

# **Greater Vancouver Integrated Response Plan for Marine Pollution Incidents**

Version 3 – April 2020



## LETTER OF PROMULGATION

The Greater Vancouver Integrated Response Plan for Marine Pollution Incidents ('the Plan') is a guide for multi-agency response to marine pollution incidents of potential significance in British Columbia in the waters surrounding the Greater Vancouver Area.

This Plan is issued by the Canadian Coast Guard Western Region as part of the Canadian Coast Guard's Environmental Response planning framework. It is the product of a cooperative effort by Federal Departments, First Nations, local government, private sector and Provincial Ministries. While the Plan is being promulgated in its entirety, as signed this day, its appendices and annexes remain evergreen, subject to updates and amendments as required.

Through the Plan, the Canadian Coast Guard confirms its commitment to fulfill the role of federal Incident Commander and promote an inclusive, integrated response to marine pollution events where the Canadian Coast Guard is the lead agency.



Roger Girouard  
Assistant Commissioner, Western Region  
Canadian Coast Guard

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Signed at Victoria, B.C.

Date JUN 18 2020

## EMERGENCY NUMBERS: POLLUTION REPORTING AND NOTIFICATIONS

**SPILLS OF OIL OR HAZARDOUS MATERIALS INTO MARINE WATERS MUST BE REPORTED AS DEFINED UNDER THE - Canadian Environmental Protection Act, 1999 (CEPA, 1999), Fisheries Act, Canada Shipping Act, 2001 (Vessel Pollution & Dangerous Chemical Regulations s.132 & s.133) and BC Environmental Management Act, and Spill Reporting Regulation.**

<b>MARINE POLLUTION IN CANADIAN WATERS</b>	
All ship-source or mystery-source pollution must be reported to the Canadian Coast Guard Marine Reporting Line.	<p><b>Canadian Coast Guard</b> Regional Operations Centre MARINE POLLUTION REPORTING LINE <b>1-800-889-8852</b> Toll Free 24hrs</p>
<b>LAND-BASED SPILL OR SPILL ON LAND</b>	
All land-based spills or spills occurring on land must be reported to Emergency Management BC Spills reporting line.	<p><b>Emergency Management British Columbia</b> SPILLS REPORTING LINE <b>1-800-663-3456</b> Toll Free 24hrs</p>
<b>SHIP-SOURCE RELEASE OF DANGEROUS GOODS OR HAZARDOUS NOXIOUS SUBSTANCES</b>	
In addition to contacting the Canadian Coast Guard Regional Operations Centre, any ship-source release of dangerous goods or hazardous noxious substances into the marine environment should be reported to the Canadian Transport Emergency Centre (CANUTEC).	<p>Canadian Transport Emergency Centre (CANUTEC) <b>1-888-CAN-UTEC (226-8832) Toll Free 24hrs</b> (613) 996-6666 Collect Call <b>*666 Cellular Phone (Canada only)</b></p>
<b>MARINE POLLUTION IN U.S.A. WATERS</b>	
For spills outside Canadian waters contact USCG National Response Centre.	<p>United States Coast Guard National Response Center REPORTING LINE <b>1-800-424-8802</b> Toll Free 24hrs</p>
<b>NATIONAL ENVIRONMENTAL EMERGENCY CENTRE</b>	
The National Environmental Emergency Centre is notified of environmental emergencies through the above mentioned organizations but may be contacted directly on occasion.	<p>Environment and Climate Change Canada National Environmental Emergencies Centre REPORTING LINE <b>1-866-283-2333</b> Toll free 24hrs</p>
The National Environmental Emergency Centre coordinates Environment and Climate Change Canada's emergency preparedness and response, provides oversight and scientific advice to help protect the environment during an emergency.	

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## PARTICIPANTS IN RESPONSE PLANNING

The Greater Vancouver Integrated Response Plan for Marine Pollution Incidents is intended as a framework to guide an operational, integrated and cooperative response to marine pollution incidents within the waters of the Greater Vancouver Area.

The Plan was developed through a collaborative planning process and its development serves to build valuable relationships across the multiple jurisdictions and participants that are often involved in response to a marine pollution incident.

The following organizations are instrumental in the planning process and agree in principle to support the implementation and ongoing maintenance of the Plan:

### **Federal Government**

- Canada Energy Regulator
- Canadian Coast Guard
- Environment and Climate Change Canada
- Fisheries and Oceans Canada
- Public Safety Canada
- Transport Canada
- Vancouver Fraser Port Authority

### **First Nations**

- Musqueam Indian Band
- Semiahmoo First Nation
- Squamish First Nation
- Tsawwassen First Nation
- Tsleil-Waututh First Nation

### **Health Authorities**

- First Nations Health Authority
- Fraser Health Authority
- Vancouver Coastal Health Authority

### **Provincial Government**

- BC Ministry of Environment and Climate Change Strategy
- Emergency Management BC
- Health Emergency Management BC

### **Regional Districts**

- Metro Vancouver Regional District

\*note: additional Regional Districts and Local Governments to be added as the area expands to include portions of Howe Sound.

### **Local Governments and Authorities**

- City of Burnaby
- City of Coquitlam
- City of Delta
- City of New Westminster
- City of North Vancouver
- City of Port Moody
- City of Richmond
- City of Surrey
- City of Vancouver
- District of North Vancouver
- District of West Vancouver
- North Shore Emergency Management

### **Private Sector**

- Vancouver Aquarium
- Western Canada Marine Response Corporation

Environmental emergency management in Canada is a shared responsibility, relying on ongoing cooperation and communication between federal, First Nation, provincial, local government, and private sector.

The Appendix, Agency Specific Summary of Participant Roles, Jurisdictions and Capabilities, provides additional information about those involved in the development of the Plan how they can be contacted, jurisdiction or mandate, any capacity for response they may have and whether or not they have additional plans, policies and guidelines that relate to preparedness and response in Canada and this region.

## GLOSSARY OF TERMS

Term	Acronym (if applicable)	Definition
<b>Affiliated Volunteers</b>		An individual who is affiliated with either a governmental agency or Non-Government Organization and who has been trained for a specific role or function in disaster relief or response.
<b>Agency Representative</b>		A person assigned by a Primary Department, Assisting, or Cooperating Government Agency or private organization that has been delegated authority to make decisions affecting that agency's or organization's participation in incident management activities following appropriate consultation with the administrator(s) of that agency.
<b>Area Response Plan</b>		Provides detailed information to be used by responders within specific geographical areas and is consistent with a broader regional plan. Also referred to as a Geographically Specific Response Plan. The Greater Vancouver Integrated Response Plan is an Area Response Plan.
<b>British Columbia Ministry of Environment and Climate Change Strategies</b>	<b>BC MoECCS</b>	Key Provincial Ministry responsible for coordinating a provincial response to spills of hazardous materials and incidents impacting the environment and providing oversight to ensure proper cleanup.
<b>Canadian Coast Guard</b>	<b>CCG</b>	The Canadian Coast Guard is the lead federal agency for the response component of Canada's Marine Oil Spill Preparedness Response Regime.
<b>Canadian Waters</b>		Pursuant to the <i>Interpretation Act</i> , Canadian water is defined as the territorial sea of Canada and the internal waters of Canada.
<b>Containment</b>		The use of physical barriers such as boom to control or to restrict the spread of harmful substances.
<b>Countermeasures</b>		Any measure that is taken to reduce the impact and effect of the discharge of harmful substances.
<b>Convergent Volunteers</b>		Convergent Volunteers are those members of the community who come forward without having been previously affiliated, prepared, or trained by the specific organizations in which they are supporting.
<b>Discharge</b>		Under the <i>Canada Shipping Act, 2001</i> , refers to a discharge of a pollutant from a vessel, or a discharge of oil from an oil handling facility engaged in loading to, or unloading from, a

		vessel, that directly or indirectly results in the pollutant entering the marine environment, and includes spilling, leaking, pumping, pouring, emitting, emptying, throwing and dumping.
<b>Emergency Coordination Centre</b>	<b>ECC</b>	The Emergency Management BC coordination and communication link with the other response levels and the federal disaster support system.
<b>Emergency Management British Columbia</b>	<b>EMBC</b>	Emergency Management BC is the coordinating agency for the provincial government's emergency management activities.
<b>Emergency Operations Centre</b>	<b>EOC</b>	The Emergency Operations Centre coordinates information and resources to support domestic incident management activities.
<b>Environment and Climate Change Canada</b>	<b>ECCC</b>	Provides the Government of Canada's coordinated scientific and technical advice and expertise during pollution incidents involving the discharge or threat of discharge of a pollutant to the environment regardless of source.
<b>Environmental Unit</b>	<b>EU</b>	Recognizes and balances social, cultural, ecological, and commercial values, supported by science and local knowledge to make recommendations to Unified Command.
<b>Environmental Unit Lead</b>	<b>ENVL</b>	Responsible for environmental matters associated with the response, including assessment, modeling, surveillance and environmental monitoring and permitting.
<b>Federal Lead Agency/Provincial Lead Agency/Agency of Primary Jurisdiction</b>		The organization designated by statute, inter-agency agreement, treaty or Cabinet decision to ensure appropriate management of the emergency response functions. This concept relates to the statutory mandate and authorities of each agency.
<b>First Nations Health Authority</b>	<b>FNHA</b>	Coordinates First Nations Health Authority activities to ensure First Nation communities are effectively incorporated into emergency response and recovery activities.
<b>First Response to Oil Spills Training</b>	<b>FROST</b>	A two-day introductory training course taught by the Canadian Coast Guard
<b>Fisheries and Oceans Canada</b>	<b>DFO</b>	Provide necessary and relevant technical advice, guidance, support and services to response and response participants to enable and ensure an effective environmental response. Through these actions we provide and maximize protection of fisheries, fish (including marine mammals), fish habitat, sensitive marine ecosystems, aquatic Species at Risk, and their habitat, under its jurisdiction.
<b>Geographic Response Strategy</b>	<b>GRS</b>	A pre-established tactical plan tailored to protect a specific sensitive area from impacts of a marine pollution incident if operationally feasible. GRS provide tactical information and include practical and logistical information to facilitate quick deployment during an incident. A GRS is a concise document

		with maps, pictures, diagrams, and instructions used by operational field personnel.
<b>Incident Commander</b>	<b>IC</b>	<p>The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The Incident Commander has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.</p> <p><b>Federal Incident Commander:</b> The federal government’s representative member of Unified Command designated by mandate and/or legislation.</p> <p><b>First Nations Incident Commander(s):</b> The First Nation representative assigned as a member of Unified Command by its territory and executive.</p> <p><b>Local Government Incident Commander:</b> The local government’s representative member of Unified Command designated by charter and its executive.</p> <p><b>Provincial Incident Commander:</b> The provincial government’s representative member of Unified Command designated by mandate and/or legislation.</p> <p><b>Polluter Incident Commander:</b> A ship owner or facility agent assigned to be a representative member of Unified Command and designated by the Polluter.</p>
<b>Incident Command Post</b>	<b>ICP</b>	The field location at which the primary tactical-level on-scene incident command functions are performed ( <i>CCG Incident Management Handbook, 2016</i> ).
<b>Incident Command System</b>	<b>ICS</b>	A standardized incident management methodology specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries ( <i>CCG Incident Management Handbook, 2016</i> ).
<b>Information Officer</b>	<b>IOFR</b>	Responsible for developing and releasing information about an incident to the media and public.
<b>Joint Information Centre</b>	<b>JIC</b>	Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during a crisis or incident operations.
<b>Marine Emergency Response Coordination Committee</b>	<b>MERCC</b>	The Marine Emergency Response Coordination Committee provides a venue for Canadian Coast Guard and other interested organizations to maintain an open dialogue on the

		coordination of marine assets during emergency or security response and recovery activities.
<b>Marine Pollution Incident</b>		When a pollutant enters, or has the potential to enter, Canadian waters, regardless of source.
<b>Marine Spill Response Operations Course</b>	<b>MSROC</b>	This 5 day course teaches all aspects of spill response management. It prepares personnel to respond to marine oil spill incidents, including operation direction, coordination and supervision under the overall direction of the incident commander.
<b>National Aerial Surveillance Program</b>	<b>NASP</b>	The National Aerial Surveillance Program watches ships in Canadian waters to help prevent pollution.
<b>National Environmental Emergencies Centre</b>	<b>NEEC</b>	Environment and Climate Change Canada's 24/7 hub for providing scientific and technical advice aimed at reducing impacts and ensuring measures are taken to protect the environment.
<b>Net Environmental Benefit Analysis</b>	<b>NEBA</b>	The process used during pollution response to inform decisions about response options and technologies. This process estimates the potential gains in environmental services or other ecological properties and cultural values attained by response actions and weighs them against the potential adverse impacts caused by those actions to determine whether an action associated with the incident response or recovery is likely to provide a "net" benefit.
<b>Oil</b>		Petroleum in any form, including crude oil, fuel oil, sludge, oil refuse and refined products, as well as oil from plants and animals.
<b>Oil Handling Facility</b>	<b>OHF</b>	A facility, including an oil terminal, that is used or that will be used in the loading or unloading of petroleum in any form, including crude oil, fuel oil, sludge, oil refuse and refined products, to or from vessels.
<b>Plan Area</b>		The Greater Vancouver Integrated Response Plan Area extends north into Howe Sound and Squamish Harbour to the base of the Squamish River, moving southward follows the western boundaries of the Squamish-Lillooet Regional District, and follows the western Metro Vancouver Regional District boundaries to the Canada-USA border. The southern reaches of the Plan Area follow the Canada/USA border to include Tsawwassen, Boundary Bay and Semiahmoo Bay. The eastern boundaries are those of the Vancouver Fraser Port Authority jurisdiction which includes all of Burrard Inlet and Indian Arm, and up the Fraser River to the Highway 1 bridge. The Greater Vancouver Integrate Response Plan Area is adjacent to two other Canadian Coast Guard planning areas; the Georgia Strait Integrated Response Plan Area to the

		north-west, and the Juan de Fuca Integrated Response Plan Area to the south-west.
<b>Pollutant</b>		<p>The <i>Canada Shipping Act, 2001</i> definition is:</p> <p>(a) a substance that, if added to any waters, would degrade or alter or form part of a process of degradation or alteration of the quality of the waters to an extent that is detrimental to their use by humans or by an animal or a plant that is useful to humans; and</p> <p>(b) any water that contains a substance in such a quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state, that it would, if added to any waters, degrade or alter or form part of a process of degradation or alteration of the quality of the waters to an extent that is detrimental to their use by humans or by an animal or a plant that is useful to humans.</p> <p>It includes oil and any substance or class of substances that is prescribed for the purpose of Part 8 of the CSA to be a pollutant.</p>
<b>Polluter</b>		The owner of the vessel or the Oil Handling Facility that is the source of a discharge of a pollutant into Canadian waters or Exclusive Economic Zone.
<b>Polluter Pays Principle</b>		The <i>polluter pays principle</i> requires that the polluter be responsible for the costs associated with prevention and response activities. In accordance with the <i>Marine Liability Act</i> , Part 6, the owner of a ship is strictly liable for oil pollution damage from a ship including reasonable costs for clean-up, preventative measures, monitoring costs, and for the costs of reinstatement measures.
<b>Pollution Damage</b>		The Marine Liability Act applies this term to a vessel or an oil handling facility to describe loss or damage outside the vessel or oil handling facility caused by contamination resulting from a discharge from the vessel or facility.
<b>Regional Operations Centre</b>	<b>ROC</b>	The Canadian Coast Guard's 24/7 alerting desk.
<b>Remediation</b>		The process to remove residual contamination from soil, water, air, and other media.
<b>Residual effects</b>		Adverse consequences directly related to the discharge remaining after the implementation of recovery and remediation actions; residual effects are usually described

		using standard residual effects criteria: context, magnitude, extent, duration, reversibility, and frequency.
<b>Resources-at-Risk</b>	<b>RAR</b>	Features that have the potential to be impacted by pollutants. They can be divided into the following categories: physical environment, ecological resources, socio-economic resources, and local and Indigenous knowledge.
<b>Response Organization</b>		A qualified organization to whom the Minister issues a certificate of designation under subsection 169(1) of the <i>Canada Shipping Act, 2001</i> . Response Organizations are prepared to respond to marine pollution and to mitigate the impact of discharge into the marine environment. In British Columbia the certified response organization is Western Canada Marine Response Corporation.
<b>Response Resources</b>		Equipment, personnel, and other assets, either contracted or owned, deemed necessary by Unified Command to conduct response operations or monitoring activities.
<b>Restoration</b>		The process of assisting the recovery of a species, habitat, ecosystem, or other resource (natural or cultural) that has been degraded, damaged, or destroyed. It is an intentional human activity that initiates or enhances the recovery of an impacted resource with respect to its health, integrity, and sustainability.
<b>Safety Officer</b>	<b>SOFR</b>	Responsible for the development and recommendation of measures to ensure personnel safety and occupational health of response workers.
<b>Ship-Source Oil Pollution Fund</b>	<b>SOPF</b>	A special purpose account in the accounts of Canada, established under Part 7 of the <i>Marine Liability Act</i> to facilitate the indemnification of claims for ship-source pollution in Canadian waters while protecting the taxpayer.
<b>Shoreline Cleanup Assessment Technique</b>	<b>SCAT</b>	A systematic method for surveying an affected shoreline after a marine pollution incident.
<b>Transport Canada</b>	<b>TC</b>	The lead federal regulatory agency responsible for Canada's Marine Oil Spill Preparedness and Response regime.
<b>Unified Command</b>	<b>UC</b>	An application of the Incident Command System, used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. To be a member of the UC, a participating organization must have underlying legislative authority or legal obligation to carry out proposed response action and have jurisdiction within the area affected by the incident.. ( <i>CCG Incident Management Handbook, 2016</i> ). Please refer to Section 3150 for further information
<b>Vessel</b>		A boat, ship or craft designed, used or capable of being used, solely or partly for navigation in, on, through or immediately

		above water, without regard to method or lack of propulsion, and includes such a vessel that is under construction. It does not include a floating object of a prescribed class.
<b>Waste Management Plan</b>	<b>WMP</b>	A document that outlines the activities and methods of waste management from waste generation to final disposal.
<b>Western Canada Marine Response Corporation</b>	<b>WCMRC</b>	The Transport Canada certified Response Organization for British Columbia.
<b>Wildlife</b>		In the context of pollution response, including marine and terrestrial species that are protected under the Fisheries Act, the Migratory Birds Convention Act, the Species at Risk Act, and the BC Wildlife Act as well as species that are of cultural importance to First Nations and coastal communities.

# Chapter 1000 Plan Overview

## 1100 Intent of the Plan

### 1110 Purpose

The purpose of the Plan is to promote a consistent and predictable response to a marine pollution incident to ensure a safe, effective, coordinated response and minimize adverse effects to the health of the people, cultures, communities, and ecological and socio-economic resources within the area covered by the Plan. It provides a common understanding among anyone involved in, or affected by, a marine pollution incident.

### 1120 Scope

The Plan is an operational response plan focused on actions relating to response such as preparedness, response, notification, assessment and containment. It is intended for discharges or threatened discharges of pollutants from a vessel, an Oil Handling Facility (OHF) engaged in loading or unloading oil from a vessel or as a result of mystery source spill within Canadian waters. It is further intended for significant, complex marine pollution incidents in the Plan Area where Unified Command (UC) is established.

The Plan is a “living – or evergreen - document” in that it can evolve as lessons learned from incidents, exercises and preparedness provide new insights.

### 1130 Guiding Principles

With the intent of the various participants working together during the response to a marine pollution incident within the Plan Area, all participants agree on the following guiding principles:

- **Health and Safety** - The protection of the health and safety of response personnel and the public is paramount.
- **Environmental Stewardship** - The protection of people, the environment, cultural heritage, and property are the primary objectives for each response effort.
- **Minimize Economic Impacts** – minimize impacts of the pollution on the local and regional economies.
- **Respect** - All participants acknowledge and respect the laws, customs, traditions, existing agreements and governance structures in place in the Plan Area. The UC does not modify the legal authorities of the Participants.
- **Timeliness of Response** - The response must be timely, appropriate and reasonable in order to repair, remedy, minimize or prevent pollution damage.

- **Incident Management** - The Federal, Provincial and Local Government agencies, and First Nation(s) will use the Incident Command System (ICS) to organize and coordinate their participation in the response effort. Unified Command may be established to allow participants with jurisdictional or functional responsibility to jointly develop a common set of response objectives and strategies.

## 1140 Health and Safety

The following elements must be addressed in health and safety planning and implementation.

- **Safety Management System** established whereby safety and health are systematically delivered and communicated throughout the Incident Management's organization from command to field.
- **Dedicated Safety Officer** builds safety plans and ensures health and safety of all responders.
- **Hazard and Risk Assessment** undertaken that is particular to the incident and the working environment that includes, but is not limited to: sea conditions, transportation, chemical exposures, decontamination, and operations.
- **Safety Communication and Monitoring** are undertaken to deliver, record, assess, and alter responder safety throughout the course of an incident.
- **Training and Certification** is required whereby responders have been trained and certified – or trained prior to deployment – for the duties and working environments they are tasked with.
- **Personal Protective Equipment** that is provided to first responders is suitable for operations, hazards and working conditions. Further, responders should be oriented and trained in the correct use of personal protective equipment.
- **Hygiene and Decontamination** facilities and supplies are readily available and their standard of use is communicated to all responders. Response-related oil/chemical contamination is controlled and decontamination protocols are effectively implemented.

More information regarding health and safety can be found in the Health and Safety appendix.

## 1150 Relationship of this Plan to Other Plans

This Integrated Response Plan is part of a hierarchy of plans within the Canadian Coast Guard (CCG):

1. **Marine Spills Contingency Plan – National Chapter** – Is a policy document that provides overarching guidance for CCG regions on how to manage the national and regional Environmental Response Program in order to be compliant with regulations, standards and the oil spill response regime.
2. **Marine Spills Contingency Plan – Western Region Chapter** – Is a strategic document that details how the Environmental Response teams are managed, conduct operations, procure and maintain pollution response equipment, train and exercise.

In addition to the national hierarchy, the CCG also is signatory to a cross-border specific plan – Canada/US Joint Marine Pollution Contingency Plan – CANUSPAC Annex (in the southern area) and CANUSDIX in northern BC.

The Canadian Coast Guard Western Region has eight geographically specific response planning areas along the coast of BC. Each of these areas will develop an integrated response plan, such as this one, in collaboration with Federal Government, First Nations, Provincial Government, Local Government and the Private Sector. The response planning area boundaries have been established to align with various existing regional and district boundaries, as well as CCG response areas.

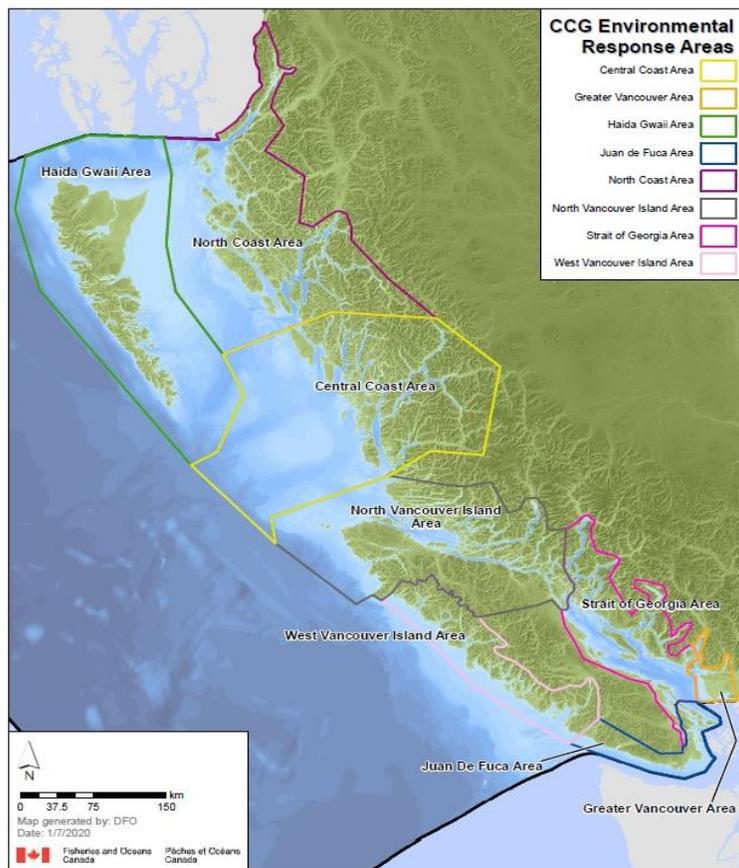
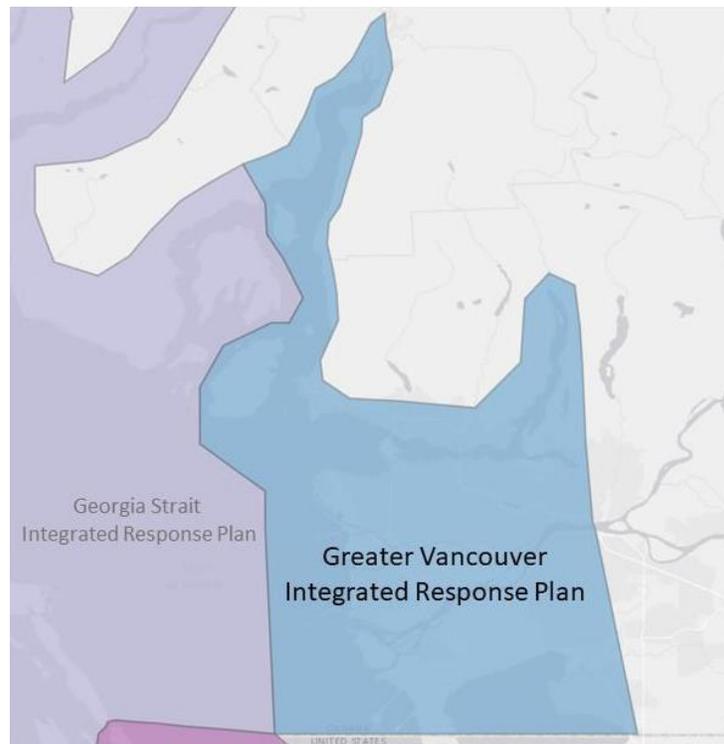


FIGURE 1.1 – The eight Canadian Coast Guard Environmental Response Areas. These areas include the Central Coast, Greater Vancouver, Haida Gwaii, Juan de Fuca, North Coast, North Vancouver Island, Strait of Georgia, and West Coast Vancouver Island.

This Plan is one component of a framework for marine pollution incident response that spans multiple jurisdictions, and is aligned with both Canadian legislation and with international conventions and guidelines made under the International Maritime Organization. This Plan should be considered in conjunction with First Nation, federal, provincial and local government, private sector and transboundary plans that align with the current National Oil Spill Preparedness and Response Regime.

### 1160 Overview of the Plan Area

The consequences of a marine pollution incident in the Plan Area would be influenced by several factors, such as location, timing, volume and type of product released or material spilled. Understanding the potential consequences to at-risk resources, ecosystems, and communities is fundamental to marine pollution incident preparedness. As a result of marine pollution incidents, coastal First Nations and coastal communities may suffer losses and adverse impacts to their livelihoods and community health.



*Figure 1.2 - The Greater Vancouver Response Planning Area, which includes Howe Sound, Burrard Inlet, and Boundary and Semiahmoo Bays. This area borders the Georgia Strait Response Planning Area on the west.*

The Greater Vancouver Integrated Response Plan Area extends north into Howe Sound and Squamish Harbour to the base of the Squamish River, moving southward follows the western boundaries of the Squamish-Lillooet Regional District, and follows the western Metro Vancouver Regional District boundaries to the Canada-USA border. The southern reaches of the Plan Area follow the Canada/USA border to include Tsawwassen, Boundary Bay and Semiahmoo Bay. The eastern boundaries are those of the Vancouver Fraser Port Authority jurisdiction which includes all of Burrard Inlet and Indian Arm, and up the Fraser River to the Highway 1 bridge. The Greater Vancouver Integrate Response Plan Area is adjacent to two other Canadian Coast Guard planning areas; the Georgia Strait Integrated Response Plan Area to the north-west, and the Juan de Fuca Integrated Response Plan Area to the south-west.

Every incident is unique and must consider a variety of information in order to determine the best course of action. As such, it is important to incorporate local knowledge into the decision making process. There are some items that have been pre-identified for response in the Plan Area, which can be found in the Resources at Risk appendix.

# Chapter 2000 Preparing for Marine Pollution Incidents

## Purpose and Scope

This chapter describes some of the preparedness information and structures in place to help mitigate negative outcomes of marine pollution incidents. The sections below outline response capacity, pollution response training and exercises specific to the Plan Area.

## 2100 Regional Capacity

The Canadian pollution response regime includes the ability to cascade local, regional, national and international resources in order to expand response capabilities. This means that in the Greater Vancouver area resources will come from within and outside the area.

The scale and complexity of the incident informs the level of response capacity that is part of a response. Initially the local resources are tasked for the response, however, as the scope or complexity of an incident evolves, equipment may be cascaded from other locations within the region, across the country or from across the border, under the Joint Contingency Plan, to supplement the local equipment that was initially deployed.

The Joint Contingency Plan, CANUSPAC Annex applied to the waters of Juan de Fuca Strait and is a joint plan developed by the CCG and United States Coast Guard that is activated through a formal agreement between the CCG Assistant Commissioner or the District Commander, 13<sup>th</sup> United States Coast Guard District, depending on where the discharge or pollution originated. The plan sets procedures for the movement of personnel and equipment across the borders, communications, logistics and exercise plan.

Escalation from one level to another does not mean that the previous level resources are released, but rather that additional resources are brought into the incident to supplement the initial capacity.

## 2110 Pollution Response Capacity in the Plan Area

In British Columbia, Western Canada Marine Response Corporation (WCMRC) is the Transport Canada certified Response Organization. WCMRC resources are strategically located along the coast.

WCMRC demonstrates on an annual basis that appropriate equipment, including but not limited to booms, skimmers and temporary storage, are available to meet the Response Organization Standards requirements set by Transport Canada, for pollution in specified areas. The specific requirements relate to oil quantity, response times, on-water recovery, and

shoreline treatment in each operating environment. A list of WCMRC's equipment capacity is available in their Oil Spill Response Plan at <http://wcmrc.com/preparedness/strategies/>

The Canadian Coast Guard's Environmental Response Department staffs and maintains depots containing pollution countermeasure equipment along the BC coast. CCG also has Environmental Response equipment in containers positioned at strategic locations throughout the Area for the use of Canadian Coast Guard personnel. For current details on the status of CCG capacity please contact the Regional Operations Centre at the number located at the beginning of this document.

In addition, Oil Handling Facilities are required to have equipment and resources for immediate use to contain and control discharge of oil that has occurred while engaged in the loading to, or unloading from, a prescribed vessel that directly or indirectly results in the pollutant entering the marine environment. This equipment is not necessarily available for discharges from non-OHF.

Federal, First Nation, Provincial, and local emergency response assets and personnel may have a response capacity that can be used to respond to marine pollution incidents. These include resources from participants, such as private sector, contractors, consultants and other groups (e.g., oiled wildlife response organizations).

All equipment is subject to operating limits based on weather or environmental conditions. In order for response systems to be deployed and effectively used to recover oil, there must be sufficient qualified personnel, vessels, and safety equipment to sustain operations.

All equipment is maintained and tested as per industry standards on a regular basis to ensure functionality in the event of an incident.

## 2200 Training & Exercises

Response training and exercises are critical components of emergency preparedness and provide confirmation of the information in the Plan. Training and exercises help ensure competency, coordination, safety of responders and the general public as well as an effective overall response to a marine pollution incident. The working groups established through the response planning process should discuss recommendations for exercising with the Exercise Coordination Working Group for the Region.

### 2210 Training

A number of organizations may deliver or arrange for specific response related courses. Some of these courses will be centrally delivered and others will be available in communities. In order to build awareness and training of different responders, these courses may have a mix of participants including Canadian Coast Guard, First Nations, government personnel, private sector, community members and other responders as available. Table 2-1 below summarizes

the training courses available in the Plan Area to help participants identify and plan for training their personnel.

**Table 2.1 - Marine Pollution Response Training Available in the Plan Area**

Course Name	Description	Delivered by:
<b>Recommended for all members of an incident</b>		
INTRO to Essentials of Marine Oil Spills Training	This 1-day (7.5 hour) theoretical course discusses roles and responsibilities, fate and behavior of oil in the marine environment, basic health & safety, and initial spill assessment. The INTRO is designed for blended audiences and external partners.	CCG
ICS 100	Intro to ICS	Private Vendor
<b>Recommended for spill recovery field crews</b>		
First Response to Oil Spills Training (FROST)	This 2-day (15 hour) course includes the theoretical modules of the INTRO course with added practical on-water boom deployment sessions. The FROST is designed for internal CCG audience and those who have access to, and would deploy pollution response countermeasures.	CCG
<b>Recommended for members in the incident command post</b>		
ICS 200	Basic ICS Prerequisite: ICS-100	Private Vendors/ Federal Emergency Management Agency
ICS 300	Intermediate ICS Prerequisites: ICS-100 & ICS-200	Private vendors
Marine Spill Response Operations Course (MSROC)	Response management techniques Prerequisites: Essential of Marine Oil Spill Training (EMOST) CCG 4-day and ICS 100-300	CCG
<b>Recommended for Environmental Unit and specialist field crews</b>		
Shoreline Cleanup Assessment Technique (SCAT)	Standardized technique for assessing shorelines to establish clean-up priorities and techniques. Additional training available for Team Leaders	Environment and Climate Change Canada/ Private Vendors
<b>Recommended for advanced Incident Command Post positions</b>		
ICS 400	Advanced ICS Prerequisites: ICS-100, 200, 300	Private Vendors
ICS position specific courses	There are courses available that are specific to certain Command and General Staff positions Prerequisites: ICS-100, ICS-200, ICS-300	Private Vendors

## 2220 Exercises

An environmental response exercise is a structured or organized activity that requires people to solve problems, take actions and make decisions in a team setting as if they are responding to a real incident. Exercises across the Plan Area will be designed to test the Plan or aspects of the Plan as well as test the joint training that has taken place and continue to improve cooperation, communication and relationships among participants. Exercises can include the deployment of equipment, simulating incident management functions, workshops, seminars or facilitated discussions.

When possible, exercises should involve the entire marine pollution response community within the Plan Area. Such an approach recognizes that the response to marine pollution will be a community effort that will involve the personnel, resources and plans of several organizations and responders. Where possible, exercise design should also consider capacity and time these exercises to facilitate participation.

The Plan is intended to be exercised through a larger multi-agency exercise in the Greater Vancouver Integrated Response Plan Area every 4 years. In addition, smaller drills focusing on one aspect of the Plan should be conducted annually to support and lead up to the 4-year exercise. Exercises should be held in different locations throughout the Plan Area to examine possible geographic differences but they should still include all participants from the Plan Area. Multi-agency exercises should be planned as a group to facilitate shared objectives. Exercises will be planned to test various aspects of the response plan over multiple types of exercises and will consider the capacity, roles and responsibilities of all levels of government in the Plan Area.

An actual response to a marine pollution incident that engages with a significant number of response agencies and touches on the breadth of the Plan can be considered to meet the definition of a multi-agency exercise.

All marine pollution response exercises need to be evaluated against the exercise objectives and the lessons learned from them should be documented and appropriately acted on by participants. Critically, each exercise should lead to improvements in the Plan, inform future exercises and identify gaps in training and overall emergency preparedness. Learnings from exercises should be reviewed and shared during response planning meetings to improve overall response preparedness.

# Chapter 3000 Responding to Marine Pollution Incidents

## Purpose and Scope

This section outlines initial actions to implement a coordinated response to a marine pollution incident using established principles of ICS. The appendix, Key ICS Functions, provides more detailed information about the full organization that may be stood up during a response.

## 3100 Initial Response Phase

Some of the activities in the initial response process described in this section may occur simultaneously. CCG personnel will follow internal Standard Operating Procedures.

### 3110 Incident Reporting

A discharge or threat of a discharge of a pollutant in the Plan Area could be reported by a variety of sources, such as an oil handling facility operator, vessel master under legal requirement to notify or the public who observed an event.

A discharge of pollutants into the marine environment must be reported to the CCG 24/7 Marine Pollution Reporting Line - **1-800-889-8852** - at the CCG's Regional Operations Centre (ROC).

A pollution incident that originates from a land source must be reported to the Emergency Management BC (EMBC) Spill and Emergency Reporting Line - **1-800-663-3456** - at the Emergency Coordination Centre (ECC).

Reports can also be directed through local emergency services 911.

When the CCG ROC or EMBC ECC receives an incident report, situational information (e.g. source, product, amount, etc.) is gathered, a Pollution Report (or Dangerous Goods Incident Report) is created and the Duty Officer is notified.

### 3120 Initial Assessment

The CCG Duty Officer will validate the information provided in the Pollution Report, gather any information that may be missing or inadequate and will assess the significance of the reported incident based on threat and risk. Threat involves the quantity and type of product along with the likelihood of discharge. Risk involves the impacts to environmentally, socio-economically and culturally sensitive areas. The CCG Duty Officer will consider the factors listed in 3140 below, then determine the appropriate escalation measures needed for the response.

Measures may include, but not be limited to:

- tasking resources to the site,
- requesting information from anyone that can assist in this initial assessment with local personnel and vessels, including First Nations, Port Authority, Response Organization, first responders in local governments, local harbor masters (wharfingers), commercial vessels, aircraft, and many others,
- sending out notifications (see section 3130).

The appendix, Initial Information Gathering Checklist, contains a Marine Pollution Observation and Reporting Checklist.

As the polluter often has the most real-time knowledge of the size and scope of an incident, the Polluter or the Canadian Coast Guard may activate the response organization (WCMRC). However, once ICS is initiated, all response assets will then be tasked through the appropriate authority under the ICS command structure.

During the initial assessment, personnel other than Coast Guard responders such as Environmental Enforcement Officers, Wildlife Enforcement Officers and/or Environmental Emergencies Officers of Environment and Climate Change Canada (ECCC) could attend the site to gather information prior to the establishment of an Incident Command Post (ICP). However, once an ICP is established and there is a recognized Unified Command, officials would make their presence known to command and for safety reasons sign in and out of the operating area.

### 3130 Notification within a Response Planning Area

When the CCG Duty Officer's initial assessment indicates that there is a potential for it to be a large-scale, complex incident or potential for the incident to have significant environmental, economic and public and/or political concerns, the CCG Regional Operations Centre will initiate email notifications to a pre-identified distribution list for the Plan Area. The notifications are formatted to provide a brief synopsis of the incident and will be sent to federal, First Nation and private sector contacts. The ROC also sends the same Pollution Report to EMBC Emergency Coordination Centre, who in turn notify provincial, First Nation and local government contacts in the response planning area. Email notifications may be followed-up by phone notifications for those Nations or agencies that will be immediately impacted.

In the event of an incident close to the border(s) of the Response Planning area the other planning area(s) will be notified using their pre-defined distribution lists. It is the responsibility of each First Nation or agency to maintain and update their emergency contact lists and provide them to their CCG response planning contacts.

Once notified, any government or agency may initiate their own internal notifications to their community, constituents or employees.

## 3140 Activating a Coordinated Response

The decision to mobilize resources for a coordinated response is made by Canadian Coast Guard and BC Ministry of Environment & Climate Change Strategy (BC MoECCS) personnel when the initial assessment indicates that there is a potential for it to be a large-scale, complex incident or potential for the incident to have significant environmental, economic and public health or safety concerns.

The volume of the product spilled does not always, independently, indicate the severity of the incident, therefore the following criteria for this assessment may include, but not be limited to:

Human Health and Safety:

- Contamination of water or food sources
- Air quality impacts, dermal exposure or potentially explosive conditions
- Need for evacuation of people

Environmental and Economic Resources:

- Injury or loss of animal or plant species, or their habitats, that are of ecological or economic importance
- Impact to aquatic species at risk
- Impact to ecological reserves, marine and foreshore parks
- Archaeological, traditional use and cultural sites
- Impact to significant socio-economic areas (marinas, ports, recreational beaches)
- Interference with public or commercial transportation
- Incidents with cross-border implications including the activation of CANUSPAC

### Initial Coordination Call

The Canadian Coast Guard Regional Operations Centre will create a calendar invitation for a coordination call and distribute that invitation using the same email distribution list used to send the pollution reports. These distribution lists notify EMBC ECC, federal, First Nation, response organization and private sector participants. Emergency Management BC will then forward the invitation, like the pollution report, to First Nations, provincial government and local governments. The CCG ROC will then facilitate the coordination call, using the template found in the appendix, Coordination Conference Call Agenda, and will also send any follow up information or invitations using the same distribution list.

### Coordination Calls

Coordination calls are used as a mechanism for collaboration and information-sharing among participants during the initial response phase. At a minimum, these coordination calls should include representatives of each potentially affected departments and agencies who are mandated to take action in these circumstances and First Nation(s), along with the response organization and other key participants.

These coordination calls are conducted prior to or during the establishment of Unified Command and an Incident Command Post. Key discussions include:

- What emergency measures are required, such as: deployment of an emergency rescue tug and nearshore protection measures.
- Where and when to establish an Incident Command Post to best manage the marine pollution incident.
- Key public messaging and briefing of government/First Nation executive of the incident.

Multiple coordination calls may be required to maintain this awareness and inclusion until the ICP is fully operational and other mechanisms have been developed to disseminate and share information.

### **Ongoing Updates**

The initial notification distribution list, with any requested modifications, will be used as a platform for continuing dissemination of situation reports and updates. If telephone notifications are made instead of emails, notified entities should be updated regularly until UC is established or the incident resolves.

### **3150 Establishing Unified Command**

For pollution response, or the significant threat of a pollution, Unified Command may be formed during a discussion between the Initial Incident Commander(s) and any jurisdiction that is, at a minimum, initially impacted.

**The intent is for Unified Command to consist of a representative from each of the following, where available:**

- **Federal;**
- **First Nations;**
- **Provincial;**
- **Local Government; and**
- **Polluter (usually the ship owner or their representative)**

Organizations in UC should have authority or functional responsibility under a law or regulation for the incident or alternatively Aboriginal title, rights or interests in the affected area and have resources to support an ongoing response.

All participants in UC require delegated authority from their respective institutions to make decisions on response objectives and strategies, deploy resources, assign personnel, spend funds and sign-off on Incident Action Plans in real time, without impeding the response.

The composition and authorities of Unified Command are more clearly defined in the appendix, Lead Agency Designation.

Unified Command must be kept to a manageable size in order to make decisions and move response operations forward efficiently. Each impacted level of government will collectively designate one person to represent the combined priorities and concerns of each affected government, but ultimately act in support of the incident objectives. That person will be the Incident Commander for that level of government.

The makeup of Unified Command can change over time to meet the needs of the incident. As functional and jurisdictional responsibilities change, the representatives in Unified Command will also change. This means that, if the area of pollution moves or progresses, representatives may have to collectively discuss the composition of Unified Command at multiple times throughout the response.

At this stage the Unified Command members along with the Polluter will assign personnel to fill key Incident Management Team roles and determine the size and composition of the ICS organization both initially and throughout the 'lifecycle' of the incident. The appendix, Key ICS Functions has further information on ICS roles and responsibilities as well as for the 'Planning P.'

The ICS organization will reflect the multi-jurisdictional approach outlined in the Plan, with First Nations, federal agencies, provincial agencies and local government assigning personnel and contractors to fill positions within the organization. The Polluter may also assign personnel or contractors to fill some of these positions.

During the transition from the initial response, coordination calls or meetings will continue to be held to ensure communication is maintained until the Incident Command Post is fully staffed and operational. As soon as practicable the Unified Command members will co-locate to the Incident Command Post.

### 3160 Environmental Unit

The Environmental Unit (EU) is within the Planning Section and is central to the development of strategies and tactics during a marine pollution response. The EU's primary responsibility is to recognize and balance social, cultural, ecological, and commercial values, supported by science and local knowledge when making recommendations to Unified Command.

The EU strives to be inclusive of all interests, even if they are not represented in the EU. As such, EU participation will be primarily governmental agencies, First Nations and Polluter representatives with interests and/or mandates in resource management and protection. The EU aims to make recommendations collaboratively and these recommendations are conveyed to Unified Command to aid in decision making. The recommendations are incorporated in the Incident Action Plan and communicated during scheduled meetings.

More information about the Environmental Unit can be found in the Environmental Unit appendix.

### 3161 Resources at Risk

Resources at risk (RaR) are features of cultural, socio-economic, physical, and ecological systems that have the potential to be impacted by pollution incidents or incident response activities. Federal, provincial, and municipal agencies, Indigenous communities, response organizations, industry, and other groups maintain spatial data repositories to support response planning during marine pollution incidents. RaR discussions within the EU contribute to identification and ranking of priority areas as part of completion of the ICS 232 RaR form for operational response purposes. RaR's can be divided into cultural knowledge and resources, socio-economic resources, the physical environment, and ecological resources. Identification of priority resources areas help inform the response (e.g., placement of pollution prevention measures such as booming). It is important to note that prioritization of RaR within the EU does not reflect the overall importance of or desire to protect specific areas or species but instead takes into account the feasibility of successful response actions.

There is no single approach or type of information that can be used to describe the many sensitive areas, species, and uses in a given region. Accordingly, knowledge and information from federal, provincial, and municipal agencies, and Indigenous communities are required during incidents to inform response actions and assist responders. A detailed description of RaR for the area is provided in the Resources at Risk appendix.

#### **Cultural Resources**

Traditional knowledge and information on RaR from coastal Indigenous communities would be incorporated during a marine pollution incident. Resources, including species or cultural activities (e.g., village sites, burial sites, clam gardens, canoe runs, middens, or food, social, and ceremonial fishing areas), habitats, or other areas of cultural importance not explicitly identified by government agencies need to be enhanced by local and traditional knowledge in the event of a marine pollution incident.

#### **Socio-Economic Resources**

Socio-economic resources may be directly impacted by marine pollution incidents, and may affect local communities. Examples of the information available to response agencies and organizations for mapping and evaluating socio-economic resources during marine pollution incidents includes information about: infrastructure (e.g., marinas); regulated economic activities (e.g., transportation); resource extraction sites (e.g., aquaculture, fisheries); shellfish growing, harvest and closure areas; and, information on recreational sites along shorelines (e.g., campsites, fishing) and parks.

#### **Physical Environment**

Fisheries and Oceans Canada (DFO), ECCC, the Province of British Columbia, Indigenous communities, local municipalities, and other agencies can provide data on key physical characteristics in the marine environment such as water and air temperature, salinity, current, sea state, bathymetry, and substrate type. Collectively, these mapping layers that inform real-time conditions of an incident are available to responders through a Common Operating Picture (COP), whether or not an ICP is set up (e.g., oil spill trajectory modelling, site-specific weather, marine traffic, sea current tracker buoys, characteristics of shorelines and the potential of oil remaining in the shoreline substrate, incident specific locations). Other sectors of an ICP may also feed data layers into the COP.

### **Ecological Resources**

Exposure to pollutants such as petroleum products has a wide range of lethal and sub-lethal impacts on ecological resources. It is imperative for responders to be aware of particularly sensitive habitats and vulnerable species in order to implement preventative response measures. Repositories of data and resources to identify and map birds, fish, invertebrates, and plants that are highly vulnerable to oil are available to the EU from federal, provincial, and municipal agencies, as well as Indigenous communities, response organizations, and industry. Sources of information include (but are not limited to) fact sheets, DFO Science's Vulnerability Framework, data (e.g., GIS, surveys, stock assessments, fisheries), and expert/community knowledge.

Repositories available to the EU also include data to map important areas including: legally protected areas (e.g., Marine Protected Areas, National Wildlife Areas); critical habitat for species listed in the *Species at Risk Act*; Ecologically and Biologically Significant Areas; Important Bird Areas; Rockfish Conservation Areas; congregation and migration areas (e.g., marine mammals haul-outs, seabird breeding colonies, fish spawning areas, estuaries, foraging sites); and other important coast habitats such as eelgrass beds.

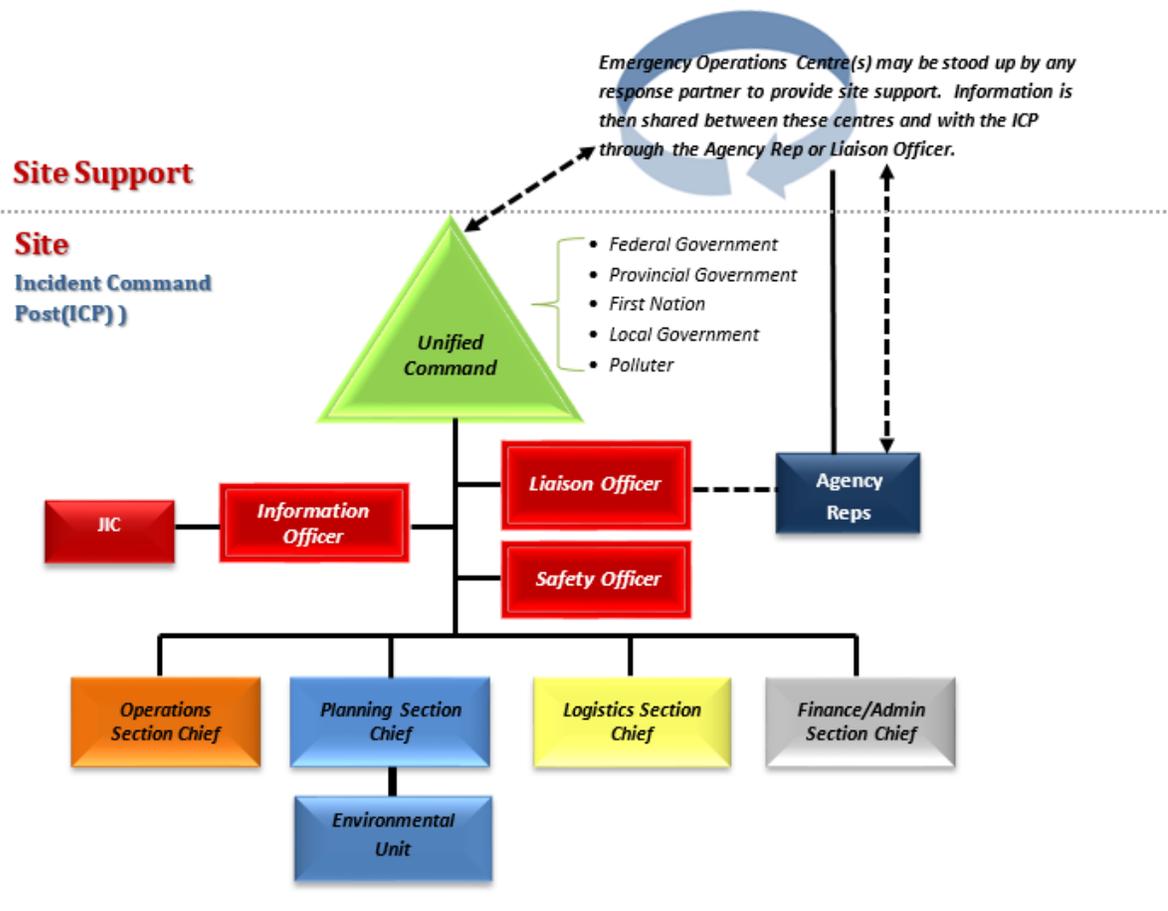
Models to predict marine aquatic species' distribution, habitat and/or substrate have also been developed by DFO and ECCC to assist responders in prioritizing response areas in the absence of survey data. During a marine pollution incident, the EU can obtain further RaR information to reflect current spatial and temporal field conditions including near real-time wildlife occurrence and distribution, Indigenous knowledge, and subject matter expertise. Collectively, this information informs various response activities, including: anticipated movement of wildlife; planning hazing activities; understanding personnel and equipment requirements; and, determining locations of Shoreline Cleanup Assessment Technique activities and other areas targeted for sampling.

## 3200 Planned Response Phase: Incident Command

An orderly transition from initial to planned response phases is essential for effective incident management and response to a marine pollution incident. Activities then move from initial actions to the establishment of a cycle of meetings and the development of the Incident Action Plan.

This is achieved through the coordinated integration of all responders into an ICS organization and the establishment of facilities at one or more locations. All individuals must clearly understand their roles and responsibilities as well as where they should be located. The elements of the ICS Organization and Interaction Flowchart are depicted in Figure 3.1.

### ICS Organization and Interaction Flowchart



*Figure 3.1 – ICS Organization and Interaction Flowchart. This flowchart depicts the hierarchical relationship between positions in the ICS organization chart, as well as information flow lines with external agencies represented in their emergency operations centres or represented by Agency Representatives.*

### 3210 Information Management

Information is a critical element of the response to any type of emergency and it is essential that accuracy and privacy of that information is maintained. The Information Officer, or Joint Information Centre when stood up, is responsible for working with Unified Command to ensure that messages are timely, accurate and consistent.

At the ICP, personnel will use ICS documentation and follow the ICS information transfer and reporting structures such as personal logs, resourcing and financial, plan development, meeting schedules, etc.

The Information Officer or Joint Information Centre is responsible for information flow to the public and media and has their own set of procedures to ensure consistency and accuracy.

It is important that all personnel contributing to the response familiarize themselves, within their work area, with the documentation requirements for that area.

#### **Private and Confidential Information**

All participants in the Plan agree to share information for the purposes of managing the response to a marine pollution incident. However, information gathered for inspections, investigations, or enforcement purposes will not be able to be shared until legal proceedings are complete and then, only under circumstances where sharing is possible.

Everyone involved in the response are expected to act in good faith to protect the personal and confidential information according to the respective legislation and will enact measures to secure information that requires protection, including paper and electronic formats. In cases where First Nations hold sensitive data not appropriate for public release, the Nation(s) will interpret this information to inform decision-making, but may not release certain datasets.

Irrespective of any provision in the Plan, the release, subsequent disclosure, and sharing of personal and confidential information of the incident will be in accordance with each government's access to information and protection of privacy legislation.

### 3220 Volunteer Management

A primary objective of any response is to ensure the health and safety of the public and responders. The safety risks associated with marine pollution response operations prohibits the use of volunteers in all operational response activities. However, it may be necessary for the

response to find safe response-related activities for convergent volunteers and it is always essential to ensure there is adequate security to protect the public from danger.

Canadian Coast Guard policy states:

*During the response to a marine pollution incident, the Canadian Coast Guard may receive requests by individuals who wish to participate in response operations as a volunteer. In accordance with provisions outlined in various legislation and Canadian Coast Guard policies related to Health and Safety (see 4.1 Responder Health and Safety), the Canadian Coast Guard will not engage / place volunteers in potentially dangerous situations, exposing them to hazardous materials, environments and working conditions. Alternatively, volunteers will be redirected to any recognized volunteer/charitable organization (e.g. The Canadian Red Cross, Ducks Unlimited Canada, etc.) that may be involved with the incident. Individuals who approach the Canadian Coast Guard to offer their services and time for payment may either be hired under contract, if required, or referred to any response contractors engaged in the response.*

While volunteers may be hired as temporary workers by WCMRC or the Polluter, the purpose of volunteer management is typically to assign volunteers to functions that support the overall response without creating health and safety risks. For more information on managing volunteers – both convergent and affiliated – please see Annex D Volunteer Management Guidelines.

### 3230 Waste Management

Waste management is an integral component of Pollution clean-up that should be initiated as soon as the pollution is detected. It is implemented through collaborative efforts in the Planning and Operations sections, and must be communicated through the entire response system.

Waste management includes planning, collection, treatment and disposal of all waste generated by the response and the response activities. Waste is to be collected, characterized, segregated, tracked, reported and transported, in accordance with all applicable legislation to authorized management sites, including, but not limited to the BC Hazardous Waste Regulation, BC Environmental Management Act, Fisheries and Oceans Canada's Fisheries Act, Environment and Climate Change Canada's Canadian Environmental Protection Act, and Transport Canada's Transportation of Dangerous Goods Regulations.

Once initiated, the waste management specialist (provincial representative from the BC MoECCS) will work in collaboration with the waste and disposal group supervisor (often a response organization or polluter representative), to generate a response Waste Management Plan (WMP). The WMP should be incident-specific and dynamic enough to accommodate evolving response needs and consider applicable local knowledge. The WMP, much like ICS, can expand or contract depending on what may be needed at the moment.

Waste Management Guidelines are attached as Annex C.

### 3240 Response Demobilization

Equipment and personnel requirements change throughout various time periods of a response to marine pollution incidents. A response may shift from scene stabilization, on water containment and recovery, shoreline assessment and cleanup to monitoring and recovery. Demobilization of equipment and extraneous personnel is a continuous process and should be a consideration early in the response. Demobilizing equipment and personnel that are no longer needed can contribute to the effectiveness of the response and reduce impacts to the area by reducing congestion and making room for equipment and personnel better suited to objectives at that point in the response.

Demobilization Plans are developed and updated throughout the response in the Planning Section either by the Demobilization Unit or the Planning Section Chief and are approved by Unified Command. Final demobilization of response assets should not happen until developed endpoints have been reached for each response area. End points will be developed in the Environmental Unit and approved by Unified Command.

Pre-determined mechanisms must be in place to allow for continued, virtual communications within Unified Command to resolve any issues that remain outstanding following demobilization.

# Chapter 4000 Post Incident

## Purpose and Scope

There are many activities that take place to transition from a response to recovery phase, some of which are mentioned in the appendix, Transition to the Recovery Phase. These include the demobilization of equipment and other actions, such as waste management, that have been ongoing since the beginning of the response. Other elements of the recovery phase may be included in a separate document, as the Plan focuses on the incident response phase.

## 4100 Post Incident Response Analysis

The primary purpose of post-incident reviews is to identify deficiencies in the Plan and determine necessary actions to correct the deficiencies. The post-incident reviews can often reveal which response procedures, equipment and techniques were effective, which were not and the reason(s) why. These reviews can lead to “lessons learned” which should be reflected in updates to the Plan, training efforts, and exercise objectives.

At a minimum, post-incident review checklists should include:

- State of readiness
- State of response plans
- Notification
- Assessment
- Activation
- Safety measures taken during the response
- Measures taken to control and contain pollution and protect resources at risk, private property and infrastructure

Incidents of significance will require a post-incident review session attended by those with key roles in the response including those in Unified Command and the Environmental Unit. To support individual organizational learnings and in preparation for a review, organizations may still conduct internal incident reviews. These internal lessons should be brought to the after action review to aid in the discussion and share lessons broadly. An After Action Report will be produced from the review to support improvements in the Plan and other plans across the country.

## 4110 Plan Review and Updates

The Plan is meant to remain evergreen through regular updates which will be organized through the Environmental Response Sub-Committee of the Marine Emergency Response Coordination Committee (MERCC) meetings to be held in the plan area.

Updates will be informed by incident or exercise After Action Reports, technical, regulatory or policy developments or new response-pertinent information.

The Plan serves as an Area Response Plan as defined by the [CCG Marine Spills Contingency Plan – National Chapter](#).

Additional information can be found in the Related Documents and Links appendix.