West Coast Vancouver Island Integrated Response Plan

for Marine Pollution Incidents

2021 Version

PLAN REGISTER OF AMENDMENTS

This plan supersedes the 2020 version. The Plan has been reviewed and updated as appropriate to reflect lessons learned from incidents, exercises, and the planning process.

#	Date	Description	Initials
1	2021-03-03	2020/2021 PIER Working Group Updates	AF

LETTER OF PROMULGATION

The West Coast Vancouver Island 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 off the west coast of Vancouver Island. This guide is not intended to be legally binding.

This Plan was prepared 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. This area plan has been developed to be consistent with area plans in other parts of the Western Region. The appendices and annexes of this Plan 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.

Derek Moss

Assistant Commissioner, Western Region

Canadian Coast Guard

Signed at_____

Date_____8 February 2022_____

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.*

MARINE POLLUTION IN CANADIAN WATERS[1]	
All ship-source or mystery-source pollution must be reported to the Canadian Coast Guard.	**Canadian Coast Guard Regional Operations Centre** **MARINE POLLUTION REPORTING LINE** 1-800-889-8852 Toll Free 24hrs or Marine Communications & Traffic Services (MCTS) VHF Channel 16
LAND-BASED SPILL OR SPILL ON LAND	
All land-based spills or spills occurring on land must be reported to Emergency Management BC Spills reporting line.	**Emergency Management British Columbia** **SPILLS REPORTING LINE** 1-800-663-3456 Toll Free 24hrs
SHIP-SOURCE RELEASE OF DANGEROUS GOODS OR HAZARDOUS NOXIOUS SUBSTANCES	
In addition to contacting the Canadian Coast Guard, any ship-source release of dangerous goods or hazardous noxious substances into the marine environment should be reported to the Canadian Transport Emergency Centre.	**Canadian Transport Emergency Centre (CANUTEC)** 1-888-CAN-UTEC (226-8832) Toll Free 24hrs (613) 996-6666 Collect Call *666 Cellular Phone (Canada only)
MARINE POLLUTION IN U.S.A. WATERS	
For spills outside Canadian waters contact USCG National Response Centre.	**United States Coast Guard** **National Response Center REPORTING LINE** 1-800-424-8802 Toll Free 24hrs
NATIONAL ENVIRONMENTAL EMERGENCY CENTRE (NEEC)	
The NEEC receives notification of emergencies through the above mentioned organizations and can be contacted directly for specific scientific and technical advice.	**Environment and Climate Change Canada** **National Environmental Emergencies Centre** **REPORTING LINE** 1-866-283-2333 Toll free 24hrs

[1] Vessels and oil handling facilities must report pollutant discharge or anticipated discharge as outlined within the *Vessel Pollution & Dangerous Chemical Regulations s.132 & s.133*.

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PARTICIPANTS IN RESPONSE PLANNING

Environmental emergency management in Canada is a shared responsibility, relying on ongoing cooperation and communication between federal, First Nation, provincial, local, and private sectors. The Canadian Coast Guard has worked closely with the response community to identify best practices and develop area response plans for marine pollution incidents. This process has served to build valuable relationships across multiple jurisdictions and with participants involved in a response.

The West Coast Vancouver Island Integrated Response Plan for Marine Pollution Incidents is intended as a framework to guide an operational, integrated and cooperative response to marine pollution incidents. 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
- Canadian Wildlife Service
- Environment and Climate Change Canada
- Fisheries and Oceans Canada
- Transport Canada
- Parks Canada
- Public Safety Canada

First Nations
- Ahousaht First Nation
- Ehattesaht First Nation
- Hesquiaht First Nation
- Hupacasath First Nation
- Huu-ay-aht First Nation
- Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nation
- Mowachaht/Muchalaht First Nation
- Nuchatlaht First Nation
- Tla-o-qui-aht First Nation
- Toquaht First Nation
- Tseshaht First Nation
- Uchucklesaht Tribe
- Ucluelet First Nation
- Nuu-chah-nulth Tribal Council
- Maa-nulth Treaty Society

Health Authorities
- First Nations Health Authority
- Vancouver Island Health Authority

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

Local Authorities
- Alberni-Clayoquot Regional District
- District of Tofino
- District of Ucluelet
- Strathcona Regional District
- Village of Gold River
- Village of Sayward
- Village of Tahsis
- Village of Zeballos

Private Sector
- Western Canada Marine Response Corporation

Appendix 1 – Agency Specific Summary of Participant Roles, Jurisdictions and Capabilities provides information about those involved in the Plan development, including:

- Contact information
- Jurisdiction or mandate
- Response capacity (if applicable)
- Additional plans, policies, and guidelines related to preparedness and response in Canada and this region.

GLOSSARY OF TERMS, ACRONYMS AND ROLES

Term	Acronym	Definition or Role
Agency Representative		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.
Area Response Plan		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 West Coast Vancouver Island Integrated Response Plan is an Area Response Plan
British Columbia Ministry of Environment and Climate Change Strategies	**BC MoECCS**	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.
Canadian Coast Guard	**CCG**	The Canadian Coast Guard is the lead federal agency for the response component of Canada's Marine Oil Spill Preparedness Response Regime.
Canada Energy Regulator	**CER**	The Canada Energy Regulator is an independent federal regulator of several parts of Canada's energy industry. It regulates pipelines, energy development and trade.
Containment		The use of physical barriers such as boom to control or to restrict the spread of harmful substances.
Countermeasures		Any measure that is taken to reduce the impact and effect of the discharge of harmful substances.
Discharge		The *Canada Shipping Act*, 2001, 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.
Emergency Coordination Centre	**ECC**	The Emergency Management BC coordination and communication link with the other response levels and the federal disaster support system.
Emergency Management British Columbia	**EMBC**	Emergency Management BC is the coordinating agency for the provincial government's emergency management activities.

Emergency Operations Centre	**EOC**	The Emergency Operations Centre coordinates information and resources to support domestic incident management activities.
Environment and Climate Change Canada	**ECCC**	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.
Environmental Unit	**EU**	Recognizes and balances social, cultural, ecological, and commercial values, supported by science and local knowledge to make recommendations to Unified Command.
Environmental Unit Leader	**ENVL**	Responsible for environmental matters associated with the response, including assessment, modeling, surveillance and environmental monitoring and permitting.
Federal Lead Agency/Provincial Lead Agency/Agency of Primary Jurisdiction		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.
First Nations Health Authority	**FNHA**	Coordinates First Nations Health Authority activities to ensure First Nation communities are effectively incorporated into emergency response and recovery activities.
First Response to Oil Spills Training	**FROST**	A two-day introductory training course taught by the Canadian Coast Guard
Fisheries and Oceans Canada	**DFO**	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.
Geographic Response Strategy	**GRS**	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.

Hazardous Substance		Includes any unknown or incompletely identified material or mixture, any pollutant other than oil, or any material regulated as a "Dangerous Chemical", "Noxious Liquid Substance", "Dangerous Bulk Material", or "Dangerous Good" under the *Canada Shipping Act, 2001*, or *Transportation of Dangerous Goods Act* or other goods of a dangerous nature.
Incident Commander	**IC**	The individual responsible for all incident activities under their mandate or delegation of authority, 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. **Federal Incident Commander:** The federal government's representative member of Unified Command designated by mandate and/or legislation. **First Nations Incident Commander(s):** The First Nation representative assigned as a member of Unified Command by its territory and executive. **Local Authority Incident Commander:** The local authority's representative member of Unified Command designated by charter and its executive. **Provincial Incident Commander:** The provincial government's representative member of Unified Command designated by mandate and/or legislation. **Polluter Incident Commander:** The representative of the ship owner or Oil Handling Facility assigned to be a member of Unified Command.
Incident Command Post	**ICP**	The field location at which the primary tactical-level on-scene incident command functions are performed.
Incident Command System	**ICS**	A standardized incident management methodology and terminology specifically designed to facilitate the cooperation between different departments, agencies, private companies, First Nations and all affected or having a responsibility as a result of an incident, without being hindered by differences of terminology or organisational structure.
Information Officer	**IOFR**	Responsible for developing and releasing information about an incident to the media and public.
Joint Information Centre	**JIC**	Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during a crisis or incident operations.

Land Based Spill		A pollution incident originating from a land based source that enters the maritime environment.
Lead Agency		The Lead Agency, otherwise known as Agency of Primary Jurisdiction, is the organization designated by statute, inter-agency agreement, treaty or Cabinet decision to ensure appropriate management of the emergency response functions.
Liaison Officer	**LOFR**	A member of the Command Staff responsible for coordinating with representatives of cooperating and assisting agencies or organizations.
Marine Emergency Response Coordination Committee	**MERCC**	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.
Marine pollution incident		When a pollutant enters, or has the potential to enter, Canadian Waters. For the purpose of this plan, "Marine Pollution Incident" applies to Canadian Coast Guard lead responses under the powers of the Minister of Fisheries and Oceans as defined within Section 41 of the Oceans Act. In circumstances when the Canadian Coast Guard is not the lead agency, the appropriate department, board or agency's regulatory requirements would take precedence.
Marine Spill Response Operations Course	**MSROC**	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.
Mitigate		Any action to contain, reduce, or eliminate the harmful effects of a spill or release of a hazardous substance/material.
Multi-Jurisdictional Response		An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In Incident Command System, these incidents will be managed under Unified Command.
Mystery Source Pollution Incident		A spill of a pollutant from an unknown source in Canadian waters.
National Aerial Surveillance Program	**NASP**	The National Aerial Surveillance Program monitors ships by aerial surveillance to help prevent pollution in Canadian waters.

National Environmental Emergencies Centre	**NEEC**	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.
Net Environmental Benefit Analysis	**NEBA**	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.
Oil		Petroleum in any form, including crude oil, fuel oil, sludge, oil refuse and refined products (CSA, 2001).
Oil Pollution Incident		An occurrence, or a series of occurrences having the same origin, that results or may result in a discharge of oil (CSA, 2001 Part 8 s.165).
Oil Handling Facility	**OHF**	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.
Oil Pollution Incident		An occurrence, or a series of occurrences having the same origin, that results or may result in a discharge of oil (CSA, 2001 Part 8 s.165).
Plan Area		The West Coast Vancouver Island Integrated Response Plan Area focuses on the water off the west coast of Vancouver Island. The southernmost border begins between Pacheena Bay and Nitinat Lake. The area encompasses the waters of Barkley Sound and Alberni inlet, Clayoquot sound, and Nootka Sound. The northernmost border lies on the southern side of Brooks Peninsula. The Plan Area borders the North Vancouver Island Response Planning Area to the north, and the Juan de Fuca Response Planning Area to the south.

Pollutant		The *Canada Shipping Act, 2001* definition is: **(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 **(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.
Polluter		In the context of marine pollution, a polluter can be a vessel owner or an oil handling facility owner.
Polluter Pays Principle		Canada has adopted the polluter pays principle where the polluter is responsible for costs and expenses for eligible claims associated with pollution damage. For example, if a ship spills oil in Canadian waters the responsibility to compensate for eligible losses and damages, the ship-owner is first and foremost strictly liable.
Pollution Damage		"Pollution damage", in relation to any ship, means loss or damage outside the ship caused by contamination resulting from the discharge of a pollutant from the ship (*Marine Liability Act*, Part 6).
Regional Operations Centre	**ROC**	The Canadian Coast Guard's 24/7 alerting desk.
Remediation		The process to remove residual contamination from soil, water, air, and other media.
Residual effects		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.
Resources-at-Risk	**RAR**	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 interests.

Response Organization	**RO**	A qualified person to whom the Minister (TC) issues a certificate of designation under subsection 169(1) of the *Canada Shipping Act, 2001*. Response Organizations are prepared to respond to marine pollution and to mitigate the impact of discharge into the marine environment. See *Western Canada Marine Response Corporation*.
Resource Agency		An agency or organization providing personnel, services, or other resources to the agency with direct responsibility for incident management.
Response Resources		Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations.
Restoration		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.
Safety Officer	**SOFR**	Responsible for the development and recommendation of measures to ensure personnel safety and occupational health of response workers.
Ship-Source Oil Pollution Fund	**SOPF**	Established under Part 7 of the Marine Liability Act, the Ship-source Oil Pollution Fund (SOPF) is a special purpose account available to pay for claims of response costs and expenses, loss and damage related to oil pollution damage or anticipated damage caused by the discharge of oil from all classes of ships on inland or coastal waters, including the exclusive economic zone of Canada.
Shoreline Cleanup Assessment Technique	**SCAT**	A systematic method for surveying an affected shoreline after a marine pollution incident.
Transport Canada	**TC**	Transport Canada is the lead federal regulator of marine shipping and has legislative oversight over Canada's oil spill preparedness and response regime.
Unified Command	**UC**	An application of the Incident Command System, used when there is more than one agency with incident responsibility or when incidents cross 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. (*CCG Incident Management Handbook, 2016*). Refer to section 3150 for further information.

Vessel		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.
Volunteer		Any individual accepted to perform services by an agency that has authority to accept volunteer services when the individual performs services without promise, expectation, or receipt of compensation for services performed.
Waste Management Plan	**WMP**	A document that outlines the activities and methods of waste management from waste generation to final disposal.
Waters under Canadian Jurisdiction		The internal waters of Canada as described in section 6 of the *Oceans Act*, the territorial sea of Canada as described in section 4 of the *Oceans Act* and the exclusive economic zone of Canada as described in section 13 of the *Oceans Act*, and includes the shipping safety control zones prescribed pursuant to section 11 of the *Arctic Waters Pollution Prevention Act*.
Western Canada Marine Response Corporation	**WCMRC**	The Transport Canada certified Response Organization for British Columbia.
Wildlife		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 support 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 that falls under the authority of the Canadian Coast Guard, as provided for by legislation.

The following table summarizes the circumstances where other agencies will adopt the lead agency role.

Table 1. Lead Agency Based on Pollutant Source

Pollutant Source	Lead Agency	CCG Role
Vessel operated by the Department of National Defence	ECCC	Resource Agency
Canadian Coast Guard Vessel	ECCC/CCG	Resource Agency
Land Based (Federal Facility)	ECCC	Resource Agency
Land Based	Province(s) or Territory	Resource Agency
Land Based (Pipeline)	Province	Resource Agency
Land Based (Inter-Provincial Pipeline)	CER	Resource Agency

1120 Scope

The Plan highlights operational activities, from reporting, assessment, and notification to conducting a coordinated response to a marine pollution incident. It is intended for discharges or threatened discharges of pollutants resulting from a vessel, an Oil Handling Facility (OHF) engaged in loading or unloading oil from a vessel or as a result of a mystery source spill within Canadian waters. It is further intended to support significant, complex marine pollution incidents in the Plan Area where Unified Command (UC) is established.

This evergreen document will continuously change and evolve through lessons learned from incidents, exercises and the planning process.

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** – The economic impacts from a marine pollution incident on local and regional economies should be minimized.
- **Respect** – All participants acknowledge and respect the laws, customs, traditions, existing agreements and governance structures in the Plan Area. Unified Command does not supersede the legal authorities assigned by law to any other department, board or agency of the Government of Canada.
- **Timeliness of Response** – The response must be timely, appropriate and reasonable in 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 develop a coordinated 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** build safety plans and ensures the health and safety of all responders.
- **Hazard and Risk Assessment** undertaken 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 an incident.
- **Training and Certification** are required for all responders before deployment to ensure they are prepared for operational tasks in potentially hazardous working environments.
- **Personal Protective Equipment** provided to responders suitable for their operations, hazards, and working conditions. Responders should be oriented and trained in the correct use of personal protective equipment.
- **Hygiene and Decontamination** Personal hygiene facilities and supplies are readily available, and the standard of use is communicated to all responders. Response-related oil/chemical contamination is controlled and decontamination protocols are effectively implemented.

Additional information can be found in Appendix 8: Health and Safety.

1150 Other Plans in the Area

This Integrated Response Plan is part of a network of plans within the Canadian Coast Guard. The following network of plans are dependent on each other but one does not necessarily supersede the other.

Marine Spills Contingency Plan (National Chapter)
This policy document that provides overarching guidance for CCG regions on managing the national and regional Environmental Response Program to be compliant with regulations, standards and the Marine Oil Spill Preparedness and Response Regime.

Marine Spills Contingency Plan (Western Region Chapter)
The Western Region Chapter is a strategic document that details how the Environmental Response teams are managed, train and exercise, conduct response operations, and procure and maintain pollution response equipment.

Canada-United States Joint Marine Pollution Contingency Pacific Annex (CANSUPAC)
CANUSPAC is an agreement between the Canadian Coast Guard (CCG) and the United States Coast Guard. The Joint Contingency Plan is intended to ensure awareness and enable a coordinated federal response to pollution incidents that could affect both countries and covers all potential sources of marine pollution.

Integrated Response Plans (Area Plans)
Canadian Coast Guard Western Region has eight geographically specific response planning areas along the coast of BC. These areas have developed an integrated response plan, such as this one, in collaboration with federal government, First Nations, provincial government, local authorities 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.

This Plan is one component of a framework for marine pollution incident response that spans multiple jurisdictions, and is aligned with Canadian legislation, which implements the relevant international conventions adopted under the auspices of 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.

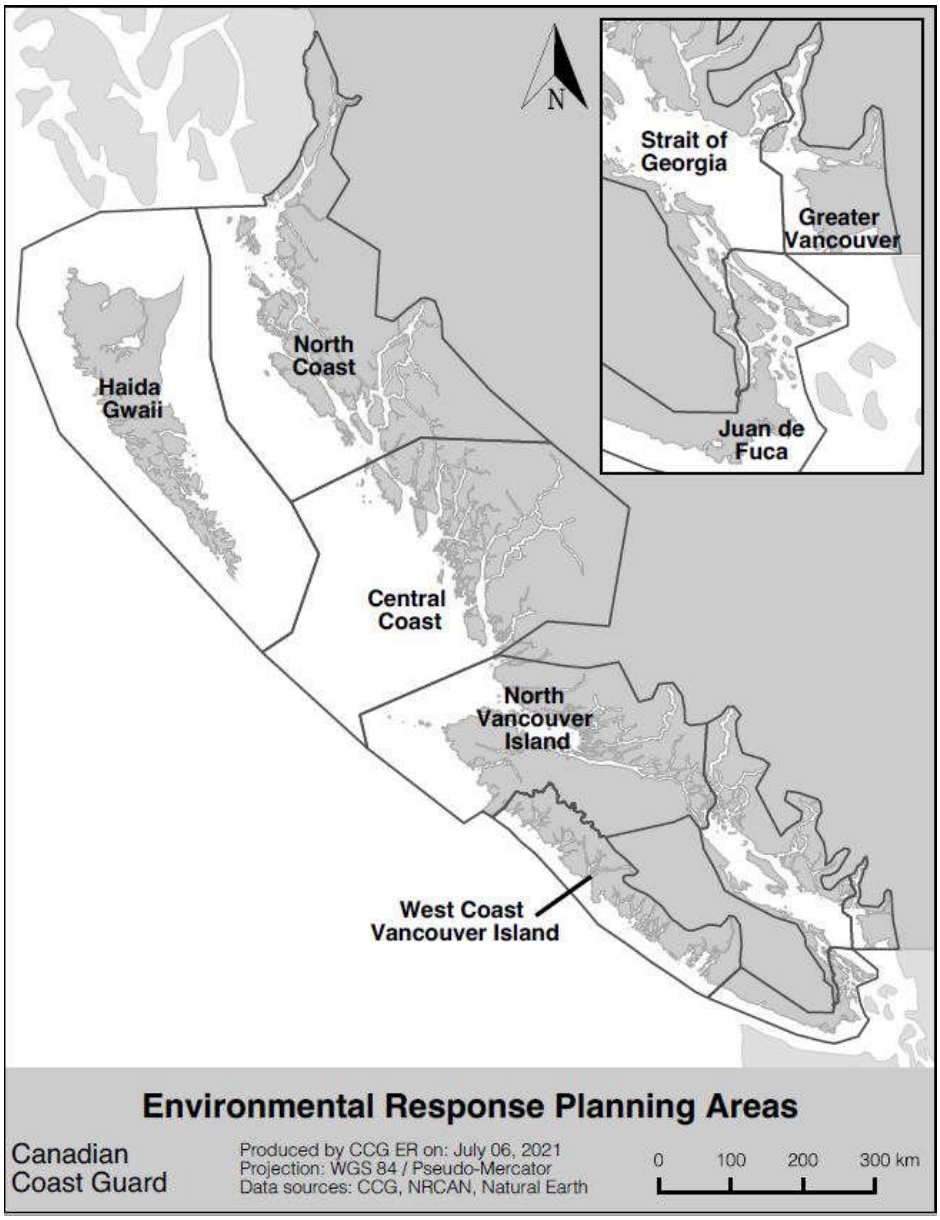

Figure 1. The eight Canadian Coast Guard Environmental Response Areas. These areas include the Central Coast, Greater Vancouver, Haida Gwaii, Juan de Fuca, North Coast, North Vancouver Island, Strait of Georgia, and West Coast Vancouver Island.

1160 Overview of the Plan Area

The West Coast Vancouver Island Integrated Response Plan Area focuses on the water off the west coast of Vancouver Island. The southernmost border begins between Pacheena Bay and Nitinat Lake. The area encompasses the waters of Barkley Sound and Alberni inlet, Clayoquot sound, and Nootka Sound. The northernmost border lies on the southern side of Brooks Peninsula. The Plan Area borders the North Vancouver Island Response Planning Area to the north, and the Juan de Fuca Response Planning Area to the south.

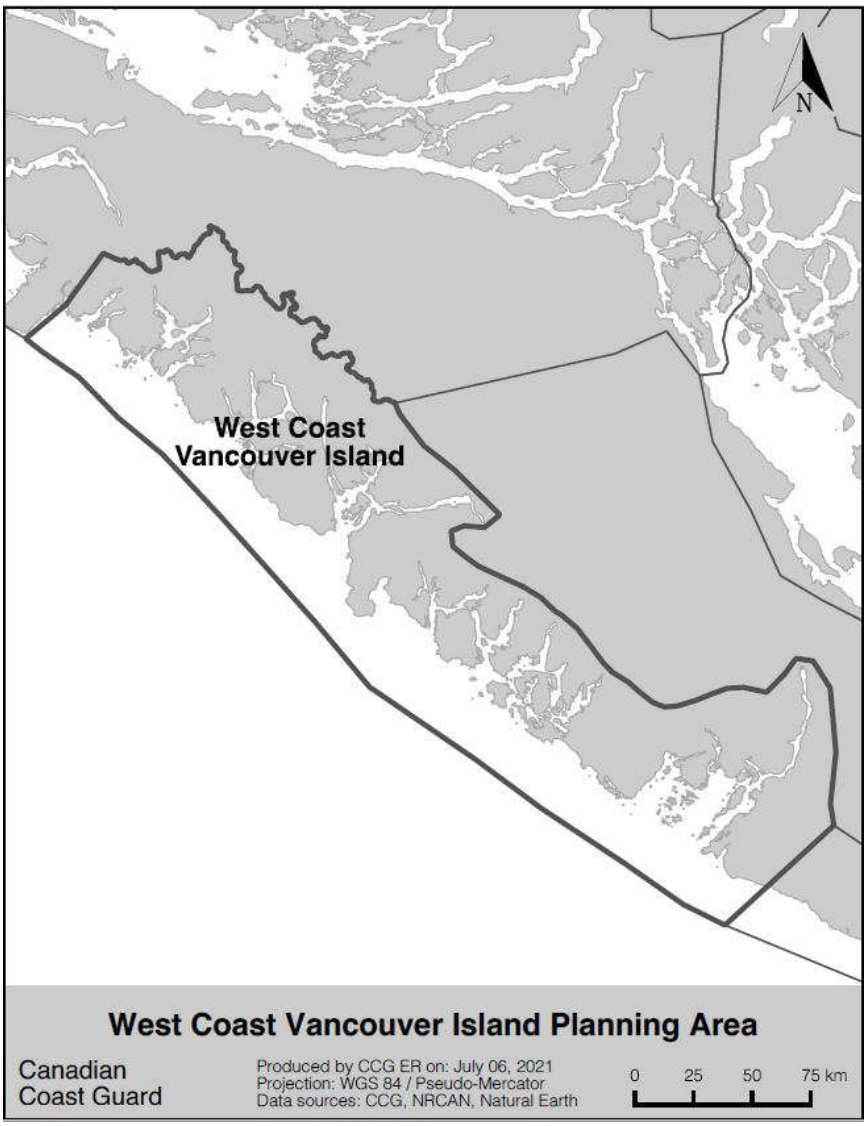

Figure 2. The West Coast Vancouver Island Response Planning Area which focuses on the waters off the west coast of Vancouver Island. This area borders the North Vancouver Island Response Planning Area to the north, and the Juan de Fuca Response Planning Area to the south.

The consequences of a marine pollution incident in the Plan Area will vary by incident and depend on many factors. Each incident is unique. In particular, where the spill occurs, and the conditions under which it happens, will influence the short and long term consequences. Some of these factors include:

- Type of product spilled and its fate and behaviour;
- Type of affected media (e.g. water, sediment, soil);
- Nature of the media affected (e.g. coarse vs fine grain sediments/soils);
- Sensitivity of the affected environment (e.g. fragile habitat, clamming beds, recreational beaches);
- Jurisdiction over the affected environment (e.g. federal, provincial, municipal, reserve lands);
- Pre-spill baseline conditions;
- Response activities (e.g. shoreline treatment, protective booming);
- Recovery strategy (e.g. complete removal, partial recovery, long-term natural attenuation); and,
- Existing plans

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 Response Capacity in the Plan Area

Coast Guard Environmental Response has assets from staffed ER depots and CCG stations throughout the Coast available to respond if necessary to repair, remedy, minimize or prevent pollution damages. CCG also has environmental response containers positioned at strategic locations throughout the plan area. Further details on CCG assets can be found in the CCG Marine Spills Contingency Plan-Western Region.

Western Canada Marine Response Corporation (WCMRC) is the Transport Canada certified Response Organization (RO) for the west coast of British Columbia. WCMRC resources are strategically located along the coast. A list of WCMRC's equipment capacity can be found at http://wcmrc.com/preparedness/capacity/. WCMRC demonstrates on an annual basis that appropriate equipment, including but not limited to booms, skimmers and temporary storage are available to meet the requirements of a spill. For clarification on the standards that must be met by WCMRC for their Transport Canada Certification, refer to the Response Organization Standards Regulation TP12401E.

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 non-OHF discharges.

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 used in a response should be maintained and tested on a regular basis to ensure functionality in the event of an incident. 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. It should be noted that there are limitations for on-water recovery, for example when weather on-scene makes recovery inefficient, uncontrollable, or unsafe.

2110 Cascading Resources

The Canadian Marine Oil Spill Preparedness and 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 plan area, resources may come from within and outside the area, depending on the scale of the incident.

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 CANUSPAC JCP, to supplement the local equipment that was initially deployed.

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

2200 Training & Exercises

Response training and exercises are critical components of response 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 3-1 below summarizes the training courses available in the Plan Area to help participants identify and plan for training their personnel.

Table 2. Marine Pollution Response Training Available in the Plan Area

Course Name	Description	Delivered by:
Recommended for all Members of an Incident		
Introduction to Oil Spills (INTRO)	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. Prerequisites: None	CCG
ICS-100	Intro to the Incident Command System (ICS). Prerequisites: None	Private Vendor
Recommended for Spill Recovery Field Crews		
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. Prerequisites: None	CCG
Recommended for Members in the Incident Command Post		
ICS-200	Basic ICS principles. Prerequisite: ICS-100	Private Vendor
ICS-300	Intermediate ICS principles. Prerequisites: ICS-200	Private Vendor
Marine Spill Response Operations Course (MSROC)	Response management techniques. Prerequisites: Essential of Marine Oil Spill Training (EMOST) CCG 4-day Response Training and ICS-300	CCG
Recommended for Environmental Unit and Specialist Field Crews		
Shoreline Cleanup Assessment Technique (SCAT)	Standardized technique for assessing shorelines to establish clean-up priorities and techniques. Additional training available for Team Leaders. Prerequisites: None	ECCC / Private Vendor
Recommended for advanced Incident Command Post positions		
ICS-400	Advanced ICS principles. Prerequisites: ICS-300	Private Vendors
ICS Position Specific Courses	There are courses available that are specific to certain Command and General Staff positions. Prerequisites Vary: 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 and 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. When designing the exercise, the exercise planners should consider the capacity, roles and responsibilities of participants and time these exercises to facilitate participation.

The Plan is intended to be exercised through a larger multi-agency exercise in the 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. Learnings from exercises should be reviewed to identify gaps 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. Appendix 3: Key ICS Functions provides detailed information about the full organizational structure that may be stood up during a response.

3100 Initial Response Phase

Some of the activities during the initial response phase may occur simultaneously. CCG personnel will follow internal Standard Operating Procedures.

3110 Incident Reporting

Reports of pollutant discharge into the marine environment made by the general public, including aircraft, harbour masters, and so forth, must be reported to the CCG Regional Operations Centre (ROC) 24/7 Marine Reporting Line by calling **1-800-889-8852** or **VHF CH16**.

Spills originating from a land-based source must be reported to the provincial Emergency Coordination Centre of Emergency Management BC (EMBC) by calling **1-800-663-3456**.

Reports can also be directed through local emergency services 911.

For vessels in waters under Canadian jurisdiction, the master must report any pollutant discharge or anticipated discharge from the vessel to a marine safety inspector or a marine communications and traffic services officer as outlined in the *Vessel Pollution and Dangerous Chemicals Regulations s.132*.

Oil handling facility operators must report any discharge or anticipated discharge of oil to the federal emergency telephone number identified in their oil pollution emergency plan. They are also to notify the nearest Transport Canada Marine Safety Office in writing as outlined in the *Vessel Pollution and Dangerous Chemicals Regulations s.133.*

Additional information can be found within Transport Canada's *Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants* https://tc.canada.ca/sites/default/files/migrated/tp9834e.pdf

Spills from CER-regulated facilities must also be reported in accordance with CER reporting requirements. See Appendix 1 for more details.

When the CCG ROC or EMBC receives a pollution report, they will ensure the reporting party has provided as much detail as possible, including but not limited to the source, product type, amount, and location. An initial Pollution Report (or EMBC's Dangerous Goods Incident Report) is created and the Environmental Response Duty Officer is notified.

3120 Initial Assessment

The 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 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:

Personal Safety	Public Safety	Polluter's Safety
• Air quality • Explosion hazard • Equipment operation • Weather/sea state • Time of day	• Air quality • Vessel traffic in the area • Location of spill in proximity to population • Contamination of water or food	• Safety Plan • Adequate PPE • Air quality monitoring • Awareness of public safety
Environment	**Economic**	**Socioeconomic**
• Presence of biological or cultural sensitivities • Proximity to sensitive shorelines • Toxicity (light oil) • Smothering (heavy oil) • Archaeological, traditional use and cultural sites	• Interruption of fisheries (food fishery, commercial, shellfish, fish farm) • Interruption of public or commercial transportation • Interruption of vessel traffic and port access. • Disruption of local gov't and communities	• Loss of the use of parks, beaches and the marine • Recreational fishing • Loss of tourism

The CCG Duty Officer will consider the health and safety factors and potential impacts and damages listed above, then determine the appropriate escalation measures needed for the response. Measures may include, but not be limited to:

- Requesting information from anyone who can assist in the initial assessment including local personnel and vessels, First Nations, Port Authority, Response Organization, first responders in local governments, local harbor masters (wharfingers), commercial vessels, aircraft, and others;
- Sending out notifications and updates;

- Tasking resources to the site.
- Contain fuel/oil in tanks (plug vents/shut valves)
- Boom the vessel/slick
- Exclusion/diversion booming
- Start initial recovery of oil by mechanical, absorbent, or manual means.

Appendix 4: Initial Information Gathering Checklist contains a Marine Pollution Observation and Reporting Checklist.

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

During the initial assessment, personnel other than Coast Guard responders such as Environmental Enforcement Officers, Wildlife Enforcement Officers or Environmental Emergencies Officers of Environment and Climate Change Canada (ECCC) could attend the site to gather information before establishing an Incident Command Post (ICP). Once an ICP is established with a Unified Command, officials would make their presence known and sign in and out of the operating area following the ICS process.

3130 Notification within a Response Planning Area

If the CCG Duty Officer's initial assessment determines a potential for a large-scale, complex incident or significant environmental, economic and public or political concerns; the CCG ROC will initiate email notifications to the pre-identified distribution list for the Plan Area.

The ROC also sends the Pollution Report to EMBC Emergency Coordination Centre, which in turn sends notifications according to their distribution list, which includes provincial, First Nation and local authority contacts in the response planning area. Email notifications may be followed-up by phone notifications for Nations or agencies that will be immediately impacted.

In an incident close to the border(s) of an adjacent Response Planning area, both planning areas will be notified using the pre-defined distribution lists. Each agency or First Nation should maintain and update their emergency contact lists with their respective CCG response planning contact.

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

3140 Activating a Coordinated Response

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, a coordinated response will be activated.

Initial Coordination Call

The CCG ROC will create a calendar invitation for a coordination call and distribute it using the same email distribution list as the pollution reports. These distribution lists notify EMBC ECC, federal, First Nation, local governments, response organization and private sector participants. Like the pollution report, Emergency Management BC will forward the invitation to First Nations and provincial and local governments. The CCG ROC will facilitate the coordination call using the template found in Appendix 5: Coordination Conference Call Agenda and send 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 that 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 before or during the establishment of Unified Command and an Incident Command Post. Key discussions include:

- What emergency measures are required? (e.g. deployment of an emergency rescue tug or nearshore protection measures).
- Where and when to establish an Incident Command Post to best manage the marine pollution incident?
- Key public messaging and incident briefing.

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 individuals should be updated regularly until UC is established or the incident resolves.

3150 Establishing Unified Command

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

UC is intended to consist of a single representative from each of the following, when possible:

- Federal;
- First Nation;
- Provincial;
- Local Government; and
- Polluter

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

All UC participants require delegated authority from their respective institutions to decide 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 clearly defined in Appendix 6: Lead Agency Designation.

Unified Command must be kept to a manageable size to make decisions and move response operations forward efficiently. Each impacted level of government will collectively designate one person to represent each affected government's combined priorities and concerns 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 the area of pollution moves or expands, functional and jurisdictional responsibilities can change. This means that the representatives in Unified Command will also change. The Incident Commander's may have to discuss Unified Command's composition at multiple times throughout the response.

At this stage, the Unified Command members and 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. Appendix 3: Key ICS Functions has further information on ICS roles and responsibilities including 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 initial response transition, 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.

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 establishing 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 establishing 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.

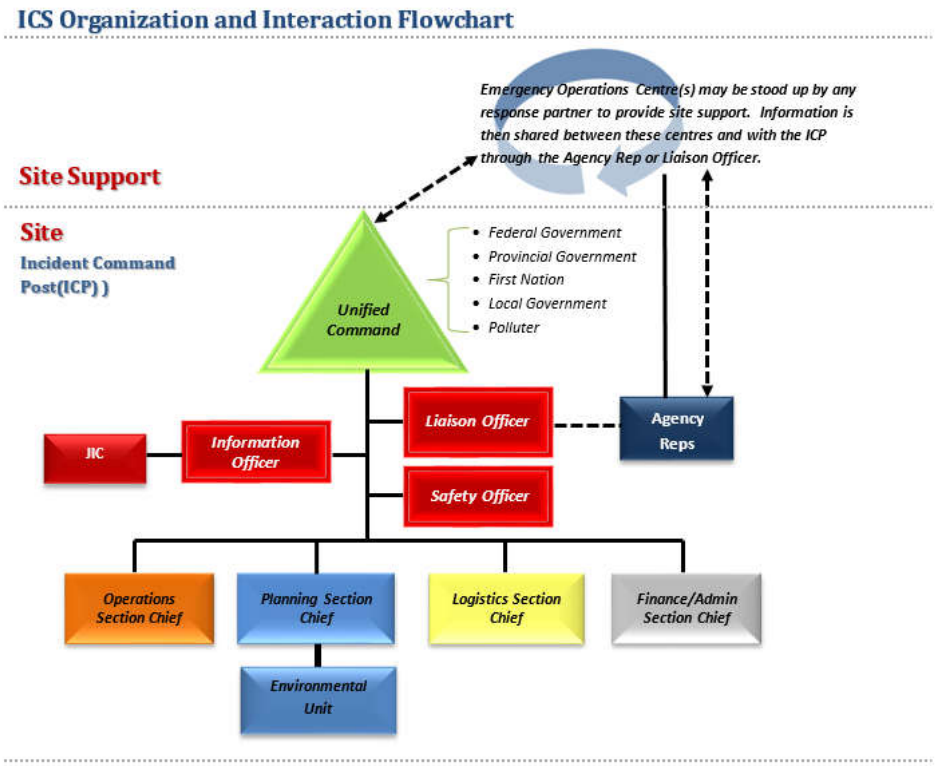

Figure 3. ICS Organization and Interaction Flowchart. This flowchart depicts the hierarchical relationship between positions in the ICS organization chart, as well as information flow lines with external agencies represented in their emergency operations centres or represented by Agency Representatives.

3210 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 weigh 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 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. EU recommendations are incorporated in the Incident Action Plan and communicated during scheduled meetings.

More information about the EU can be found in Appendix 7: Environmental Unit.

Resources at Risk

Resources at risk (RaR) are features of cultural, socio-economic, physical, and ecological systems that pollution incidents or incident response activities can impact. Federal, provincial, and municipal agencies, First Nations 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 identifying and ranking priority areas as part of the ICS-232 RaR form for operational response purposes. RaRs can be divided into cultural knowledge and resources, socio-economic resources, the physical environment, and ecological resources. Identification of priority resource areas helps 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 considers 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 First Nations communities are required during incidents to inform response actions and assist responders.

Cultural Resources

Traditional knowledge and information on RaR from coastal First Nations communities is incorporated during a marine pollution incident. Resources not explicitly identified by government agencies need to be enhanced by local and traditional knowledge in a marine pollution incident. This includes 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.

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, First Nations 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. Regardless if an ICP is set up, responders have access to real-time conditions through a Common Operating Picture (COP). The COP can provide:

- Oil spill trajectory modelling,
- Site-specific weather,
- Marine traffic,
- Sea current tracker buoys,
- Characteristics of shorelines
- Potential of oil remaining in the shoreline substrate.

Ecological Resources

Exposure to pollutants such as petroleum products has a wide range of lethal and sub-lethal impacts on ecological resources. Responders must be aware of sensitive habitats and vulnerable species 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 and First Nations communities, response organizations, and industry. Sources of information include (but are not limited to):

- Fact sheets
- DFO Science's Vulnerability Framework
- Spatial 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 substrate have also been developed by DFO and ECCC to help responders prioritize sensitive 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, such as the 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.

3220 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 useful to manage the response to a marine pollution incident. Information gathered for inspections, investigations, or enforcement purposes will not be shared unless the law requires the disclosure, such as in criminal proceedings.

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.

3230 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.

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.

Canadian Coast Guard Policy on Volunteers

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.

3240 Waste Management

Waste management is an integral component of a response that should be initiated as soon as pollutant recovery begins and waste is generated. 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, collecting, treating and disposal of all waste generated by the response and the response activities. Waste is to be collected, characterized, segregated, tracked, reported and transported, following 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 can expand or contract depending on what may be needed at the moment.

3250 Response Demobilization

Equipment and personnel requirements change throughout various 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 considered 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 by the Demobilization Unit or the Planning Section Chief and approved by Unified Command. Final demobilization of response assets should not happen until developed endpoints have been reached for each response area. Endpoints will be set in the Environmental Unit and approved by Unified Command.

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

Chapter 4000 Post Incident

Purpose and Scope

Many activities take place to transition from a response to the recovery phase, some of which are mentioned in Appendix 9: Transition to the Recovery Phase. These include the demobilization of equipment and other actions, such as waste management that have been ongoing since the start 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

A post-incident review's primary purpose 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 prepare for a review, organizations may still conduct internal incident reviews. These internal lessons should be brought to the review to aid in the discussion and share lessons broadly. As a result, an After Action Report will be produced 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 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.

Appendix 1: Agency Specific Summary of Participant Roles, Jurisdiction and Capabilities

Response to a marine pollution incident requires coordination of many organizations at several levels. The following outlines the contact information for potential participants in the North Coast area, and what their role in an incident might be. This goes further as to outline what capabilities and resources the North Coast area participants may be able to provide.

Federal

Canadian Coast Guard

Contact Information	**Marine Pollution Reporting Line – 24/7 Regional Operations Centre:** 1-800-889-8852 **Prince Rupert Marine Communications and Traffic Services (MCTS):** VHF Channel 16 Telephone: 250-627-3070 (Shift Supervisor) supervisor.rupert@innav.gc.ca
Role	The Canadian Coast Guard is the lead federal agency for the response component of Canada's Marine Oil Spill Preparedness Response Regime as stipulated by both the Oceans Act, 1996, Section 41 and the Canada Shipping Act, 2001. As a complement to the industry regime capability, the CCG also maintains a considerable preparedness capacity if an immediate response is required when the Polluter is unknown, unwilling or unable to manage a response. The CCG's Environmental Response program ensures the response to a pollutant spill in the marine environment, where the spill is ship-sourced, and a mystery spill (when the source is unknown) or a spill from an Oil Handling Facility when a vessel is loading or unloading oil. The Environmental Response program has three mission objectives: • To minimize the impact of marine pollution incidents on public safety; • To minimize the environmental impact of marine pollution incidents; and • To minimize the economic impact of marine pollution incidents.

Jurisdiction	**The Minister of Fisheries, Oceans and the Canadian Coast Guard is responsible for "Marine pollution response" in Canada pursuant to the *Oceans Act*.** **The powers of the Minister and their scope are provided for in the *Canada Shipping Act, 2001*:** ***180 (1)*** *If the Minister of Fisheries and Oceans believes on reasonable grounds that a vessel or an oil handling facility has discharged, is discharging or may discharge a pollutant, he or she may* *a) take the measures that he or she considers necessary to repair, remedy, minimize or prevent pollution damage from the vessel or oil handling facility, including, in the case of a vessel, by removing — or by selling, dismantling, destroying or otherwise disposing of — the vessel or its contents;* *b) monitor the measures taken by any person or vessel to repair, remedy, minimize or prevent pollution damage from the vessel or oil handling facility; or* *c) if he or she considers it necessary to do so, direct any person or vessel to take measures referred to in paragraph (a) or to refrain from doing so."* The CCG takes what measures are deemed necessary to repair, remedy, minimize or prevent pollution damage from a vessel or oil handling facility in waters under Canadian jurisdiction. The CCG considers a marine pollution incident to be any incident, accident or disaster involving a pollution risk or leads to a discharge of pollutant products into Canadian waters. This marine pollution must come from a vessel (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), a trans-shipment operation between a vessel and an Oil Handling Facility or an unknown source.
Capabilities & Equipment	• Federal Incident Commander • 24/7 Regional Operations Centre for pollution alerts and notifications. • 24/7 Marine Communications and Traffic Services. • 24/7 response vessels, equipment and responders for Search and Rescue and Environmental Response. • 24/7 Mobile Incident Command Posts including communication options for remote areas. • Ability to stand up an incident command post with full compliment of trained staff for ICS positions. • Coordinate contractors and response partners as required.

Environment and Climate Change Canada

Contact Information	**National Environmental Emergencies Centre Spill 24/7 Reporting Line:** 1-866-283-2333
Role	The National Environmental Emergencies Centre (NEEC) 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. The NEEC operates 24/7 and 365 days per year. During marine pollution incidents, it supports the Federal Lead Agency and response partners to enable and ensure an effective environmental response. Through these actions, it provides and maximizes the protection of: ● The environment, ● waters frequented by fish (including marine mammals), ● Species at Risk and their habitats, and ● Migratory birds. The NEEC also participates in the development and maintenance of policies, plans, agreements and procedures on environmental emergencies. It works in collaboration with partners in preparedness so that the response to environmental emergencies is timely and effective, and informed by the best scientific and technical advice available. The NEEC's partners include other federal departments, First Nations, other level of government, the private sector and international organizations.
Jurisdiction	Under the *Department of the Environment Act*, the powers, duties and functions of the Minister of Environment and Climate Change extend to matters such as: ● the preservation and enhancement of the quality of the natural environment, including water, air and soil quality, and the coordination of the relevant policies and programs of the Government of Canada; ● renewable resources, including migratory birds and other non-domestic flora and fauna; ● meteorology; and ● the enforcement of rules and regulations. https://www.canada.ca/en/environment-climate-change/corporate/mandate.html Environment and Climate Change Canada's main regulatory responsibilities are defined in the Canadian Environmental Protection Act, 1999 (CEPA) and the pollution prevention provisions of the Fisheries Act. These Acts require those responsible for an emergency to notify the government of an actual or potential

	pollution release and to take appropriate response measures. ECCC's Emergencies Officers designated under *Canadian Environmental Protection Act* and *Fisheries Act* have powers to assess risk and measures and, if necessary, require that additional actions are taken to ensure the environment and Canadians are protected. The *Emergency Management Act*, *Migratory Birds Convention Act, 1994* and *Species at Risk Act* are other examples of key Acts that govern ECCC's role in environmental emergencies.
Capabilities & Equipment	● 24/7 Notification Desk, receiving, triaging and informing partners of environmental emergencies; ● 24/7 Environmental Emergencies Officers (ICS trained) responding to emergencies throughout the country ● ECCC's environmental emergency preparedness and response coordinated services: ○ Site specific weather information: weather observations, warnings, sea state, wind, etc. ○ Ice charts and forecasts ○ Operational monitoring of satellite imagery for early detection of oil spills (Integrated Satellite Tracking of Pollution) ○ Aerial monitoring of oil spills in cooperation with Transport Canada ○ Ocean numerical modelling (currents, ice, wave, temperature, trajectories) ○ Surface winds and tidal currents over the area of interest to run oil spill models illustrating for example its trajectory on the water and its dispersion in the water column ○ Atmospheric dispersion modelling for all types of contaminants ○ Oil forensic identification ○ Fate, behaviour and effects of oil and hazardous substances. ○ Spill treating agent evaluation and guidelines ○ Evaluation of spill countermeasures, containment, recovery, treatment and disposal techniques ○ Environmental sensitivity mapping and advice including the protection of sensitive ecosystems, species at risk and wildlife (e.g., migratory birds) ○ Development and implementation of shoreline clean-up assessment technique, cleanup priorities and endpoints. ○ Establishment of impacted or potentially impacted shorelines to determine cleanup priorities and the level of cleanliness to achieve based on criteria established with partners NEEC also:

	• Ensures all appropriate and reasonable mitigation actions to protect the environment are taken
	• Notify key external partners on environmental emergencies, including First Nations
	• Convenes meetings between key subject matter experts to develop consensus-based advice for unified command
	• Provides technical and scientific advice and support to the ICS structure.
	• Provides on-site and/or remote subject matter experts and technical specialists related to:
	  ○ Field observation for on-site assessment and determination of impacts
	  ○ Shoreline Clean-up Assessment Technique (SCAT)
	  ○ Support for wildlife protection
	  ○ Environmental sensitivities identification
	  ○ Legal sampling
	  ○ Laboratory analytical services

Canadian Wildlife Service – Part of Environment and Climate Change Canada

Contact Information	**National Environmental Emergency Centre Spill Reporting Line:** 1-866-283-2333 For Wildlife Emergencies in the Pacific Region: EC.WildlifeEmergencies.pyr.EC@canada.ca 1-778-847-5807
Role	Canadian Wildlife Service personnel provide support within the Environment Unit as Wildlife Technical Specialists to: • identify resources (wildlife, habitat) at risk; • develop management plans for capture, transport, deterrence, rehabilitation of wildlife; • authorize (permit) companies and individuals for the transport and rehabilitation of oiled wildlife; • support the development of sample collection for long-term recovery monitoring. Canadian Wildlife Service can also resource field support personnel to assist in wildlife reconnaissance and capture. Canadian Wildlife Service will oversee activities conducted by Wildlife Response Organizations and/or hired contractors/consultants engaging in wildlife-related activities.

Jurisdiction	Canadian Wildlife Service is responsible for activities subject to the *Migratory Birds Convention Act* and *Migratory Birds Regulations, the Species at Risk Act*, and the *Canada Wildlife Act*. The Canadian Wildlife Service has particular authorities for Migratory Birds and Species at Risk on federal lands, as well as National Wildlife Areas and Migratory Bird Sanctuaries.
Capabilities & Equipment	• Personnel Available 24/7 • Wildlife deterrence, monitoring, rescue and rehabilitation expertise • ICS Level 300 – Environmental Unit or Wildlife Branch Lead Capability • Migratory bird and species at risk subject matter experts • GIS Personnel • Toxicological tissue sampling of marine invertebrates and migratory birds • Capture and transport equipment for oiled wildlife • Recovery and storage equipment for dead oiled wildlife • Basic survey equipment (GPS, camera, binoculars, etc.) • Environmental Data • Sensitivities Data • Wildlife permit authorizations

Fisheries and Oceans Canada

Contact Information	**Observe, Record, Report Line:** **Report suspicious fishing activity or habitat violations** 1-800-465-4336 – National Line 1-877-952-7277 – Provincial BC Line Pacific Environmental Incident Coordinator General Inbox (non-24hrs) DFO.PAC.EnvIncident-IncidentEnv.PAC.MPO@dfo-mpo.gc.ca
Role	Provide necessary and relevant 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.
Jurisdiction	Fisheries and Oceans Canada's (DFO) mandate is to support economically prosperous maritime sectors and fisheries, sustainable aquatic ecosystems and safe and secure waters. This mandate is derived from various legislative authorities including *the Oceans Act*, *Fisheries Act*, *Canada National Marine Conservation Areas Act*, and *Species at Risk Act*. DFO and ECCC closely coordinate to provide advice and

	information as they share responsibilities under the Fish and Fish Habitat Protection and Pollution Prevention provisions of the *Fisheries Act*. In the event of a marine pollution incident, DFO is responsible for providing advice and recommendations to the Federal Lead Agency to inform response actions for the protection of the resources it manages, including fish, fish habitat, species at risk and their habitat; as well as ensure its mandates are protected. This advice is coordinated with ECCC as the federal lead in coordinating scientific advice to inform initial response activities and/in or is provided via the emergency structure in place during an ongoing response if required. This advice can include but is not limited to: ● The identification of sensitive species including Species at Risk (and their habitat) under DFO's jurisdiction and aquatic ecosystems including Marine Protected Areas and other conservation areas. ● Assessing the nature and extent of impact on species and habitat. ● Ensure appropriate mitigation including consumption advisories as recommended by appropriate agencies and fisheries closures as needed. ● Providing advice on environmental impact assessments. ● Monitoring impacts on fish and fish habitat, and remediation plans. ● Monitoring marine mammals, including species at risk. ● Oceanography (including tides, currents) and Ocean Modelling. ● Integrating new research outcomes into spill response operations. Further, DFO supports response activities with timely regulatory action for the implementation of appropriate response measures. DFO develops and maintains policies, plans, agreements, tools, procedures and protocols in collaboration with other government agencies, First Nations, the private sector and international organizations in order to ensure that response to environmental emergencies is prompt, effective and informed by the best available scientific and technical advice available.
Capabilities & Equipment	• Assessment and identification of sensitive marine ecosystems, protected areas, ecologically and biologically significant areas, fish and fish habitat, fisheries resources, sensitive aquaculture, salmon enhancement sites as well as aquatic Species at Risk and their habitat. • Assessment of the nature and extent of potential impact to fisheries, fish species and their habitat, as well as aquaculture infrastructure or salmon hatchery/enhancement operations and advice on recovery monitoring for aquatic ecosystems. • Provide advice on the assessment, monitoring and protection of fisheries resources, fish, fish habitat, Species at Risk and aquatic ecosystems. • Provide advice on biology, vulnerability, geospatial and temporal distribution data, habitat information, sampling techniques and recovery monitoring of species and aquatic ecosystems

	• Provide scientific and technical advice on fate and behaviour of pollution in aquatic ecosystems • Provide advice to inform cleanup effort and techniques to ensure minimum damage to fish, fish habitat, fisheries resources, Species at Risk and aquatic ecosystem. • Work with health authorities and/or other relevant response participants in assessing and implementing fisheries adjustment measures such as modification, delays and/or closures. • Provide information, advice and/or implementation capacity and capability in the management of marine mammals, including equipment and personnel support for response measure implementation. • Provide necessary support for permitting and/or authorization to enable appropriate response measures implementations. • Support or lead enforcement if appropriate or requested. • Engage with response participants provincially, nationally and internationally in response planning and preparedness. • Provide internal technical training with respect to response planning and preparedness. ○

Canada Energy Regulator

Contact Information	**Transportation Safety Board Reporting Hotline – for significant pipeline incidents:** 1-819-997-7887 – Direct or collect 1-800-387-3557 – Toll-free **All other emergency enquiries – Canada Energy Regulator Emergency Phone:** 1-403-807-9473
Role	Lead federal regulatory agency for incidents originating from Canada Energy Regulator regulated pipelines and facilities including oil handling facilities such as Trans Mountain's Westridge Marine Terminal when no transfer of oil is underway to a ship present at the facility. **Application of WCVI IRP** There are differences in the response process should a spill originate from a CER-regulated pipeline or facility as opposed to a ship-source spill. A CER-regulated company would be primarily guided in its response actions by its Emergency Procedures Manual and supporting plans such as tactical response plans

	and geographic response plans. In developing and revising the Emergency Procedures Manual, the company must liaise with agencies that may be involved in an emergency on the pipeline system. To the extent that other plans are relevant to the company's Emergency Procedures Manual, a CER-regulated company would be expected to engage the holders of these plans and document any actions that it took based on the results of any feedback received.
Jurisdiction	Canada Energy Regulator regulated pipelines and facilities. The CER fully supports the intent of the WCVI IRP to promote an effective, coordinated, multi-agency response to marine pollution incidents of potential significance in British Columbia in the waters surrounding the West Coast Vancouver Island Plan Area. In the event of a conflict between CER regulatory requirements and the WCVI IRP, CER regulatory requirements would take precedence.
Capabilities & Equipment	● Monitors and assesses the overall effectiveness of a company's emergency response and holds the company responsible for responding and cleaning up appropriately; ● Participates in Unified Command; and ● Integrates its personnel within the company's incident management system.

Public Safety Canada

Contact Information	**Government Operations Centre (All Hazards)** 1-613-991-7000
Role	Public Safety Canada is the federal coordinating department and is responsible to engage relevant federal organizations and coordinate regional support, as required.
Jurisdiction	The *Emergency Management Act* establishes Public Safety Canada's responsibility for coordinating an integrated Government of Canada response to an emergency. The Federal Emergency Response Plan establishes Public Safety Canada as the federal coordinating department in support of the primary department. When an incident may lead to a provincial Request for Assistance, affects multiple jurisdictions and/or government institutions, directly involves federal assets or responsibilities, affects confidence in government, or affects other aspects of the national interest the all-hazards Federal Emergency Response Plan may be activated. During significant marine pollution events Public Safety will act regionally, in collaboration with the Federal Coordination Group, and nationally through the Government Operations Centre and the Federal Emergency Response Plan governance structure, to support primary federal response activities and coordinate with the Province of BC.

Capabilities & Equipment	● Trained emergency management staff in ICS. Prepared to fill ICP roles in the following positions or units: ○ Liaison Officer ○ Advance Planning ○ Logistics Coordination ● Contact data base to connect with stakeholders, as required. ● Inventory of federal regional resources.

Transport Canada

Contact Information	**For Pacific Marine Safety, call the contracted Call Centre (Angel Answering) who will alert the standby duty marine inspector:** 1-604-945-2425 **National Transport Canada Situation Centre:** 1-888-857-4003
Role	Transport Canada is the lead federal regulator of marine shipping and has legislative oversight over Canada's oil spill preparedness and response regime. TC is also responsible for: • Conducting on board compliance inspection, and if appropriate an investigation for ship source occurrences • Conducting on board compliance inspection, and if appropriate an investigation for the discharges of oil that occur during transfers between vessels and oil handling facilities • Assistance with the review of salvage plans • Providing technical expertise to CCG with respect to the ship and ship's onboard activities (e.g. lightering) in the event of a marine spill or threat of a spill. • Management of the National Aerial Surveillance Program (NASP). • The Canadian Transport Emergency Centre (CANUTEC), a national advisory service that assists emergency response personnel in handling dangerous goods emergencies on a 24/7 basis and is operated by the Transportation of Dangerous Goods Directorate of TC.
Jurisdiction	TC regulatory frameworks fall under the *Canada Shipping Act,* 2001 and are aligned with international conventions and guidelines made under the International Maritime Organization. These provide the framework for the department's comprehensive marine safety inspection and enforcement programs.

Capabilities & Equipment	● Personnel Available 24/7 ● Minimum ICS 200 trained staff including Agency Reps, Technical Specialists, Air Branch Controller (NASP) ● NASP Dash 8 pollution surveillance ● Technical Specialists: ○ Naval Architects, Engineers, Navigators ○ Remedial Measures Specialist for hazardous and noxious substance spills

Parks Canada

Contact Information	**Parks Canada Emergency Dispatch 24/7*** 1-877-852-3100 pc.jasperdispatch-repartitionjasper.pc@canada.ca *Note: The Emergency Dispatch Phone centre is located in Jasper NPR but provides 24/7 service for the Coastal BC Field Unit – PRNPR, GINPR & GHNPR
Role	• As a Responsible Authority for federal lands declared under the CNPA, Parks Canada requires rapid notification of an incident and **may request involvement/representation at the PREOC/EOC** (depending on the location, scale of the oil spill, and the threat presented to the protected area). • The Parks Canada Agency (PCA) is required to uphold its responsibility under CNPA, which (in cooperation with local First Nations governments) includes protecting ecological and cultural resources. *(See notes below regarding legislation and Law Enforcement responsibilities).* • Parks Canada also carries a level of responsibility for the **safety of visitors** to the Parks and Historic sites. Depending on the location and scale of an incident, Parks Canada may be required to assist those in need of relocation or evacuation (for varying reasons), may need to notify visitors in remote areas of the park that may be affected by pollution, and is required to provide timely and relevant information to current visitors and those who are planning a visit but have yet to arrive in the park. • The Parks Canada Agency will require regular briefings and may require the release of special media bulletins. The agency will be required to post relevant and timely information on the Federal Parks Canada website. • As part of an incident response (esp under an ICS structure) & only with pre-approval from the Agency (the Employer), PCA staff could play roles in contributing knowledge/data and skills in the **Planning Section**, may be involved in **Operations** (SCAT, etc), and may provide some support to **Logistics** (First Aid,& other support).
Jurisdiction	The Parks Canada Agency (PCA) has a mandate to protect and present nationally significant examples of Canada's natural and cultural heritage, and to foster public

understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.

Canada National Parks Act *(*CNPA): https://laws-lois.justice.gc.ca/eng/acts/n-14.01/

The language of the *Canada National Parks Act* (CNPA, 2000) makes the maintenance and restoration of ecological integrity within national parks its number one priority.
Section 32 of the Act, Mitigation of Environmental Damage, implements the legal requirement of anyone who is responsible for environmental damage within a park to take measures to prevent environmental degradation and danger to flora and fauna. If the responsible person does not comply, they are liable for the expenses of those measures which would be performed by the federal government.

> ***Canada National Parks Act (S32)***
> ***Mitigation of Environmental Damage***
> ***Pollution clean-up***
> *32 (1) Where a substance that is capable of degrading the natural environment, injuring fauna, flora or cultural resources or endangering human health is discharged or deposited in a park, any person who has charge, management or control of the substance shall take reasonable measures to prevent any degradation of the natural environment and any danger to the fauna, flora or cultural resources or to persons that may result from the discharge or deposit.*
>
> ***Powers of superintendent and Minister***
> *(2) If the superintendent of a park is of the opinion that a person is not taking the measures required by subsection (1), the superintendent may direct the person to take those measures and, if the person fails to do so, the Minister may direct those measures to be taken on behalf of Her Majesty in right of Canada*.
>
> ***Expenses of clean-up***
> *(3) A person who fails to comply with a direction given by a superintendent under subsection (2) is liable for the expenses reasonably incurred by Her Majesty in right of Canada in taking the measures directed, and those expenses may be recovered from that person, with costs, in proceedings brought in the name of Her Majesty in any court of competent jurisdiction.*

Jurisdiction and Law Enforcement: In National Parks, Park Wardens (Law Enforcement officers) have the primary responsibility for enforcing Parks Canada's and other related legislation in support of the Agency's mandate. Park Wardens have discretion to deal with offenses with a range of law enforcement responses, from issuing verbal warnings to filing charges and making arrests. Park Wardens are peace officers within the meaning of *the Criminal Code (1985)* with all the related powers, duties and protection. Park Wardens also work in cooperation with other law

	enforcement agencies (e.g., Royal Canadian Mounted Police, local police forces, and First Nations). These police services of jurisdiction have primary responsibility for all matters related to the Criminal Code on Parks Canada lands. **Pacific Rim National Park Reserve of Canada** Extending 125 km along the west coast of Vancouver Island from Tofino in the north to Port Renfrew in the south, Pacific Rim NPR is a coastal marine park covering three noncontiguous units: the Long Beach Unit (LBU), the Broken Group Islands (BGI) unit, and the West Coast Trail (WCT) unit . Parks Canada's jurisdiction in PRNPR includes **both terrestrial and marine areas.** The park reserve comprises a total area of 51,077 ha; of which 29,079 ha are land and fresh water, and 22,050 ha are marine waters. Marine boundaries in the Long Beach Unit and the West Coast Trail unit encompass intertidal and subtidal habitats (and include both the seafloor and organisms within) down to the 20 m isobath. The boundary of the Broken Group Islands unit is determined by geographic points, but also includes marine inter- and sub-tidal seafloor. Pacific Rim National Park Reserve of Canada *(Click hyperlinks below to see maps):* i. Long Beach Unit ii. Broken Group Islands iii. West Coast Trail https://www.pc.gc.ca/en/pn-np/bc/pacificrim/visit/brochures
Capabilities & Equipment	• **Emergency Dispatch** and Response Personnel Available 24/7 • Within the ICS structure & only with pre-approval from the Agency (the Employer), PCA staff could contribute knowledge and skills in the **Planning Section** (share knowledge, data on ecological and cultural resources, species at risk, sensitive marine ecosystems, and information on local shoreline access points, marine conditions & navigation). • Parks Canada may be able to provide trained staff and resources for **Operational** responses for certain tasks (e.g. some staff have SCAT & CCG FROST training, TBD). • Park Staff may provide some support to **Logistics** (e.g. First Aid, & support for responders). • Parks Canada will also have requirements (required due diligence) to address **Visitor Safety**: PCA staff may need to assist those who require evacuation (for varying reasons), notify those in geographically remote areas that may be affected by the pollution. • Visitor Safety, Law Enforcement, and Resource Conservation ecologists have **advanced ICS training** (300, 401/2, EOC, etc) and significant experience in emergency response and multi-agency emergency responses. Other Parks Canada staff have a minimum ICS 100 training, and practical operational experience working in remote areas of the National Park Reserve. • **Technical Specialists**:

	○ Visitor Safety (Staff trained and experienced in ICS -multi-agency responses, marine and back country rescue: missing persons search and rescue, advanced wilderness first aid, injured person evacuation). ○ Ecological Resource (terrestrial and marine) inventory and knowledge ○ Ecologists with specialist knowledge of marine species (cetaceans, marine mammals, sharks, rays etc), especially species at risk (e.g. Southern Resident Killer whales) ○ Cultural Resources (terrestrial and marine) inventory and specialist archaeological knowledge ○ Shoreline access and marine navigation expertise, practical operational field knowledge of WCVI marine coastal areas and back country coastal temperate rainforest landscapes. ● **Physical Resources**: **Buildings – possible ICP** / field Ops centre with communications capabilities (VHF radio- multi agency channels, landline phone, cell service, satellite phones, internet), mapping geomatics office, boardrooms-meeting rooms, kitchens, washrooms, showers etc, and ~2 weeks back-up diesel power generator. Location: Pacific Rim National Park Reserve, Administration Complex, Long Beach Unit, 2040 Pacific Rim Hwy, **Equipment**: *T.B.D. – To be determined – Requires permission of the Agency: This will be dependent on situation, risk, and availability of equipment and trained staff. (Note: Parks Canada fleet include heavy equipment + certified operators, a marine fleet with trained/certified vessel operators.)*

First Nations

Ahousaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Ehattesaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Hesquiaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Hupacasath First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	• Protect Hupacasath Nation interests and exercise their governance rights. • Provide local environmental and cultural heritage information and expert advice. • Ensure no cultural heritage or archaeological resources are harmed during cleanup operations. • Provide shoreline or archaeological monitors as needed. Ensure no marine resources are impacted by the clean-up and remediation.
Jurisdiction	Hupacasath First Nation Traditional Territory
Capabilities & Equipment	• Archaeology and cultural heritage protection • 28ft Weldcraft Fisheries Vessel. Suitable for Crew transportation. • General Laborers and Field Observers (Shoreline and on-water)

Huu-ay-aht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Mowachaht/Muchalaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Nuchatlaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Tla-o-qui-aht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Toquaht First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	Assistance in response activities, monitoring in all phases from land and water, and provide staging areas if needed in the area.
Jurisdiction	Governance of Toquaht Laws over Toquaht Treaty Lands and foreshore from Stuart Bay in Ucluelet Harbour to the uplands at the head of Toquaht Bay in Barkley Sound
Capabilities & Equipment	• Limited Personnel available 24/7 with ICS and other response training • Three vessels with operators available 24/7; One 22' crew boat, 34' Skiff with boom, 44' Landing Craft with Boom • Secret Beach Marina with boat launch and large staging area adjacent accessible by road and boat

	• Future Community Building with large staging area accessible by road (Opening Spring 2021) • Firefighting equipment (Fire Truck, equipment, and tanks) • Limited First Aid equipment

Tseshaht First Nation

Contact Information	Fisheries Manager – Dave Rolston – 250-731-5688 (cell), 250-724-1225 (office)
Role	1. Provide meaningful contribution to integrated spill response in Barkley Sound and Alberni Inlet 2. Lead, support and/or advise incident Command/Unified Command based on the incident magnitude, location, and potential consequences to Tseshaht's interests. 3. Protect Tseshaht's interests and territory and exercise their governance rights. 4. Provide local environmental and cultural heritage information and expert advice 5. Ensure no cultural heritage or archaeological resources are harmed during cleanup operations 6. Provide shoreline or archaeological monitors as needed.
Jurisdiction	Tseshaht Traditional Territory, Barkley Sound, Alberni Inlet
Capabilities & Equipment	• 33 foot aluminum boat • Semirigid hull inflatable • 2 x 22 ft aluminum boats

Uchucklesaht Tribe

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	1. Provide meaningful contribution to integrated spill response in Barkley Sound, Alberni Inlet and Uchucklesaht Inlet

	2. Lead, support and/or advise incident Command/Unified Command based on the incident magnitude, location, and potential consequences to Uchucklesaht Tribe's interests. 3. Protect Uchucklesaht Tribe's interests and territory and exercise their governance rights. 4. Provide local environmental and cultural heritage information and expert advice 5. Ensure no cultural heritage or archaeological resources are harmed during cleanup operations 6. Provide shoreline or archaeological monitors as needed.
Jurisdiction	Uchucklesaht Tribe's Treaty Settlement Lands and treaty recognized territory.

Capabilities & Equipment	● Incident Commander/Unified Command
	● Archaeology and cultural heritage protection
	● Environmental protection
	● Environmental impact assessment
	● Socio-cultural impact assessment
	● Available Equipment/Personnel:
	  ○ 28-foot Crew Boat, 22-foot utility boat
	  ○ Pick-up and flat deck trucks
	  ○ Field Observers
	  ○ General Labour

Ucluelet First Nation

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Provincial

BC Ministry of Environment and Climate Change Strategies

Contact Information	**Spill Reporting Line – EMBC Emergency Coordination Centre:** 1-800-663-3456
Role	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. The Ministry will assess and ensure the responsible party has taken proper steps to restore and recover the environment for any spill impacting a water body and all reports of spills under the *BC Spill Reporting Regulation BC Reg. 187/2017*. When a Responsible Party is unknown, unwilling or unable to properly address a spill within the ministry's jurisdiction the ministry has the authority to take over spill emergency management.
Jurisdiction	The Ministry of Environment and Climate Change Strategy is responsible for the protection, management and conservation of BC's water, land, air and living resources. The *Ministry of Environment Act* directs the Minister to plan for, coordinate, implement and manage a program to protect the welfare of the public in the event of an environmental emergency or disaster. The authority for coordinating the Government of BC's response to specific hazards is under the *Emergency Program Act* and *Emergency Program Management Regulation.* Environmental authorities for Spill Preparedness, Response and Recovery are provided under *the Environmental Management Act and Spill Preparedness, Response and Recovery Regulation; Spill Reporting Regulation and Spill Contingency Planning Regulation.*

Capabilities & Equipment	● Incident Commander
	● Liaison Officer
	● Information Officer
	● Environmental Unit Leader
	● Technical Specialists:
	  ○ SCAT
	  ○ Waste Management
	  ○ Wildlife
	  ○ GIS
	  ○ Environmental Impact Assessment
	  ○ Field Observers
	  ○ Recovery
	  ○ Sampling
	  ○ Product Hazard Analyst

BC Parks

Contact Information	**BC Parks staff in the Clayoquot Area are available during regular business hours (Monday to Friday 8-4).** Area Supervisor: (250) 736-6816 Senior Park Ranger: (250) 736-6817 Park Ranger: (250) 725-2922
Role	BC Parks staff could be available to act in a supporting role for an emergency in the Clayoquot Sound. Park Rangers would be able to provide local knowledge pertaining to the provincial parks and protected areas.
Jurisdiction	BC Parks staff in the Clayoquot are responsible for all of the provincial parks and protected areas north of Tofino including: Vargas Island Park, Cleland Island Ecological Reserve, Flores Island Park, Gibson Marine Park, Epper Passage Park, Dawley Passage Park, Sydney Inlet Park, Maquinna Marine Park and Protected Area, Sulphur Passage Park and Hesquiaht Peninsula Park. Clayoquot Area staff are also responsible for Baeria Rocks Ecological Reserve in Barkley Sound. BC Parks staff have jurisdiction in the protected areas and have authority to enforce the *Park Act* and the *Park, Conservancy and Recreation Area Regulations*. Our mandate is to protect and preserve the natural, cultural and recreational values found within the parks and protected areas.
Capabilities & Equipment	BC Parks staff in the Clayoquot Sound have a well-equipped 30-foot patrol vessel moored in Tofino and have important local knowledge about the parks. Staff have received training in Shoreline Cleanup Assessment Techniques (SCAT), Canadian Coast Guard's First Responders to Oil Spill Training (FROST), First Aid and Search & Rescue training. Staff work out of an office close to the Tofino airport with a large covered workshop and storage area which could be used for staging.

Emergency Management BC

Contact Information	**Emergency Coordination Centre (24/7):** 1-800-663-3456
Role	EMBC is the coordinating agency for the provincial government's emergency management activities and is responsible to notify Emergency Program Coordinators for Local Authorities and First Nations communities. EMBC maintains a robust and expansive list of 24-hour emergency contacts, which are updated on a regular and proactive basis, and can be drawn upon to provide initial notifications and disseminate updated information on marine spill events to emergency management partners. The overall purpose of EMBC is to increase life, safety and resiliency for individuals and communities throughout BC.
Jurisdiction	Emergency Management BC is the Province's lead coordinating agency for all emergency management activities, including planning, training, testing and exercising, to help strengthen provincial preparedness. This work is done in collaboration with local authorities, First Nations, federal departments, industry, non-government organizations and volunteers. These steps taken in advance of a disaster will help the response effort and help British Columbians along the road to recovery. The *Emergency Program Act, 1996* and the associated regulations provide the legislative framework for the management of disasters and emergencies in BC.
Capabilities & Equipment	● 24/7 Emergency Coordination Centre for immediate access following an event. ● 24/7 Duty managers available to initiate response supports as required ● Six regional and one provincial operations centre available to activate in support to events or local authority needs. ● Contact data base to connect stakeholders as required ● Coordination call capacity for up to 250 participants ● *Emergency Program Act* vote provides emergency funds for eligible response and recovery costs ● Disaster Financial Assistance program provides financial supports for authorized events to cover defined disaster related losses.

Health Authorities

Health Canada

Contact Information	**24/7 Emergency Line** 1-613-946-5690

Role	Health Canada's role is to provide scientific support and expertise for major chemical incidents of public health concern through the Chemical Emergency Preparedness and Response Unit.
Jurisdiction	Health Portfolio (Health Canada and Public Health Agency of Canada) support when requested by the province.
Capabilities & Equipment	Health Canada provides scientific support and expertise to assist the Public Health Agency of Canada in its preparedness activities for emergencies involving public health.

Health Emergency Management BC

Contact Information	**Health Emergency Management BC 24/7 Line:** 1-855-675-2436
Role	Health Emergency Management BC's role will be to support the activation of Emergency Operation Centres at the healthcare facility sites (hospitals, residential care facilities, mental health, etc.) in the Vancouver Island Health Authority. Health Emergency Management BC would also liaison with the necessary programs within the two authorities. Health Emergency Management BC would be involved if: ● The health and safety of human population is impacted. ● Support or liaison to health authorities is required. ● There is mass casualty that would cause an influx of admission into hospital sites. ● Evacuation within the community where home health patients need to be transported. ● Evacuation of community care facilities is needed.
Jurisdiction	
Capabilities & Equipment	Health Emergency Management BC provides the expertise, education, tools and support specifically for the BC Health Sector to effectively mitigate, prepare for, respond to, and recover from the impacts of emergency events ensuring the continuity of health services.

First Nations Health Authority

Contact Information	**For urgent situations requiring Environmental Health Officer assistance outside of regular operating hours (Mon-Fri, 8am-4pm), after-hours number:** 1-844-666-0711 or ephs.afterhours@fnha.ca *Calls or emails received after 10:00 pm will be responded to the following day at 6:00 am.*
Role	Coordinating First Nations Health Authority (FNHA) activities to ensure First Nation communities are effectively incorporated into emergency response and recovery activities.
Jurisdiction	The First Nations Health Authority is part of a unique health governance structure that includes political representation and advocacy through the First Nations Health Council, and technical support and capacity development through the First Nations Health Directors Association. Collectively, this First Nations health governing structure works in partnership with BC First Nations to improve the health and well-being of First Nations and Aboriginal people in British Columbia.
Capabilities & Equipment	Health Emergency Management, FNHA provides internal and external communications during an emergency, such as Provincial Regional Emergency Operations calls attendance, situational awareness reports, information dissemination to communities, and emergency event debriefs. In addition, they provide mental wellness services..

Local Authorities

Alberni-Clayoquot Regional District

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

District of Tofino

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	**Public Safety** – Legislated responsibility to assess risk to community, notify of evacuation/shelter-in-place order, coordinate provision of food, shelter, clothing, transportation and medical services to those impacted by emergency. **Preparedness** – Participate in inter-agency training/exercises. Integrated exercises provide the opportunity to identify items for improvement and support an adaptive and coordinated management model. **Response** - Incident Site Support – support life-safety and public messaging, support resource requests, liaison to local response agencies and resources, activate mutual aid agreements. **Recovery** – establish the priorities for restoring essential services provided by the local authority that are interrupted during incident recommend to service providers the priorities for restoring essential services not provided by the local authority that are interrupted during incident.
Jurisdiction	Tofino is located on the edge of the Pacific Ocean on Vancouver Island at the southern edge of the UNESCO Clayoquot Sound Biosphere Region. Situated at the northern end of the Esowista Peninsula, the community is the western terminus for Highway 4. To the south, the municipal boundary boarders the Pacific Rim National Park Reserve (Long Beach Unit). The District of Tofino is positioned **within the Hahuulthii of the Tla-o-qui-aht Ha'wiih** (the territory of the Tla-o-qui-aht First Nation) and is an Electoral Area C member municipality to the Alberni-Clayoquot Regional District (ACRD). A number of small islands and First Nation Reserve lands fall within the jurisdictional boundaries: • **Arnet Island** • **Beck Island** • **Felice Island** • **Morpheus Island** • **Neilson Island** • **Riley Island** • **Stone Island** • **Strawberry Island** **Tin Wis 11 First Nation Reserve lands of Tla-o-qui-aht First Nation (located between Mackenzie Beach Rd. and Hellesen Dr.)**

Capabilities & Equipment	**Emergency Operations Centre (EOC):** Council Chamber, 380 Campbell St. **(15)** EOC staff, cross trained in (2) functions (Level 3) **(10)** Fully portable EOC Kits with backup power and solar **(2)** VHF portable base units with antennas **(1)** Emergency broadcast radio (90.1 FM) **Emergency Support Services (ESS):** 351 Arnet Rd. (Reception Centre) Tofino Community Hall Canadian Red Cross Partnership agreement to provide ESS Level 1 **(1)** RECEPTION CENTRE RECOMMENDED CAPAITY IS **(300)** AT RECEPTION CENTRE & **(50)** AT GROUP LODGING **(1)** EMERGENCY STORAGE CONTAINER **(20')** **(1)** GENERATOR **(175)** BLANKETS **(120)** COTS **(1)** GROUP FIRST AID KIT **(10)** EMERGENCY SHELTERS (10 FT X 10 FT) **(50)** PERSON LODGING CAPACITY **(4)** PROPANE HEATERS **(2)** EMERGENCY WATER FILTRATION UNITS **(50,000 litres/day)** **(1)** 10 GPM WATER PUMP **(8)** 20-LITER POTABLE WATER STORAGE TANKS **(8)** FRS RADIOS **(2)** VHF RADIOS **(4)** WEATHER RADIOS **(2)** MEGAPHONES **(6)** PORTABLE LANTERNS **(3)** PORTABLE SOLAR LIGHTS **(1)** PORTABLE FLOOD LIGHT **(120)** SANITATION (COMFORT) KITS **(120)** EMERGENCY FOOD RATIONS **(2)** FIELD LAVATORY SYSTEMS **(1)** PORTABLE HOT WATER SHOWER **Emergency Equipment Community/Local Government:** • Auxiliary Lighting: **(10)** portable lighting • Barges: **(2)** 300 ton (G&N Towing) • Boat: **(1**) 16' aluminum, **(2)** 38' tug boats (G&N Towing) • Communications: base and portable vhf and marine radios, portable HAM and HF radio, **(1)** MSAT • Cutting Equipment: **(1)** rescue saw, chainsaws, Hydraulic Spreaders/cutters, rotary saw • Drone: **(1)** • Fuel

	• Generators **(4)** portable **(3)** trailer mounted
	• Heaters: **(5)** 18,000 BTU Propane Heaters
	• Heavy Equipment
	  ○ 1 x backhoe
	  ○ 1 x dump truck
	  ○ 1 x air compressors
	  ○ Gibson Brothers Contracting:
	  ○ 4 x 12 yard gravel trucks
	  ○ 2 x backhoes
	  ○ 1 x bulldozer
	  ○ 1 x 20 tonne mobile crane
	  ○ 2 x air compressors
	  ○ 1 x 4 tonne low bed trailer with tractor
	  ○ 4 x excavators
	  ○ miscellaneous explosives
	  ○ McGinnis Contracting
	  ○ 1 x backhoe
	  ○ 1 x forklift
	• Pumps: **(2)** small portable emergency use pumps
	• Traffic Control: **(10)** Barricades, cones, emergency lights
	Fire Suppression: **(1)** Pumper truck, **(1)** Rescue truck, **(1)** ladder truck
	• **(2)** Water bladders
	(1) Portable pump

District of Ucluelet

Contact Information	Fire Chief / Emergency Operations Centre Director - Rick Geddes (250) 266-2254 Chief Financial Officer / Deputy EOC Director - Donna Monteith - (250) 730-0719 CAO - Mark Boysen (250) 266-0306
Role	The District of Ucluelet's (DoU) role is to support the four pillars of emergency management – Mitigation, Preparedness, Response and Recovery within the municipal boundaries of the DoU.
Jurisdiction	Ucluelet is a district municipality located at the western edge of Barkley Sound, and the southern tip of the Ucluth Peninsula. The municipality has a population of 1717 permanent residents.

Capabilities & Equipment	The DoU Emergency Operations Centre is located upstairs at the Ucluelet Firehall - 1520 Peninsula Rd. The firehall has an emergency back-up generator on site. The EOC has the capability to be portable and operated off the grid. The DoU Management and supervisory staff are trained in EOC activation and operation. The Fire Chief is the default EOC Director. The Chief Financial Officer is the Deputy EOC Director. The DoU has a 14 ft. enclosed trailer which contains our Emergency Support Services equipment and reception centre supplies. This trailer allows for a reception centre to be set up in alternate sites if required. The District has a volunteer fire department that specializes in rescue, as well as a fulltime public works and parks department.

Strathcona Regional District

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Village of Gold River

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Village of Sayward

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Village of Tahsis

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Village of Zeballos

Contact Information	Information is held by Canadian Coast Guard's Regional Operations Centre.
Role	
Jurisdiction	
Capabilities & Equipment	

Private Sector

Western Canada Marine Response Corporation

Contact Information	**WCMRC 24/7 spill emergency line:** 1-855-294-9116
Role	WCMRC is the certified Transport Canada Response Organization for the West Coast, we provide on-water and ICP personnel and assets. It is WCMRC's responsibility to mitigate the impact of the spill and perform clean-up operations under the direction of Unified Command.
Jurisdiction	Entire West Coast from Washington to Alaska borders.
Capabilities & Equipment	● Personnel Available 24/7 ● Vessels Available 24/7 ● SCAT Personnel ● ICS – All levels and positions ● GIS Personnel ● Aerial and underwater surveillance ● Geographic Response Strategies for Shoreline Protection ● Media Relations ● Liaison ● Oil Skimming Vessels ● Containment Boom, skimmers, sorbents ● Liquid waste storage ● Shoreline cleanup equipment ● Air monitors ● Trajectory modelling ● Environmental data ● Cultural data ● Sensitivities data ● Possible ICP Location ● Response network and resources ● Contractual and mutual aid support

Appendix 2: Area Plan Logistics and Resources

PURPOSE AND SCOPE

This appendix focuses on the local logistics and resources information in the planning area. It is intended to assist in the coordination of logistical support during an incident including such things as: communications, air, ground, and water transportation support, equipment and supplies, facilities, fuel, and staging areas.

This appendix is intended to fill in gaps where a GRS is not yet available and to provide convenient access to information that would be operationally useful early in the response.

Logistics Section Organization

This appendix corresponds with the different roles and responsibilities assigned to the Logistics Section in the Incident Command System (Figure 1-1). The following is the organizational chart for the functions within the Logistics Section.

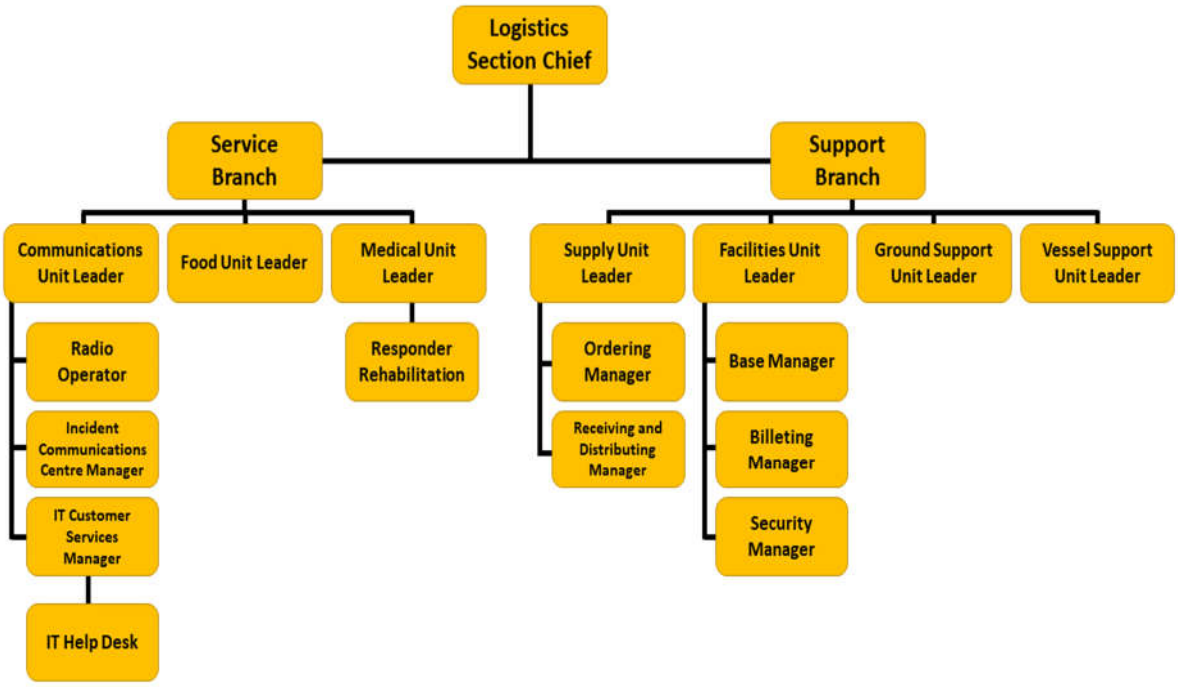

Figure 4. Logistics section organization chart, based on the Incident Command System

Communications

This section lists communication options and the radio frequencies that are typically used between agencies during a spill response in the Georgia Strait area. It also includes self-identified operating frequencies used by response participants (First Nations, industry, provincial, and local).

Communication plans within the Logistics Section are for operational and tactical response and should not be confused with communication plans developed for Information and Liaison Officers.

Initial Communications

At the onset of response activities, communications between the Incident Command Post and field operations will be determined by what is readily available. Longer-term communications will take upwards of several days to establish. In most cases, a combination of cellular phone and VHF marine radio working frequencies will be used.

Interoperability, Equipment and Resources

In the event of a large scale pollution response, multiple agencies and response participants must be able to develop a level of interoperability that allows responders to exchange information via data, voice, and video, on demand, in real time as authorized, to ensure a successful response. The Communications Unit Leader has overall responsibility for the following communications equipment and personnel requirements with support from the Staging Site Manager.

Radios

CCG Environmental Response has a variety of VHF marine radios, including the Motorola APX800 series, a top-tier public safety radio capable of VHF and UHF and encrypted digital operation. This flexibility allows CCG ER to communicate on marine, resource road, industry encrypted, and provincial emergency channels.

Mobile Phones

In addition to voice transmission, the use of mobile smart phones in areas with good network coverage, enables responders to share real-time information with the ICP through data files, pictures, video and video chats. The use of different apps may support the transfer of information between ICP and field operations as well.

In the West Coast Vancouver Island planning area, there is a reduced or lack of coverage in the following areas:

- Northern tip of Vancouver Island (Bell, Rogers, Telus)

- Bamfield to Sooke (Bell, Rogers, Telus)
- Quatsino Sound (Rogers)
- Entrance to Quatsino Sound south to Nootka Sound (Rogers, Telus, Bell)
- Hesquiat Inlet (Rogers)
- Sydney Inlet (Rogers)

Cell phone coverage maps for the major providers are found here:
https://www.whistleout.ca/CellPhones/Guides/Coverage

Satellite Phones

Satellite communications have proven to be an important asset during any large scale event. Satellite communications typically remain unaffected even though conventional landlines or cellular towers may be compromised due to circumstances such as extreme weather. Further, some areas of the plan have limited mobile network coverage and potentially poor VHF communications due to geography. In these instances, satellite phones are a reliable and suitable replacement for communicating important messages between field operations and the ICP. Both CCG and WCMRC have satellite phones ready to use if mobile phones and radio communications fail.

Satellite Terminal

CCG has a deployable satellite terminal which features built-in mounting and integration to all Mobile Incident Command Posts (MICPs). The terminal provides an external data connection where none other is possible with data rates up to 5Mbps. The unit itself can fit into two airline checkable size cases for easy shipping and transport and is located at Victoria Coast Guard Base.

The Inmarsat GX service requires CCG to contact Shared Services Canada to activate the terminal which is subject to their Monday to Friday availability. This could result in up to a 48 hour delay in activation.

Marine Communications & Traffic Services Repeaters

Prince Rupert Marine Communications and Traffic Services Center provides radio communication services within the planning area. Repeaters are used expand radio communications range when needed due to topography or distance.

In the event of a pollution response incident, MCTS can be requested to enable the repeater function at an appropriate site..

Prince Rupert MCTS (call sign, VAJ) Telephone: 250-627-3070 (Shift Supervisor) Email: supervisor.rupert@innav.gc.ca		
Site	**Location**	**Repeater Ch**
Eliza Dome	49°52'24"N 127°07'13"W	Ch84
Mount Ozzard	48°57'34"N 125°29'30"W	Ch84
Nootka	49°35'36"N 126°36'52"W	Ch26

Deployable Repeater

CCG has one rapid deployable repeater in Western Region located at Victoria CCG Base. While it is always preferable to use existing MCTS infrastructure, this rapidly deployable and self-contained repeater kit can be placed into service anywhere at short notice. It can be used to create a communications zone where no MCTS coverage exists, or to supplement existing facilities by adding a second wide-area radio channel. The unit works on VHF Ch23 and is built for extended remote site operation with the ability to be deployed on a mountain, tall building, tree, or MICP mast system.

Mobile Incident Command Post Communications

CCG has five Mobile Incident Commands Posts (MICPs) of different sizes available for use within the plan area. Each MICP is equipped with multi-band and air band radios and radio interop bridge, cellular modems, phones, network, and wifi. The Type 2 – Large Trailers (located in Victoria and Richmond) have full communications and informatics packages with a server, file share capability, radio operator console, and an interoperability bridge.

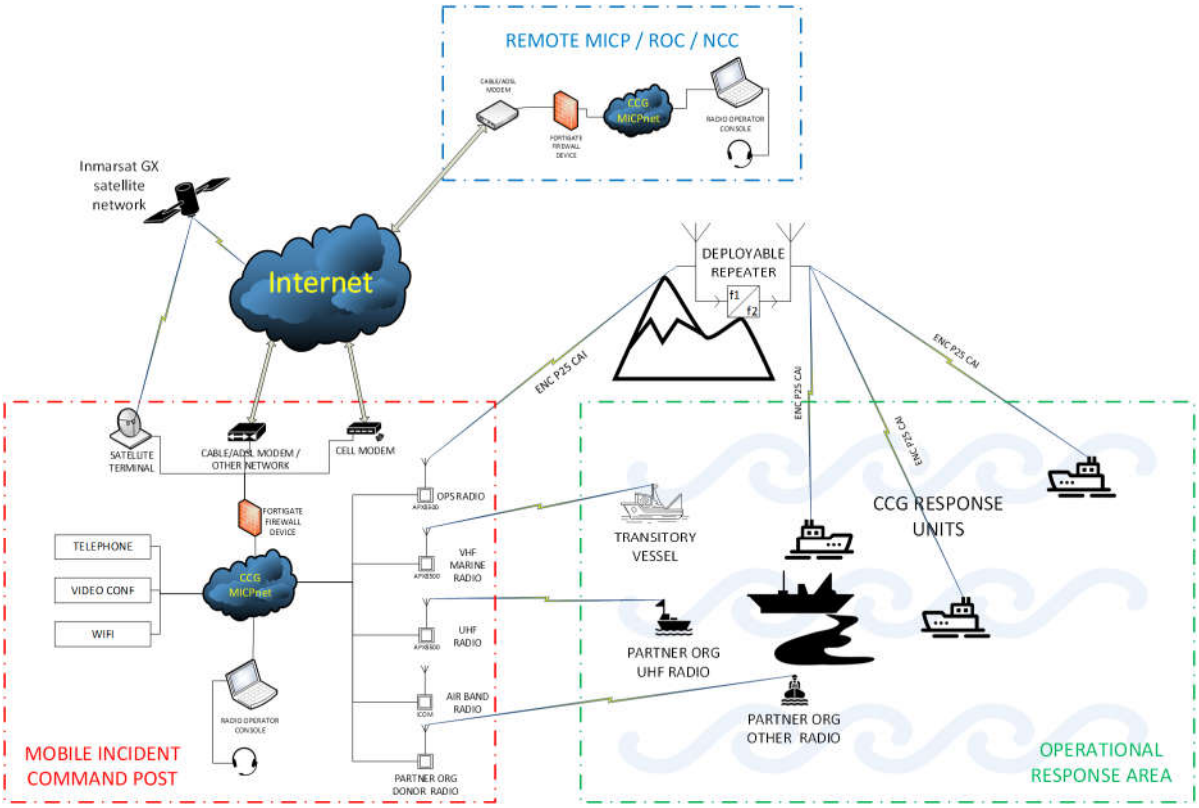

Figure 5. Mobile Incident Command Post Communications Package

Remote Connectivity Kits

MICPs have connectivity kits to extend network communication using line-of-sight links from the MICP to field operations, CCG vessels, temporary accommodations, work/staging barges, and nearby vessels. The remote connectivity kits consist of point-to-point and point-to-multipoint network radios, and are compatible with existing shipboard nearshore network links and equipment.

Developing the Incident Radio Communications Plan

The Communications Unit Leader develops the Incident Radio Communications Plan ICS-205, which provides information on all radio frequency or trunked radio system talkgroup assignments for each operational period. They are also responsible for obtaining, distributing, and supporting operation of computer and radio incident communications equipment and the data management infrastructure to support information flow.

Communications Resource Availability Worksheets (ICS-217)

A robust Incident Radio Communication Plan (ICS-205) is critical for ensuring the interoperability and the optimal use of all assigned communications capabilities. The

frequencies/channels listed in the following Communications Resource Availability Worksheets (ICS-217) will help populate a fulsome ICS-205.

The channels have been divided up into the following groups and listed in order of preference.

Safety (all vessels)
VHF Ch16 is designated under international convention for use for ship-to-ship and ship-to-shore hailing and distress in international waters. ALL users are required to use channel 16 for only these purposes and then switch to other channels for subsequent communications. Pollution response is no exception.

Operational
Operational channels are intended for communications between the field and the ICP. The VHF channels are listed in order of preference. Channels designated for primary operations should not be used for extended or team specific conversations. These types of conversations should be moved to tactical channels, as outlined below.

Tactical
Tactical channels are intended for communications between vessels engaged in on-water pollution operations in the field. Channels designated for tactical communications should be used for extended short-range and team or objective-specific conversations.

Aircraft
Marine VHF channels to be used to communicate with aircraft involved in either Search & Rescue or pollution response operations.

Vessel Traffic Services (VTS)
Each plan area contains shipping lanes and calling-in-points for vessels participating with CCG Vessel Traffic. These channels can be monitored by vessels in the field to maintain awareness of participating traffic in the area.

Weather and Maritime information
Weather and the Continuous Marine Broadcast including navigational warnings (NAVWARNs) are readily available on multiple VHF channels.

Miscellaneous
During a response, the ability to contact other users on their typical VHF channels (marinas, commercial towing, whale watching, fishing fleet, etc.) is required.

EMBC (Provincial Emergency Channels)
Designated for use by local authority emergency programs province-wide, primarily involving Site and Site Support (EOC) levels within BCEMS. This includes communications between EOC

(or PREOC when providing Site Support functions) and local authority resources or functions such as reception centers, incident command posts and logistics facilities).

RR (Resource Road Channels, Province of BC)

CCG ER trucks are equipped with radios that have been preprogrammed to operate on BC Resource Road channels for use when travelling on resource roads, particularly on the West Coast of Vancouver Island. When resource roads are used to access a shoreline, responders must follow standard radio communication protocols on Forest Service Roads (FSR) and other natural resource roads across the province of British Columbia. More information can be found here: https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/resource-roads/radio-communications

Table 3. Communications Resource Availability Worksheet (ICS-217) – Canadian Coast Guard (DEC 2020)

Basic Radio Channel Use				Frequency Band: VHF -- UHF				Description: Radio Channel Options	
Ch #	Function	Ch Name/Radio System Talkgroup	Assignment	Rx Freq	Rx Tone / NAC	Tx Freq	Tx Tone / NAC	Mode A, D or M	Remarks
16	SAR		Safety	156.800		156.800			International Distress, Safety, and Calling
07A			Operational	156.350		156.350			Intership, Ship-shore, Commercial
27			Operational	161.950		157.350			Duplex channel. Can be used as a repeater.
24			Operational	161.800		157.200			Duplex channel. Can be used a repeater.
83A	CCG/MCTS		Operational	157.175		157.175			MCTS working channel. Could be used for MCTS interoperability within a response.
84			Operational	161.825		157.225			Duplex channel, requires a repeater.
04A	CCG		Tactical	156.200		156.200			DFO/CCG only working channel.
21A	CCG		Tactical	157.050		157.050			DFO/CCG only working channel.
61A	CCG		Tactical	156.075		156.075			DFO/CCG only working channel.
62A	CCG		Tactical	156.125		156.125			DFO/CCG only working channel.
81A	CCG		Tactical	157.075		157.075			DFO/CCG only working channel.
82A	CCG		Tactical	157.125		157.125			DFO/CCG only working channel.
19A			Tactical	156.950		156.950			DFO/CCG and BC Coast Pilots working channel.
25			Tactical	161.850		157.250			Ship/Shore and Public Correspondence
64			Tactical	160.825		156.225			Ship/Shore and Public Correspondence
09			Aircraft	156.450		156.450			May be used to communicate with aircraft and helicopters in predominantly maritime support operations.
10			Aircraft	156.500		156.500			May be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.
67			Aircraft	156.375		156.375			May be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations. Also for public correspondence use.
72			Aircraft	156.625		156.625			May be used to communicate with aircraft and helicopters in predominantly maritime support operations. Also for public correspondence use.
73			Aircraft	156.675		156.675			May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.

06	SAR		Aircraft	156.300		156.300			May be used for search and rescue communications between ships and aircraft.
22A	CCG/USCG		Transboundary	157.100		157.100			A temporary working channel until another is established with USCG.
23	CCG ER		Repeater	161.750		157.150			Deployable repeater channel.
11	CCG MCTS		VTS	156.550		156.550			Vessel Traffic Channel.
12	CCG MCTS		VTS	156.600		156.600			Vessel Traffic Channel.
13			VTS	156.650		156.650			Bridge-to-bridge navigational traffic.
14			VTS	156.700		156.700			Port operations and pilot information and messages.
71	CCG MCTS		VTS	156.575		156.575			Vessel Traffic Channel.
74	CCG MCTS		VTS	156.725		156.725			Vessel Traffic Channel.
21B	CCG MCTS		Weather	161.650		---			Continuous Marine Broadcast
83B	CCG MCTS		Weather	161.775		---			Continuous Marine Broadcast
WX1	CCG MCTS		Weather	162.550		---			Weatheradio Broadcast
WX2	CCG MCTS		Weather	162.400		---			Weatheradio Broadcast
WX3	CCG MCTS		Weather	162.475		---			Weatheradio Broadcast
18A			MISC	156.900		156.900			Towing
63A			MISC	156.175		156.175			Tow Boats
68			MISC	156.425		156.425			Marinas, yacht clubs and pleasure craft.
69			MISC	156.475		156.475			Pleasure craft
78A			MISC	156.925		156.925			Fishing Industry
79A			MISC	156.975		156.975			Fishing Industry
80A			MISC	157.025		157.025			Whale Watching
SAR-IF									
MUT-AID			EMBC						
XBC-1			Police						Police – secured channel
XBC-2			Police						Police – secured channel
PEPCORD1			EMBC	148.6550		148.6550			EMBC Coordination channel 1
DFO 4G									
RR-03		Mahatta		150.140 N		150.140 N			BC Resource Road Channel
RR-05		Holberg		150.200 N		150.200 N			BC Resource Road Channel
RR-21		Holberg		151.010 N		151.010 N			BC Resource Road Channel*
RR-26		Holberg		151.340 N		151.340 N			BC Resource Road Channel*
UHF									
BOATFIRE									Pre-programmed on select CCG ER radios
WORKING									Pre-programmed on select CCG ER radios
CCG 3									Pre-programmed on select CCG ER radios

CCG 4									Pre-programmed on select CCG ER radios
MAR 1									Pre-programmed on select CCG ER radios
MAR 2									Pre-programmed on select CCG ER radios
MAR 3									Pre-programmed on select CCG ER radios
MAR 4									Pre-programmed on select CCG ER radios
MAR 7									Pre-programmed on select CCG ER radios
MAR 8									Pre-programmed on select CCG ER radios
MAR 9									Pre-programmed on select CCG ER radios
MAR 10									Pre-programmed on select CCG ER radios
MAR 11									Pre-programmed on select CCG ER radios
NOTES:* Not to be used within 64 km of the Canada-United States border									
The convention calls for frequency lists to show four digits after the decimal place, followed by an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to "A" or "D" indicating analog or digital or "M" indicating mixed mode. All channels are shown as if programmed in a control situation, mobile or portable radio. Repeater and base stations must be programmed with Rx and Tx reversed.									

Table 4. Communications Resource Availability Worksheet (ICS-217) – Response Participants (DEC 2020)

Basic Radio Channel Use				Frequency Band: VHF -- UHF				Description: Radio Channel Options	
Ch #	Function	Ch Name/Radio System Talkgroup	Assignment	Rx Freq	Rx Tone / NAC	Tx Freq	Tx Tone / NAC	Mode A, D or M	Remarks
16	SAR		Safety	156.800		156.800			International Distress, Safety, and Calling
07A			Operational	156.350		156.350			Intership, Ship-shore, Commercial
27			Operational	161.950		157.350			Duplex channel. Can be used as a repeater.
24			Operational	161.800		157.200			Duplex channel. Can be used a repeater.
83A	CCG/MCTS		Operational	157.175		157.175			MCTS working channel. Could be used for MCTS interoperability within a response.
84			Operational	161.825		157.225			Duplex channel, requires a repeater.
04A	CCG		Tactical	156.200		156.200			DFO/CCG only working channel
21A	CCG		Tactical	157.050		157.050			DFO/CCG only working channel
61A	CCG		Tactical	156.075		156.075			DFO/CCG only working channel
62A	CCG		Tactical	156.125		156.125			DFO/CCG only working channel
81A	CCG		Tactical	157.075		157.075			DFO/CCG only working channel
82A	CCG		Tactical	157.125		157.125			DFO/CCG only working channel

19A			Tactical	156.950		156.950			DFO/CCG and BC Coast Pilots working channel
25			Tactical	161.850		157.250			Ship/Shore and Public Correspondence
64			Tactical	160.825		156.225			Ship/Shore and Public Correspondence
22A	CCG/USCG		Transboundary	157.100		157.100			A temporary working channel until another is established with USCG.
11	CCG MCTS		VTS	156.550		156.550			Vessel Traffic Channel
12	CCG MCTS		VTS	156.600		156.600			Vessel Traffic Channel
13			VTS	156.650		156.650			Bridge-to-bridge navigational traffic
14			VTS	156.700		156.700			Port operations and pilot information and messages
71	CCG MCTS		VTS	156.575		156.575			Vessel Traffic Channel
74	CCG MCTS		VTS	156.725		156.725			Vessel Traffic Channel
21B	CCG MCTS		Weather	161.650		---			Continuous Marine Broadcast
83B	CCG MCTS		Weather	161.775		---			Continuous Marine Broadcast
WX1	CCG MCTS		Weather	162.550		---			Weatheradio Broadcast
WX2	CCG MCTS		Weather	162.400		---			Weatheradio Broadcast
WX3	CCG MCTS		Weather	162.475		---			Weatheradio Broadcast
18A			MISC	156.900		156.900			Towing
63A			MISC	156.175		156.175			Tow Boats
68			MISC	156.425		156.425			Marinas, yacht clubs and pleasure craft.
69			MISC	156.475		156.475			Pleasure craft
78A			MISC	156.925		156.925			Fishing Industry
79A			MISC	156.975		156.975			Fishing Industry
80A			MISC	157.025		157.025			Whale Watching
PEP EP1	EMBC		EMBC	148.6850		148.6850			British Columbia Emergency Program Channel 1. Designated for use by local authority emergency programs province-wide, primarily involving Site and Site Support (EOC) levels within BCEMS. This includes communications between EOC (or PREOC when providing Site Support functions) and local authority resources or functions such as reception centers, incident command posts and logistics facilities).
PEPCORD1	EMBC		EMBC	148.6550		148.6550			British Columbia (EMBC) Coordination Channel 1.

									Designated for multi-agency coordination province-wide at the Site level including ground and marine to ground communication. All frequency users are to ensure agencies conducting Combine Event response or air to ground communications are provided clear channel for the duration of response activities. This frequency shall not be used to replace tactical or operational frequencies for the use of individual response.
TACH 1	WCMRC		Operational	----		----			WCMRC internal UHF working channel. Wide area.

NOTES:

Most communications will take place on VHF. Response participants who have access to a marine radio, should be able to access the above VHF channels.

The convention calls for frequency lists to show four digits after the decimal place, followed by an “N” or a “W”, depending on whether the frequency is narrow or wide band. Mode refers to “A” or “D” indicating analog or digital or “M” indicating mixed mode. All channels are shown as if programmed in a control situation, mobile or portable radio. Repeater and base stations must be programmed with Rx and Tx reversed.

Medical

Select healthcare services within the West Coast Vancouver plan area are listed in Table 5. Visit Health Link BC for a complete list https://www.healthlinkbc.ca/services-and-resources/find-services.

The plan includes medical services that provide 24-hour emergency and general care, urgent care centres for those requiring same-day treatment (up to 72 hours with an appointment) and walk-in medical clinics. Remote locations are likely to be serviced by medical clinics with more urgent cases transported to the nearest hospital.

Hyperbaric chambers for diving injuries can be found at https://cuhma.ca/facilities/facilities.

Table 5. Healthcare Services. This table is not an exhaustive list of resources available in the planning area.

Location	Medical Service	Address and Phone	Description	Hours of Operation	Notes
Tofino	Hospital	261 Neill Street, PO Box 190, Tofino, BC , V0R 2Z0 250-725-4010	• 10 acute medical in-patient beds • 5 Emergency Room stretchers • Physician is on-call to the site Services: • Emergency obstetrics only • Outpatient Ambulatory Care • Emergency department • Telehealth • Medical Imaging • Laboratory services • Rehabilitation services	24/7/365 Lab Hours vary, please contact. Stat holiday hours vary-please contact.	
Tahsis	Health Centre	1085 South Maquinna Drive Health Centre Phone: (250) 934-6322 Extension 0 Nurse Pager: (250) 934-6372	The Health Centre is staffed with a receptionist and one full-time critical care nurse. There is one nurse available after hours. A doctor is available for appointments on Tuesdays and	M-F, Hours: 0900-1630	

Location	Medical Service	Address and Phone	Description	Hours of Operation	Notes
			Thursdays. The Health Centre has an urgent care room, lab services Wednesdays and Fridays, home Registered Nurse care, and immunizations.		
Zeballos	Medical Clinic	500 Parkway Road Zeballos, BC V0P 2A0. phone (250) 761-4274	Routine medical, public health, and emergency care.	M-F, Hours: 0830-1630	
Gold River	Health Center	601 Trumpeter Dr Gold River, B.C. V0P 1G0 250-283-2626 Fax 250-283-7561	Medical Imaging, Laboratory, and Lab services, Physiotherapist, Telehealth, Urgent Care Centre. The Urgent Care Centre treats medical health issues due to injury or illness. There is no overnight	Urgent Care Centre Monday - Friday: 8:30 a.m. - 5 p.m. Medical Centre Monday - Friday: 9 a.m. to 5 p.m. by appointment	
Bamfield	Health Center	353 Bamfield Road. Phone: 250-735-1151 On-call nurse phone: 250-728-3312	Nursing primary health care, urgent medical care, lab services, telehealth	Health Centre open M-F 0900-1700. On-call nurse available 24/7 for after hours	
BC	Community Paramedicine. BC Emergency Health Services		Ambulance Service		http://www.bcehs.ca/health-professionals-site/Documents/CP%20Community%20Contacts.pdf

Location	Medical Service	Address and Phone	Description	Hours of Operation	Notes
Kyuquot	Health Centre	Contact Enid O'Hara, Manager Rural Services. 250-283-2626			

Food

The Logistics section is responsible for determining all incident facilities' feeding requirements, including identifying needs for cooking facilities, food preparation and serving, drinking water, and food service area maintenance.

Table 6. Food Services. This table is not an exhaustive list of resources available in the planning area.

Location	Type of Food Service	Address and Phone	Description	Hours of Operation
Gold River	Bulk Food Delivery	Cold Star Solutions 1734 Ryan Rd, Comox, BC V9M 4C9 Call centre: 250-381-3399	The Comox warehouse may be small, but it has the vital role of serving as portal to the north end of beautiful Vancouver Island. Its dedicated team ensures that we are able to provide high quality service to Quadra Island, Gold River, Port Hardy and all points in between.	Monday: 6 am to 2 pm, Tuesday to Friday: 5:30 am to 3:30 pm, Saturday: By request, Sunday: Closed
Ucluelet	Food Services	https://www.uclueletco-op.crs/sites/ucluelet/local/detail/co-op-food	Grocery Store in Ucluelet.	0900-1900 daily
Campbell River	Food Services	Riptide Marine Pub 1340 Island Hwy 250-830-0044	Catering group in CR	1130-2100 Thursday-Monday
Campbell River	Food Services	On Line Catering 250-286-6521	Catering group in CR	https://www.onlinegourmetcatering.com/

Campbell River	Food Services	Quay West Kitchen & Catering 921 Island Hwy, Campbell river, BC 250-286-9988	Catering group in CR	1130-2100 7/365

Facilities

The facilities unit is responsible for the setup, maintenance and demobilization of incident facilities, such as staging areas or the incident command post. This unit also provides sleeping and sanitation facilities for incident personnel. This section outlines some considerations for establishing these types of facilities in the West Coast Vancouver Island area, as well as provides some pre-identified sites that may be used.

For large incidents in the West Coast Vancouver Island area an incident command post would likely be stood up in a location that has sufficient accommodation, medical and food services as to not be an issue. Depending on the exact location of the incident, field crews may require to have food go with them to the response site, but they are likely able to travel at the end of the day to return to their lodging.

Incident Command Posts

The following criteria should be considered when identifying Incident Command Posts:

- ICP Identifier (Name, location)
- Access (parking, etc)
- Maximum capacity
- Internal amenities (meeting spaces, breakout rooms, washrooms, kitchen)
- Electronic connections (wifi and cell signal and capacity, printing, projection screens)

Table 7. Potential Locations for Incident Command Posts. This table is not an exhaustive list of resources available in the planning area.

ICP Site Name, Location and Contact	Description of Area	Access to Site	Separate meeting spaces	Communications (cell, internet, radio)	Notes
Institute of Ocean Sciences **9860 W Saanich Road, Sidney BC** **250-363-6517**	Large building that is the centre for various scientific facilities, as well as CCG's MCTS centre. Has a	Car, dock access	Yes – additional rooms close to the auditorium	Cell phone coverage is known to be spotty. Hardline internet only (no WiFi)	Cafeteria located in the building.

ICP Site Name, Location and Contact	Description of Area	Access to Site	Separate meeting spaces	Communications (cell, internet, radio)	Notes
	large auditorium suitable for an ICP.			Auditorium has large screen set-up with projector.	
Tahsis Recreation Centre **285 Alpine View, Tahsis, BC V0P 1X0** **250-934-6443**	Has meeting hall, showers, gym, kitchen, wi-fi			Wi-Fi	
Gerry Morgan Memorial Centre **350 Muchalat Dr. Gold River** **250-283-2251** mman@goldriver.ca	Community centre with lounge, community hall, and kitchen				

Virtual Incident Command Post

The Coast Guard has successfully tested the ability to carry out multi-day coordination activities required for a large scale response while in a virtual environment. In the event a virtual ICP is established, the primary platform of choice will be Microsoft Teams and any other platform accessible to the ICP participants both internally and externally to CCG.

Accommodations

The plan area includes both easily accessible and remote locations. In places with high tourism such as Tofino, Ucluelet, and Port Alberni, available accommodations may be affected by seasonality. In remote areas such as Gold River, Tahsis and Bamfield, temporary accommodations such as camp barges, fishing lodges, or other rapidly deployable lodgings should be considered. In the event of reduced accommodation availability in smaller communities with no temporary accommodation options, the closest municipal hub of Campbell River could be considered.

Table 8. Accommodations. This table is not an exhaustive list of resources available in the planning area.

Location and Contact	Description	Notes
Gold River Chalet **390 Minpkish Dr, Gold River** **1-866-450-2688**	Close to marina for access to Friendly Cove, Nootka Island and Tahsis.	goldriverchalet@cablerocket.com
Ridgeview Motor Inn **395 Donner Ct, Gold River** **250-283-2277**	Hostel-Type	info@ridgeview-inn.com
Campbell River	15+ places to stay- chain mid-range hotels, motels, b&bs	May struggle with seasonal availability in the summer
Tofino	30+ places to stay – includes cabins, multi-room motels, lodge, hostel, hotel	May struggle with seasonal availability in the summer
Ucluelet	50+ places to stay – includes cabins, multi-room motels, lodge, hostel, hotel	May struggle with seasonal availability in the summer

Ground Support

The ground support unit is responsible for the management of tactical equipment, vehicles, mobile ground support equipment and fueling services; transportation of personnel, supplies, food and equipment in support of incident operations. The Vessel Support Unit is responsible for coordinating transportation on the water and between shore resources, as well as fueling, docking and maintenance requirements. This section outlines available methods of transportation in the plan area.

The Canadian Coast Guard's Integrated Technical Services (ITS) directorate has a variety of experts that may provide these services during a response.

A digital library with manuals for maintenance and use of response equipment is kept by the CCG's Marine Civil Infrastructure program.

Travel in and around some parts of the WCVI area may pose some limitations to a response. Highway, airport, and marine services and infrastructure may be limited for some locations within the planning area.

Personnel/Equipment Mobilization

Responders may find barriers when mobilizing personnel and equipment in the West Coast Vancouver Island area. There are some remote areas that may be only accessed by vessel. The following table provides approximate times for responders to reach different areas in the Plan Area. Note that these times are assumed that responders are on site and that weather conditions permit suitable travel conditions. Unless stated otherwise, these travel times are for a truck and trailer.

General transportation for the area (eg. ferry routes, airports, water taxis, roads, logging roads, seasonal variability, etc.). See the tables in the subsections below.

Table 9. Water Transportation Services. This table is not an exhaustive list of resources available in the planning area.

Service	Description	Frequency	Capacity	More Information/Contact
Tofino Water Taxi	Runs to Meares, Vargas, Sloman or Felice Islands.	Open all year during daylight hours.		1-250-725-8844 Contact Name: Brandon Hilbert. TC safety certified, insured.
Zeballos Water Taxi	Destinations include Esperanza, Tahsis, Gold River, Friendly Cove, Nuchatlitz, Queen's Cove, Port Eliza, Weasel Creek, Oclucje, and Louie Bay.	Contact for frequency.	8 passengers and freight	1-250-761-4137 Contact names: Cristina Lepore and Daniel O'Connor. info@zeballosexpeditions.com;
Maxi's Water taxi & Charter Service	Serves the Nootka Found Area		Can accommodate up to 12 passengers, also towing capacity up to 2,000 lbs	1-250-283-2282
Shorebird Expeditions water taxi	private marine operator listed in Tahsis Evacuation Plan as being equipped to assist with marine evacuation.		Able to transport 6 passengers	250-218-1145

Service	Description	Frequency	Capacity	More Information/Contact
Get West Adventure Cruise	Private marine operator listed in Tahsis Evacuation Plan as being equipped to assist with marine evacuation.		A refitted Boat to accommodate 100 passengers and up to 70 tons of freight	M-f, 0800- 1630 1-877-824-8253 email: reservations@getwest.ca
BC Ferries	Provincial Crown corporation	Varies, scheduled. Also available for charter options.	Varies, dependent on route	https://www.bcferries.com/routes-fares/schedules https://www.bcferries.com/contact-us/ferry-vessel-chartering

Table 10. Air Transportation Services. This table is not an exhaustive list of resources available in the planning area.

Service	Description	Frequency	Capacity	More Information/Contact
Scheduled Harbour Air	Scheduled Flights in Southern BC (Vancouver Island and Lower Mainland/Sunshine Coast)	Some routes are seasonal.	4 types of aircraft – accommodates 19, 14, 9, or 6 passengers	https://www.harbourair.com/
Air Nootka	Charter flights in and around Nootka Sound	Contact for flight availability	2 types of aircraft- Cessna 185(3 passengers, combined weight for passsengers & baggage 700 lbs) and De Havilland Beavers (6 passengers with combined weight of passenger and baggage of 1200 lbs)	250-283-2255 or toll free 1-877-795-2255

Launch Sites and Water Access

Please refer to the Harbour Authority Association of BC for a list of harbour authorities by zone: https://haa.bc.ca/harbour-authorities-by-zone/

The link above includes interactive maps showing the marinas located in each zone, with photos and contact information for each of the harbour authorities.

Launch sites and water access can also be found in the Sailing Directions publication at this link: http://www.charts.gc.ca/publications/sailingdirections-instructionsnautiques-eng.html

Marine Fuelling Stations

See the Sailing Directions for information regarding availability of fuel at launch sites and water access points: http://www.charts.gc.ca/publications/sailingdirections-instructionsnautiques-eng.html .

Table 11. Marine Fueling Locations. This table is not an exhaustive list of resources available in the planning area.

Facility	Address	Fuel Types	Hours of Operation	More Information/Contact
Port Renfrew	Pacific Gateway Marina	Gas & Diesel	Not open Tue & Wed, however; it can be opened on those days and after-hours by contacting Marina Manager in advance	Merle, Marina manager 250-217-6255

Geographic Response Strategies

This appendix supplements information found within Western Canada Marine Response Corporations' (WCMRC) Coastal Mapping Program. Geographic Response Strategies (GRS) are site-specific response plans tailored to protect sensitive areas threatened by an oil spill. These GRS include a photo of the site, the strategic objective, access, radio and cell coverage, staging area, shoreline features and recommended equipment. GRSs can be accessed via: http://coastalresponse.ca/coastal-mapping/.

Appendix 3: Key ICS Functions

This section identifies several key ICS functions where collaboration and shared understanding of ICS implementation are particularly important.

Incident Management Team

The term Incident Management Team refers to the Incident Commander and appropriate Command or General Staff assigned to an incident.

The Command Staff consists of the Incident Commander or Unified Command, Liaison Officer, Information Officer, Safety Officer and, in some cases, Intelligence/Investigation Officer. The Incident Commander or Unified Command wear green vests while the remainder of Command Staff wears red.

The Incident Commander/Unified Command is in charge of the incident site's overall activities and responsible for establishing incident objectives for each operational period.

The Information Officer (IOFR) is responsible for developing and releasing information about the incident to the media and public. While less often discussed, the Information Officer is also responsible for ensuring that an incident's command staff are kept apprised about what is being said or reported about an incident. The officer may have Assistants as necessary, and they may come from other Assisting or Cooperating Agencies.

For a sizeable marine pollution incident, a Joint Information Centre (JIC) may be established by the Information Officer to manage communication resources and generate media products when multiple organizations are involved in the incident response. A JIC, or portion of it, should be located close to the Incident Command Post. Remote JICs may be needed for response to major incidents involving large geographic areas, and JIC members may be distributed geographically as long as the JIC can develop and approve products in a timely manner. The JIC is working toward Unified Command's objectives and not the objectives or procedures of their home department or agency.

The Safety Officer (SOFR) ensures that the safety of responders and the public is not compromised while carrying out response operations. The SOFR evaluates proposed strategies and tactics and works closely with the Operations Section Chief to implement safeguards as necessary.

The Liaison Officer (LOFR) represents the Incident Commander/Unified Command in communicating with agencies supporting the incident. In addition, the LOFR interfaces with interested parties to ensure that their concerns are brought to the attention of the Incident Commander/Unified Command. Only one primary Liaison Officer will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. There may be a need, driven by the complexity or scope of the incident, to appoint one or more

Assistant Liaison Officers in the Incident Command Post or field to maintain a manageable span of control.

An agency that participates in the response may assign an Agency Representative to make decisions on all matters affecting their agency's participation at the incident.

The Intelligence/Investigation Officer fulfills a traditional role of collecting and analyzing intelligence information to support the incident objectives. This position or group, if activated, could either report to Unified Command or another position within General Staff, such as Planning Section Chief.

*Please note the activities led by ECCC's Environmental Enforcement Officers, Wildlife Enforcement Officers, and Environmental Emergencies Officers could occur outside the ICS structure prior to establishing an ICP. As mentioned in section 3120 Initial Assessment, once an ICP is established and there is a recognized Incident Commander/Unified Command, officials would make their presence known to command, and for safety reasons, would sign in and out of the operating area.

General Staff

The Operations Section Chief is responsible for managing all tactical operations at an incident and has a key role in assisting in developing the Incident Action Plan. The need to expand the Operations Section is generally dictated by the number of tactical resources involved and is influenced by span of control considerations.

The Planning Section Chief is responsible for providing planning services for the incident and has the primary role in developing the Incident Action Plan. Under the Planning Section Chief's direction, the Planning Section collects situation and resources status information, evaluates it, and processes the information for use in developing action plans. Dissemination of information can be in the form of the Incident Action Plan, informal briefings, or through map and status board displays.

The Logistics Section Chief provides all incident facilities, services, personnel and material to support the incident. The Logistics Section receives and processes resource requests from all other sections of the incident. Additionally, the Logistics Section is responsible for the Communications Plan and the Medical Plan.

The Finance/Administration Section Chief is responsible for managing all financial, administrative and costs analysis aspects of an incident. This section identifies all funding sources and ceilings for the response operation. The Finance Section also works closely with Logistics for contracting purposes.

Assisting and Cooperating Agencies

Assisting and Cooperating Agencies are those agencies that do not have a jurisdictional or statutory responsibility to respond to incidents but are providing resources or support to the incident. An Assisting Agency is providing personnel, services, or other resources in support of the incident objectives. A Cooperating Agency supplies assistance other than direct operational or support functions or resources to the incident management effort. This is typically an agency that is supporting first responders who are responding to the incident. The Assisting or Cooperating Agency's role is to ensure their resources are being used appropriately, any technical information relating to those resources is available, and any restrictions or limitations of those resources are known.

Assisting and Cooperating Agencies are connected to the response efforts through the Liaison Officer.

Emergency Operations Centres

Agencies or jurisdictions may establish Emergency Operations Centres (EOCs) to coordinate multiple emergency services, resources or activities to support an emergency response. EOCs are located outside of the ICP and have their own organization and mission. EOC design and functionality are not part of the Plan; however, the flow of information between the EOC and ICP is expected to follow ICS Principles. The Incident Commander(s) are supported by their lead incident EOC(s). In contrast, other EOC(s) typically perform a support function and communicate through the Agency Representative to the Liaison Officer at the ICP.

Levels of Response - Modular Organization

One of the Incident Command System's key features is that it is scalable to suit the needs of the response. Some incidents can be responded to by an individual or a small team of responders. Those types of responses likely will not necessitate the use of the Plan. There are times when an incident could result in a better net environmental benefit if the spill is left to monitoring and natural attenuation without undertaking tactical cleanup activities.

The IC/UC would choose natural attenuation if the product spilled is of such size and type that it would limit adverse effects on the environment and allow the pollutant to degrade naturally over time and space. This mitigation method is preferred when cleanup actions may be ineffective or infeasible, cause unacceptable damage to the environment, or create an unacceptable safety risk for responders.

For those instances where a larger-scale response is required, and the Plan is used, many people may be brought in to manage the response activities. The ICS organization expands or contracts to meet the needs of the response to the incident and manage the types of activities required to ensure a successful outcome.

Tactical Response

Typically, there are a variety of field teams undertaking a wide range of tactical activities such as on-water response, shoreline cleanup, ground support (e.g. food, lodging, fuel, equipment) for responders, wildlife management and waste management. These teams are directed and supported by the Incident Management Team in the Incident Command Post.

Incident Command Post

The Incident Command Post is where the primary command functions are performed and where the Incident Commander/Unified Command and Command and General Staff work together.

Personnel from Assisting or Cooperating Agencies may be placed within the incident management structure. They must be familiar with and respect the reporting relationship within the command structure for an incident response while representing their organization's jurisdiction, responsibility and authority.

Incident Action Plan

Every incident needs a written or verbal Incident Action Plan that moves response operations from a reactive to a proactive or planned mode. It provides responders with direction on what to accomplish in a specified operational period and which resources will be necessary to support these operations.

Establishing a Meeting Cycle

By working through the Planning Process, or Planning 'P' in Figure A3.1, responders go through a series of steps or activities to complete an Incident Action Plan. The Planning Section Chief establishes the schedule of meetings; each meeting has specified goals and leads into the next step within the planning cycle. The CCG Incident Management Handbook explains these meetings, goals and steps in detail and is recommended as a resource in the Incident Command Post.

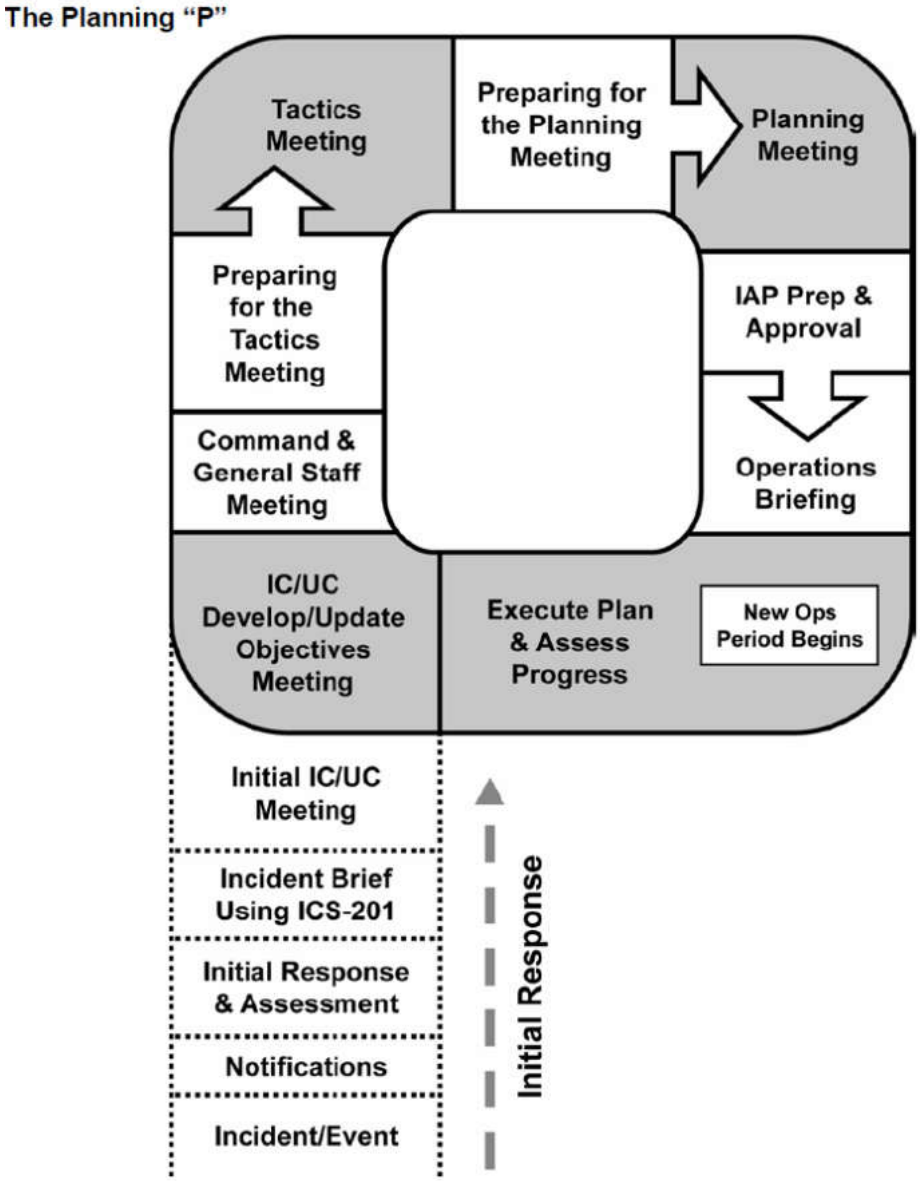

Figure 6. 'The Planning P.' This process includes the stem of the P which are actions performed once at the beginning of a response, and the circle of the P which is a series of cyclical meetings and plans in order to meet changing objectives throughout the response.

Appendix 4: Initial Information Gathering Checklist

In the event **a marine pollution incident is observed**, timely and accurate information gathering is critical. However, human safety is paramount, and you should not put yourself or others at risk.

If incident severity is unknown, it is always preferable to respond based on the incident's potential magnitude. It is easier to scale back if an incident de-escalates than ramp-up if an incident quickly escalates.

The following actions should be taken immediately:

Remain upwind or upstream of the suspected pollution and attempt to evaluate the incident from a safe distance. Note that hazards, such as fumes, vapours or fire risks, may not be readily apparent.

Call for emergency medical support if there are injuries to people. If required, notify the proper authorities to facilitate the area's safe evacuation without putting yourself at risk.

Maintaining a safe distance, observe and record the following:

- ◻ Location of the incident
- ◻ Extent of the incident (area covered by product)
- ◻ Type of incident (i.e. explosion, collision, tank failure, grounding, etc.)
- ◻ Number and type of injuries or fatalities
- ◻ Source of pollution and any available information (i.e. pipeline, ship, container, rail car, etc. and placards or labels on containers/tanks, etc.)
- ◻ Name of Potential Polluter and point of contact if available (Name, phone, address)
- ◻ Name of vessel/facility, railcar/truck number or other identifying information
- ◻ Type and size of vessel/facility
- ◻ Description of product released (i.e. size, colour, smell, etc.)
- ◻ Estimated quantity of product released
- ◻ Total potential quantity that could be released (i.e. total quantity in tank or onboard)
- ◻ Environment impacted or potentially impacted from product (i.e. air, water, ground/soil)
- ◻ Impacted waterbodies/shoreline areas
- ◻ Effects on people, wildlife, aquatic species and the environment
- ◻ Proximity to homes, businesses, schools, hospitals, or other aggregations of people
- ◻ Weather: wind, temperature, sea conditions, current, etc.

Appendix 5: Coordination Conference Call Agenda

Conference Call Details

Call In Number/Link:		Date:	
Meeting ID:		Time:	
Password:			

Attendees

**Circle/highlight those invited. Check off participants in attendance. Adjust list based on incident impacts and location.*

	Entity	Contact
Federal Government	☐ **CCG**	
	☐ **ECCC-NEEC**	
	☐ **ECCC-CWS**	
	☐ **TC**	
	☐ **DFO**	
	☐ **Public Safety Canada**	
	☐ **Health Canada**	
	☐ **Parks Canada**	
	☐ **CER**	
	☐ **CBSA**	
First Nations	☐ **Ahousaht First Nation**	
	☐ **Ehattesaht First Nation**	
	☐ **Hesquiaht First Nation**	
	☐ **Hupacasath First Nation**	
	☐ **Huu-ay-aht First Nation**	
	☐ **Ka:'yu:'k't'h'/ Che:k:tles7et'h' First Nation**	
	☐ **Mowachaht/Muchalaht First Nation**	
	☐ **Nuchatlaht First Nation**	
	☐ **Tla-o-qui-aht First Nation**	
	☐ **Toquaht First Nation**	

	☐ Tseshaht First Nation	
	☐ Uchucklesaht First Nation	
	☐ Ucluelet First Nation	
Provincial Gov.	☐ BC MoECCS	
	☐ EMBC	
	☐ BC Parks	
	☐ HEMBC	
	☐ FNHA	
	☐ VIHA	
Local Government	☐ Alberni-Clayoquot Regional District	
	☐ District of Tofino	
	☐ District of Ucluelet	
	☐ Strathcona Regional District	
	☐ Village of Gold River	
	☐ Village of Sayward	
	☐ Village of Tahsis	
	☐ Village of Zeballos	
RO & Stakeholders	☐ Port Authority	
	☐ WCMRC	
	☐ Marina	
	☐ Harbour Authority of BC	
	☐	
Polluter	☐	
	☐	
	☐	

Agenda

#	Agenda Item | Presenter	Detailed Outcome	Actions/Notes
1	Convene Meeting | Facilitator • Introduce UC • Roll Call	Ensure all key representatives are on the call	
2	Update on Incident Status and Hazard Outlook; review and consolidate, if needed (ICS 201) | UC • Where and how large is the impacted area? • Which jurisdictions are/may be impacted • Discuss types of impacts, including potential impacts (e.g., responder safety, public health, environmental, cultural, infrastructure, etc.) • What is the status of the initial response and current operations underway, including initiation of other Emergency Response Plans • Who has been notified?	Establish situational awareness and response actions Confirm notifications	
3	Status of Plan Coordinated Response | UC • Confirm membership of Unified Command • Clarify UC roles and responsibilities • Identify Command and General Staff positions, including Environmental Unit Leader • Consider appropriate local representation in the staffing of key ICS roles in response organization • Confirm establishment and location of ICP	Confirm UC and key ICS roles	
4	Notifications and Ongoing Updates | ALL • Based on nature of incident, have all necessary parties been notified? • Who, outside of Unified Command, should be kept informed of ongoing status of event; how is this best achieved (email updates, conference calls) until Liaison Officer is established		

	• Establish linkages to EOCs through Liaison Officer	
5	Confirm Initial Response Objectives (ICS 201-2) | ALL • Based on nature of incident, are there any additional response objectives that should be established during the initial response phase?	
6	Communications | ALL/IOFR • Determine which of the agencies will be able to send communications personnel to staff the JIC • Complete and approve Joint Media Statement • Confirm repurpose key messages from Joint Media Statement for other channels (e.g., Twitter) • Confirm use of Incident Response Website • Confirm use of logos of all participating agencies • Confirm activation of Twitter account	
7	Next Steps | Facilitator • Summarize and document key actions and decisions from this meeting • Confirm schedule and process for sharing situational awareness	
8	Questions | ALL • Roundtable to address any outstanding questions	
9	Identify Next Meeting | UC	

- Set times for further updates

Appendix 6: Lead Agency Designation

Table 12. Lead Agency and Unified Command structure based on pollutant source.

POLLUTANT SOURCE	UNIFIED COMMAND	COMMENT
Vessel in Canadian waters	**Federal IC– CCG (lead)** Provincial IC – BC MoECCS First Nation IC Municipal IC Polluter IC	This includes any vessel in Canadian waters, regardless of the vessel's origin.
Unknown source in Canadian waters (mystery spill)	**Federal IC– CCG (lead)** Provincial IC – BC MoECCS First Nation IC Municipal IC	Mystery spill refers to pollution for which no source has been identified.
Oil Handling Facility (Ship to Shore Transfer)	**Federal IC– CCG (lead)** Provincial IC – BC MoECCS First Nation IC Municipal IC Polluter IC	When a transfer of oil is underway and enters or threatens to enter the marine environment, the CCG is Federal Lead Agency.
Land Based (Non- CER regulated OHF, Prov. Regulated Pipeline)	**Provincial IC – BC MoECCS (lead)** Federal IC – ECCC First Nation IC Municipal IC Polluter IC	A spill from a non-CER OHF, if no vessel is involved. All hazardous material discharges on site or under transportation including leaks from provincially regulated pipelines.
Interprovincical Pipeline, OHF, CER Regulated (No Transfer Underway)	**Federal IC– CER (lead)** Provincial IC – BC MoECCS First Nation IC Municipal IC Polluter IC	If no vessel involved, CER will be Federal Lead;
Land Based (Federally owned Facility), or Source is a DND vessel	**Federal IC– ECCC (lead)** Provincial IC – BC MoECCS First Nation IC Municipal IC Polluter IC	Source is a DND vessel. An agency is not capable or willing to act as a Lead Agency, or There is an agreement in place (i.e., the Canada-US Joint Inland Pollution Contingency Plan).

* ECCC would be the Federal Incident Commander only for land based spills pursuant to applicable ECCC legislation. For more details, please consult Appendix A: Agency Specific Summary of Participant Roles, Jurisdiction and Capabilities - Environment and Climate Change Canada.

Appendix 7: Environmental Unit

Environmental Unit Overview

The Environmental Unit is established during a marine pollution incident to provide technical, scientific and local knowledge and expertise. This information supports incident planning to mitigate damage from threats to people, property and the environment and ensure the best tactical decisions are made.

Under ICS principles, the size and composition of the EU are scalable to the severity of the incident. The EU sits within the Planning Section and works with other units or sections to implement EU outputs such as Resources at Risk Prioritization, Sampling Plans, Wildlife Plans, or the Waste Management Plans to achieve the objectives of the Incident Action Plan.

Environmental Unit Responsibilities

The primary responsibility of the EU is to gather and coordinate environmental, archeological, cultural and socio-economic information from multiple sources to assess potential impacts and ways to minimize them. This information is used to identify and evaluate response options to achieve the Incident Action Plan's objectives. This information can include coastal resource maps and data, weather predictions, trajectory modelling, local and traditional knowledge and field observations.

The EU must also recognize and strive to protect social, cultural, ecological, and economic resources. Different sources offer Environmental Unit Job Aids (repository of supporting information and processes), including the North West Area Contingency Plan.

Establishing the Environmental Unit

During the initial coordination call for a given incident, an Environmental Unit Leader (ENVL) and other participants of the Environmental Unit will be identified by the UC. The ENVL will then arrange an initial environmental unit call to identify individual's roles and discuss their responsibilities.

Skill sets within the environmental unit include familiarity with scientific and research methods, statistics, biological sampling, shoreline clean up and assessment techniques, traditional knowledge, chemistry and toxicology, waste and wildlife management, regulatory and permitting contexts, meteorology, and mass transfer of contaminants.

Traditional Knowledge and local information that is considered private are not expected to be shared in the plan. However, they should be pre-identified and ready to be communicated by respective participants to protect these areas during a given incident.

Common outputs (not in the order of importance) of the EU include:

- Support development of the Incident Action Plan with the Operations Section.
- Complete the Resources at Risk (ICS 232) form which summarizes environmental, cultural, ecological, archaeological and socio-economic sensitive areas and resources.
- Develop Shoreline Cleanup Assessment Technique plans
- Develop Environmental Sampling Plans (water, sediment, soil, toxicology)
- Develop Waste Management Plan
- Prepare permits, authorizations, incident specific environmental advisories, orders or closures.
- Obtain, analyze and present weather forecasts, tides and sea conditions and trajectory modelling.

Communicate natural resource concerns and potential impacts to the Joint Information Centre and Incident Commander/Unified Command via the Planning Section Chief.

Environmental Unit Staffing

Due to the breadth of skills required, the EU's composition is necessarily inclusive of government agencies, First Nations, the polluter, and subject matter experts with direct local knowledge or mandates in resource management, human health, environmental and archeological protection.

The Environmental Unit Leader is selected by IC/UC and works to serve the overall incident rather than the interests of a particular organization or party.

One of the roles of the ENVL is to facilitate discussions in the EU between all participants, stimulate collaboration and strive for reaching a consensus so that recommendations and technical advice can be given to Unified Command for their consideration and approval in a timely manner.

Environmental Unit Recommendations

Recommendations made within the EU should be collaborative and supported by the best available science and Indigenous Knowledge. As per ICS principles, the EU's recommendations inform operations and tactics and are brought forward through the Planning Section as part of the Incident Action Plan for approval by IC/UC. The IC/UC may request the EU's recommendations on the feasibility of various response methods, including, but not limited to, Net Environmental Benefit Analysis, establishing protection priorities and evaluating trade-offs in response options.

All technical advice and recommendations from the EU are provided to the Incident Commander/Unified Command for their consideration and approval. Recommendations formed within the EU should be collaborative, scientific and consensus-based, with the ENVL acting as a coordinator or facilitator of the decision-making process. If consensus is not

possible, the ENVL will record and include the dissenting opinion with the EU recommendations to the Incident Commander/Unified Command for the final decision.

1. Given the emergency nature of pollution response, it should be recognized that decision-making will need to proceed at a very quick pace. As such, best efforts from all response participants are needed to support timely outputs from the EU.
2. Recommendations may involve environmental, cultural/ archaeological and/or socio-economic prioritizations given the limited time and resources encountered during the response.

The EU is a collaborative technical forum based on sound science, traditional ecological knowledge, best available information and reasonableness. As such, opinions and information should be free-flowing. The group should seek consensus on EU recommendations. Dissenting opinions on an EU recommendation and/or output (e.g. sampling plan) should be discussed and recognized. The ENVL should record and forward the dissenting opinion with the EU recommendations to the Incident Commander/Unified Command for the final decision.

Appendix 8: Health and Safety

Purpose and Scope

This appendix provides direction for the implementation of health and safety protocols in the event of a marine pollution incident in the Plan Area.

Best Practices

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 the health and safety of all responders.
- **Hazard and Risk Assessment** undertaken that is particular to the incident and the working environment that includes, but not limited to sea conditions, transportation, chemical exposures, and operations.
- **Safety Communication and Monitoring** are undertaken to deliver, record, assess, and alter responder safety throughout an incident.
- **Training and Certification** are required whereby responders have been trained and certified – or trained before deployment – for the duties and working environments they are tasked with.
- **Personal Protective Equipment** is provided to responders suitable for their operations, hazards, and working conditions, and that responders are oriented and trained in its use.
- **Hygiene and Decontamination** are addressed whereby personal hygiene facilities and supplies are readily available and standard of use are communicated. Excessive oil/chemical contamination is controlled, and decontamination measures are provided and trained to.

Safety is the responsibility of all personnel to apply and to monitor.

Cease activities and report immediately to a supervisor if any one of the above conditions is not present. Report all accidents and injuries; and when in doubt…stop and enquire, all workers have the right to refuse unsafe work.

Health and Safety of Responders

Emergency response personnel must have appropriate training to satisfy the health and safety requirements associated with task-oriented functions and activities when deployed in an environmental emergency response.

All functions and activities associated with environmental response should have site safety plans and be filed with assigned safety officers under the umbrella of the Incident Command System and designated officials.

The following are agreed on protocols about the health and safety of incident management and response personnel:

1. Prior to establishing an on-site Incident Command Post, safety remains the responsibility of all responders and their supervisors in consultation with the Canadian Coast Guard. Responders should only participate in tasks in which they have received proper training and certification.
2. In consultation with the Safety Officer, Unified Command will determine what health and safety standards, protocols, and resources will be used for the incident.
3. Personnel who undertake activities that require safety and operational training may be required to show proof-of-certification/instruction (e.g., vessel operations, use of water/oil transfer systems, chain-saws, All Terrain Vehicles, etc.). Table 4-1 of the Small Commercial Vessel Safety Guide lists the minimum requirements for competency for the vessel operator and the marine emergency duties training requirements for personnel on board.
4. Basic oil spill safety training is the minimum qualification for being within an oil-contaminated area for field assessments, monitoring, and response.

All field personnel will be provided with a safety orientation that includes, but is not limited to, the following topics:

- Safety objectives and responsibilities specific to the incident as approved by the IC/UC
- Type of pollutant spilled and its fate and behaviour in the marine environment
- How to report injuries and safety issues in the field
- Safety Data Sheet for the pollutant
- Overview of the operating environments including weather conditions
- Presence of fire/explosion/toxicity risk
- Various evacuation and muster procedures (e.g., tsunami evacuation routes, site-specific rules for working at an industrial facility)

- Knowledge of the buddy-system, man-overboard, and all-stop procedures
- When and how to expect emergency notifications (e.g., lightning, storm events, fog)
- How to reduce personal contamination
- Minimum level of Personnel Protective Equipment and how to use it effectively (e.g., doffing, wearing, removal, and discharging)
- Air quality monitoring and the presence of harmful gases and irritants to breathing, eyes and/or skin
- Maintaining awareness of slips, trips and falls
- Manual handling of equipment (safety considerations such as creating a spark)
- Safe access and egress to transportation (e.g., vehicles, All Terrain Vehicles, boats, aircraft)
- Safety around heavy equipment operations (e.g., graders, dump-trucks)
- On-board transport safety (e.g., vehicles, boats, aircraft)

All field personnel will abide by the standard check-in and check-out procedures for entering a controlled site or facility or undertaking field observations (e.g., aerial reconnaissance, shoreline cleanup assessment teams, air quality monitoring, etc.).

Each Branch Director will contribute to the incident's Health and Safety Plan. The Environmental Unit leader will contribute to the Health and Safety Plan regarding all "field observer" functions.

Tail-gate safety meetings will be undertaken at entry control-sites by division/ group supervisors, team/unit leaders, or Branch Directors under the guidance of a Safety Officer.

All new threats, accident occurrences, and near-miss accidents will be reported to immediate supervisors, recorded and communicated with the Safety Officer to investigate or communicate mitigation measures.

Worker Compensation

All workers employed during a response will be covered under Federal or Provincial Compensation legislation. Federal environmental response personnel involved in the marine pollution response shall do so in accordance with the Canada Labour Code, specifically those specified in the Canada Occupational Health and Safety Regulations, the Marine Occupational Safety and Health Regulations, the Fleet Safety and Security Management System and the Shore-Based Safety Management System. Workers' compensation is provided through the *Workers Compensation Act* (and associated Regulations) of British Columbia. Convergent volunteers are the responsibility of the polluter or its agent(s) and are afforded health and

safety in accordance with the requirements in the British Columbia *Workers Compensation Act* and the British Columbia *Employment Standards Act*.

Health and Safety of Public

During a response, a major focus of the responding local and First Nations governments will be on protecting the public's health and safety, as well as those managing the response and Incident Command Post. Public health risks may include (but are not limited to):

- Exposure to oil on beaches or oiled debris;
- Exposure to toxic gases in proximity to oil slicks;
- Consuming tainted seafood;
- Attempting to clean or contain oil without proper training and protective equipment.

All responders at Federal, provincial, local and First Nations governmental levels will work with the incident Safety Officer and support personnel to communicate risks and undertake activities to protect public health and safety as a component of overall incident safety. These actions may include (but are not limited to):

- Issuing emergency messaging, notifications, or advisories;
- Evacuating people from specific locations;
- Issuing shelter-in-place notices;
- Closing beaches, parks, or other public areas;
- Issuing advisories or prohibitions regarding consumption of tainted foods.

Appendix 9: Transition to Recovery Phase

Purpose and Scope

This appendix will provide initial information on the transition from the response phase to recovery, which includes demobilization of response equipment and personnel, long-term monitoring and assessment, cost recovery, post-incident review, and restoration.

Transition from the Response Phase to the Recovery Phase

The two major phases associated with the clean-up of marine pollution are the Response Phase and the Recovery Phase. With respect to environmental monitoring, both phases begin immediately after the discharge of pollutants into the water; however, the Response Phase is typically completed upon isolating the source of pollution, completion of on-water recovery and shoreline clean-up operations and standing down of the ICP while the Recovery Phase may continue, sometimes for years, after the response activities have ended.

The Response Phase typically involves activities associated with mitigating the pollutants' impacts, such as containment and clean-up of the spilled material. Data collected early in the Response Phase includes information on the location, size of areas, and environmental components impacted by the product spilled. This data is expected to guide any further response action and is used to determine when no further response is required.

Endpoints agreed upon by UC are used to determine when the response phase is complete. The incident objectives together with the ICS-232 Resources at Risk identified by the Environmental Unit, are used to determine endpoint criteria.

Endpoints are specific criteria or a set of standards used to determine when treatment or clean-up efforts have been completed for a particular impacted area. Endpoints may require specific affected areas to be returned to the pre-spill state or to conditions allowing impacted areas to be used for their intended purpose (i.e. residential, recreation, subsistence or commercial fishing) after a spill. Endpoint criteria may be defined using various methods, including but not limited to:

- Field measurements (i.e. extent of oiled areas or percentage of surface oil distribution using SCAT);
- Qualitative field observations (i.e. presence/absence of oil);
- Analytical sampling methods (i.e. quantitative results – chemical, toxicological analyses);
- Or other methods as proposed by EU.

When endpoint criteria cannot be achieved, and every other aspect of the Response Phase has been met the incident may transition into the recovery phase. In the Recovery Phase, long-term monitoring and remediation actions are implemented, subject to the characteristics of the product(s) released.

Note that many Recovery Phase monitoring component should be initiated alongside Response Phase monitoring, particularly to document baseline data.

Incident Impact Assessment

As necessary, the following impact assessments may be undertaken as a result of a spill subject to characteristics of the product(s) released, conditions of the spill and receiving environment.

Environmental Monitoring and Impact Assessment

Environmental Monitoring and Impact Assessment should be developed, starting with reviewing an Environmental Monitoring and Impact Assessment technical report. This document is meant to provide "evergreen" technical guidance on the development and implementation of short-term and long-term impact assessment of pollution and inform decisions throughout the clean-up and recovery processes monitoring program following a marine oil pollution incident. As such, it will be updated periodically throughout consultations with various experts.

It is proposed that the Environmental Unit members use this technical guidance document to develop a scientifically robust and defensible post-incident environmental monitoring program.

Archaeological Monitoring and Impact Assessment

In addition to an assessment of the environmental impacts, an Archaeological Impact Assessment should be carried out to assess any potential or actual interactions between the spill and identified archaeological and heritage sites along the coast.

It is recommended that affected First Nations work with the Environmental Unit to ensure the integrity of the cultural heritage sites in the vicinity are protected and, if required, included in the post-incident monitoring program.

Health Impact Assessment

Relevant federal, First Nations, provincial and local health authorities may work together to assess any health impacts from a marine pollution incident to identify, understand, and mitigate impacts on fisheries and harvests.

For further guidance consult:

Health Canada (2018) Guidance for the Environmental Public Health Management of Crude Oil Incidents – A guide intended for Public Health and Emergency Management Practitioners. http://publications.gc.ca/site/eng/9.849592/publication.html

For concerns relating to the potential human health risk from oil on recreational beaches, the following guidance document may be consulted:

Health Canada (2017) Supplemental Guidance on Human Health Risk Assessment of Contaminated Sediments: Direct Contact Pathway. http://publications.gc.ca/collections/collection_2018/sc-hc/H144-41-2017-eng.pdf

Liability & Compensation for Ship-source Oil Pollution: Compensation for Ship-source Spills in Canada

Canada has a comprehensive ship-source pollution liability and compensation system under the Marine Liability Act. The system is based on the principles of polluter-pays and shared responsibility between the ship owner and the oil industry.

In 2018, Canada took a significant step to improve our system for compensating victims of ship-source oil pollution. This included changes to the Marine Liability Act to make sure compensation is available for victims and responders of ship-source oil pollution caused by any type of oil from any type of ship. Eligible claims, including environmental remediation, that are deemed reasonable, are now 100% compensable no matter the size of the spill.

Liability and compensation for ship-source oil pollution in Canada is based on international conventions developed by the International Maritime Organization, which endeavors to make the polluter pay.

Canada is party to five international conventions adopted by the International Maritime Organization that govern liability and compensation oil pollution. These international conventions establish strict liability for the shipowner and limits to the shipowner's liability and create international compensation funds financed by the oil industry.

The shipowner is, first and foremost, strictly liable. This means polluters are financially responsible, even where they did not commit any fault or negligence. . The system is not based on penalties or criminal charges. If a shipowner's insurance doesn't cover the full costs of eligible claims, there are also international and domestic funds available.

Spills from Oil Tankers

If a shipowner's oil tanker spilled its cargo in Canadian waters, they would be liable for up to approximately $162 million depending on the size of their ship. If the costs of the spill were more than the shipowner's limit of liability, additional compensation could be paid by

international funds financed by industry and distributed by the International Oil Pollution Compensation Funds (IOPC Funds). Approximately $1.37 billion is available from shipowners and the IOPC Funds[2].

Liability & Compensation for Ship-source Oil Pollution: The Ship-source Oil Pollution Fund

Canada's domestic oil spill compensation fund is the Ship-source Oil Pollution Fund, which is funded by industry. The SOPF provides compensation for eligible claims for oil pollution damage caused by any type of oil spill from any type of vessel, even when the cause of the spill is not known. Any person in Canada who has suffered a loss, or incurred costs related to oil pollution damage in Canadian waters can file a claim directly with the SOPF.

Once a claim is assessed and paid, the Administrator of the SOPF is required to take all reasonable steps to recover compensation from the polluter. These recovered amounts go back into the SOPF's accounts and help make sure that industry-funded compensation is available in the event of future spills. There are no costs or fees to submit a claim directly to the SOPF.

How should claims be submitted?
To be entitled to compensation, you must provide:

- A description of the incident
- A description of the loss or damage that you've suffered or the cost that you've incurred because of the incident

You should present your claims with supporting documentation like:

- invoices
- photographs
- explanatory notes
- account ledgers

It is important that the documentation is complete and accurate in order for the claim to be processed. For more information on how to submit a claim, please visit the SOPF's website: http://sopf.gc.ca/

[2] These values presented in Canadian dollars, have been approximated based on a conversion from Special Drawing Rights as of August 29, 2019. The actual amount of compensation available fluctuates depending on conversion rates calculated from the date of an incident.

You should submit your claim as soon as you know your total costs after an incident. The SOPF will accept eligible claims up to two years from the date of the pollution damage, but no more than five years after the occurrence that caused the damage.

The Small Claims Process
The SOPF has a new, faster process where claims for $35,000 or less submitted within one year of the occurrence that causes the oil pollution damage can be paid within 60 days. Documentation is not needed when submitting the claim, but once compensation has been paid, you may need to provide supporting documentation for your claim up to three years after the date of the oil pollution damage.

Liability & Compensation for Ship-Source Oil Pollution: What is Eligible for Compensation?

The following types of loss or damage are accepted:

Pollution Prevention Measures
Compensation is available for expenses for preventive measures even if no oil pollution occurs. Any reasonable steps taken after an incident to prevent or minimize pollution damage are also eligible.

Example: A ship grounds, its hull cracks and trained responders from a local First Nation deploy a boom to prevent pollution.

Clean-up Costs
Compensation can help recoup the cost of reasonable clean-up measures.

Example: If wildlife is oiled in a spill, reasonable costs associated with the cleaning and rehabilitation of the animals, such as birds, mammals and reptiles, are accepted.

Property Damage
Compensation is available for reasonable costs of cleaning, repairing or replacing property that has been contaminated by oil.

Example: If ship-source oil pollution has contaminated fishing gear, compensation is available for cleaning or repairing the equipment.

Fisheries Losses
You can submit a claim for the loss of profit related to commercial and recreational fisheries, aquaculture and fish processing sectors.

Example: If a fishery closes, a licensed commercial fishery can claim their loss of revenue.

Tourism Losses
The local tourism industry can submit a claim for their loss of profit, if the loss was caused by ship-source oil pollution.

Example: Ship-source oil pollution contaminates the beach nearest to a hotel and for that reason its normal vacancy rate is affected. Hotel owners can make a claim for that loss.

Environmental Remediation
Compensation is available to cover the costs of reasonable environmental reinstatement work, which could include post-spill studies like an assessment of environmental impacts, aimed at speeding up the natural recovery process.

Example: The cost of a study to establish the extent of environmental damage to decide whether remediation measures are necessary and feasible.

Liability & Compensation for Ship-Source Oil Pollution: Food, Social and Ceremonial Loss

The ability to harvest fish and other aquatic species for food, social or ceremonial purposes is important to the culture of many Indigenous people in Canada. If an Indigenous group or person cannot access the resources they need for food, social and ceremonial purposes because of ship-source oil pollution, they may submit a claim for compensation.

The goal of the Marine Liability Act is to restore the lives of claimants to pre-spill standard and does not prevent or limit claims related to Aboriginal fishing losses.

For example, if a fishery is closed because of a ship-source oil spill, Indigenous groups with Communal Fishing Licenses can claim for costs of getting fish for food, social or ceremonial purposes. This would include:

- Buying fish from an outside supplier, or
- Additional costs of arranging access and fishing at another location

In some cases, the Ship-source Oil Pollution Fund can provide compensation ahead of losses that have not occurred, but will most certainly occur. For example, if someone usually fishes for themselves or their family, but cannot safely fish because of a ship-source spill, they may submit a claim to the SOPF for future losses. This lets the victims of ship-source oil pollution buy the fish and resources they need to replace what they can't catch themselves.

Claims for compensation need to be made within the timeframes set out in the Marine Liability Act and documentation needs to be provided to show what expenses have been reasonably incurred because of a pollution incident.

For the most up to date and accurate information on liability and compensation in the event of a ship-source oil spill, please visit the SOPF's website at http://sopf.gc.ca/ to read their claims manual or visit Transport Canada's website at https://tc.canada.ca/en/marine-transportation/marine-safety/marine-liability-compensation-oil-spills.

Appendix 10: Related Documents and Links

Oil Properties:

- **Environment Canada Oil Properties Database:** physical and chemical properties of a range of different oil types
  https://etc-cte.ec.gc.ca/databases/OilProperties/oil_prop_e.html
- **OSHA Occupational Chemical Database:** searchable database that includes petrochemicals and focuses on human exposure risks and protective measures
  https://www.osha.gov/chemicaldata/

Sampling and Monitoring:

- Seafood safety after an oil spill (NOAA)
- Oil spill response and killer whales (NOAA)
- *Oil spill monitoring handbook* (AMSA, 2003)
- *Sampling and Monitoring of Marine Oil Spills* (ITOPF, 2014)
- *Good Practices for the Collection of Biodiversity Baseline Data* (IPIECA, 2015)
- European Union Certification Requirements for Fish

Shoreline Protection and Cleanup:

- A field Guide to Oil Spill Response on Marine Shoreline. ECCC. (http://publications.gc.ca/site/eng/9.820227/publication.html)
- Shoreline Cleanup Assessment Technique (SCAT) Manual. ECCC. (http://publications.gc.ca/site/eng/9.855598/publication.html)
- Guidelines for selecting shoreline treatment endpoints for oil spill response. ECCC. (http://publications.gc.ca/site/eng/9.690599/publication.html)
- Shoreline Countermeasures Manuals (NOAA)
- A Guide to Shoreline Cleanup Techniques (IPIECA, 2015)
- *Clean up of oil from shorelines* (ITOPF, 2014)
- *Sensitivity mapping for oil spill response* (IMO, IPIECA, OGP, 2012)

Other Resources:

- *Oil spill exercises.* (IPIECA, 2014)
- British Columbia Environmental Management Act (2017)

Spill Reporting Regulation
Spill Preparedness, Response and Recovery Regulation

Spill Contingency Planning Regulation

- Claims Manual (2019). International Oil Pollution Compensation Funds. 45 pp. Retrieved from https://www.iopcfunds.org/uploads/tx_iopcpublications/2019_Claims_Manual_e.pdf on

Industry Guidelines

The following are industry-based guidelines on how to plan, prepare and respond to major oil spills. They generally have a common approach to each topic and based on many years of experience and expertise.

CEDRE - ***Centre of Documentation, Research and Experimentation on Accidental Water Pollution***. CEDRE is a not-for-profit association founded in 1979. It has operational guidelines for decision-makers and operators in the event of a spill of pollutant into an aquatic environment (http://wwz.cedre.fr/en/Resources/Publications/Operational-Guides)

IPIECA - ***International Petroleum Industry Environmental Conservation Association*****.** IPIECA shares and promotes good practice and knowledge to help the oil and gas industry improve its environmental and social performance. They have an extensive library (http://www.ipieca.org/resources/) of which many pertains to guides for oil spill planning, preparedness and response. Selected examples:

ITOPF -***International Tanker Oil Pollution Federation*****.** A not-for-profit organization established in 1968. Technical services functions for tanker owners and P&I insurers. ITOPF has good Technical Information Papers (https://www.itopf.org/knowledge-resources/documents-guides/technical-information-papers/) that cover multiple topics related to oil spills.

ITOPF's film series "Response to Marine Oil Spills" and video library offer informative films available to view online: (https://www.itopf.org/knowledge-resources/library/video-library/).

OSRL – ***Oil Spill Response Limited***. OSRL is a large international industry-funded cooperative to respond to oil spills world-wide. Wholly owned by oil and gas companies. The have a series of field guidelines (https://www.oilspillresponse.com/technical-library/?tag=Field%20Guides) that includes for cold water. Selected guides:

POSOW – Preparedness for Oil-polluted Shoreline cleanup and Oiled Wildlife interventions has a good selection of informational posters. (http://www.posow.org/documentation/posters-1)