VESSEL POLLUTION IN PACIFIC CANADA

Commission for Environmental Cooperation

Government of Canada Response to Submission SEM 23-007

Prepared by: Environment and Climate Change Canada for the Government of Canada

April 12, 2024

Table of Contents

1. INTRODUCTION 3
2. BACKGROUND 4
    - 2.1 Exhaust Gas Cleaning Systems: International Standards and Guidelines 4
    - 2.2 Environment and Climate Change Canada 5
    - 2.3 Transport Canada 7
    - 2.4 Fisheries and Oceans Canada 8
3. ECCC ENFORCEMENT ACTIVITIES UNDER THE FISHERIES ACT, 1985 8
    - 3.1 Pollution Prevention Provisions of the *Fisheries Act, 1985* 8
    - 3.2 Wastewater Systems Effluent Regulations 10
    - 3.3 Enforcement Activities over the last 10 years 11
4. TRANSPORT CANADA ENFORCEMENT ACTIVITIES UNDER THE CANADA SHIPPING ACT, 2001 16
    - 4.1 Pollution Prevention Provisions of the Canada Shipping Act, 2001 16
    - 4.2 Vessel Pollution and Dangerous Chemicals Regulations 18
    - 4.3 Enforcement Activities over the last 10 years 20
5. ECCC & TRANSPORT CANADA COORDINATION 22
6. PRIVATE REMEDIES UNDER CANADIAN LAW 23
7. MONITORING AND ADDRESSING INCREASING SCRUBBER USE IN CANADA 26
8. CONCLUSION 31
9. TABLE OF ACRONYMS 33
10. ANNEX 1 35

1. INTRODUCTION

Canada is committed to the effective enforcement of its environmental laws. Since 1994, Canada has supported the Submission on Enforcement Matters (SEM) process as a unique mechanism to promote transparency, public participation and to enhance understanding regarding environmental law and its enforcement in North America.[1]

On October 30, 2023[2], the non-governmental organization Stand Environment Society, also known as Stand.earth, ("the Submitter") filed a submission SEM-23-007 (*Vessel Pollution in Pacific Canada*) with the Commission for Environmental Cooperation (CEC). The submission requested that the CEC "(…)initiate an investigation into Canada's failure to effectively enforce Section 36(3) of its Fisheries Act, RSC 1985, c F-14, in order to prevent pollution of the marine environment, particularly pollution from cruise ships using "exhaust gas cleaning systems" along the Pacific Coast of Canada."[3] The submission cites other related provisions under the *Fisheries Act, 1985* (FA), the *Canada Shipping Act, 2001* (CSA 2001), and the *International Convention for the Prevention of Pollution from Ships* (MARPOL)[4] as well as other international instruments.

On December 4, 2023, the CEC Secretariat determined that the submission met three of the four eligibility requirements of the Environment Chapter (Chapter 24) of the *Canada-United States-Mexico Agreement* (CUSMA) under Articles 24.27(1) and 24.27(2), and 24.27(3)(a), (b), (d). The CEC Secretariat found that the submission did not provide enough information to satisfy Article 24.27(3)(c), related to the pursuit of private remedies. On January 10, 2023, the CEC Secretariat received additional information from the Submitter.[5]

On February 12, 2024, the CEC Secretariat determined the submission merits a response from Canada, under Article 24.27(3) of CUSMA, as it relates to the effective enforcement of the FA and the CSA 2001. The CEC Secretariat determined that international obligations cited by the Submitter do not qualify as environmental law as set out in Article 24.1 of CUSMA. [6]

---

[1] The SEM mechanism was administered under Articles 14 and 15 of the *North American Agreement on Environmental Cooperation* (NAAEC) and since July 1st, 2020, continued under the *Canada-United States-Mexico Agreement* (CUSMA), under the Environment Chapter (Articles 24.27 and Article 24.28).

[2] On November 2, 2023, the CEC informed the Submitter of minor formatting errors, specifically related to the length of the submission. A condensed submission was filed with the CEC Secretariat on November 15, 2023.

[3] SEM-23-007 (*Vessel Pollution in Pacific Canada*) filed on October 30, 2023, page 1 (SEM-23-007 (Vessel Pollution in Pacific Canada) (cec.org)).

[4] The *International Convention for the Prevention of Pollution from Ships* (MARPOL), established by the International Maritime Organization (IMO), governs various aspects of the prevention of pollution by ships in the marine environment.

5 The Submitter noted that the letter sent to the Minister of the Environment inquiring about the enforcement efforts related to Section 36(3) of the *Fisheries Act* and marine pollution by cruise ships, "was intended as a formal written complaint." The Submitter also indicated that, with regard to pursuing private remedies "(…) it faces substantial financial constraints, delay and hardship in pursuing further domestic administrative law remedies…"

[6] The CEC Secretariat's initial determination (issued on December 4, 2023), found that the citations to several CUSMA provisions and other international instruments do not quality as "environmental law" under CUSMA since they are not Acts of the Parliament of Canada enforceable by the central level of government within the definition in CUSMA Article 24.1.

This document represents Canada's response to the CEC Secretariat, in accordance with CUSMA Article 24.27(4)[7], and provides information about the Government of Canada's effective enforcement of the relevant pollution prevention provisions of the FA, the CSA 2001, and the *Vessel Pollution and Dangerous Chemicals Regulations* (VPDCR). Specifically, the response explains the relevant enforcement activities undertaken by Environment and Climate Change Canada (ECCC), which administers and enforces the pollution prevention provisions of the FA, and Transport Canada (TC), which administers and enforces the CSA 2001 and the VPDCR. In addition, the response recognizes that scrubber use in Canadian waters has increased rapidly in recent years, and outlines ongoing Government of Canada work to monitor, understand and address the implications. The response does not address the enforcement of the *Wastewater Systems Effluent Regulations*, which was cited by the Submitter, as these apply to land-based wastewater systems, not ship based pollution.

2. BACKGROUND

2.1 Exhaust Gas Cleaning Systems: International Standards and Guidelines

To reduce emissions of Nitrogen oxides (NOx), Sulphur oxides (SOx) and Particulate Matter (PM) from ships, and protect human health, the International Maritime Organization (IMO)8 places limits on the sulphur content of marine fuels under Regulation 14 of MARPOL Annex VI. The Global Sulphur Cap came into effect as of January 1, 2020, introducing a limit of 0.5% sulphur content, with a lower limit of 0.1% in areas that are designated as Emission Control Areas (ECA). For vessels operating in the North American Emission Control Area (NA-ECA) the fuel oil sulphur content limit is 0.10%, while vessels operating outside of the NA-ECA (including the Arctic) are required to meet a 0.50% sulphur limit.

The IMO allows the use of alternative compliance methods in order to comply with these sulphur fuel levels. The use of Exhaust Gas Cleaning Systems (EGCS), also known as scrubbers, are an approved alternative compliance method. An EGCS is designed to reduce levels of SOx emissions from marine engines. Using fuels with lower sulphur content is the primary compliance mechanism, while Regulation 4 of MARPOL[9] Annex VI enables an Administration to allow approved alternatives, including "any fitting, material, appliance or apparatus (…) if such (…) methods are at least as effective in terms of emissions reductions as that required by this

[7] Article 24.27(4) of the CUSMA provides that the responding Party: "Shall inform the CEC Secretariat within 60 days of delivery of the request: (a) whether the matter at issues is the subject of a pending judicial or administrative proceeding, in which case the CEC Secretariat shall proceed no further; and (b) of any other information the Party wishes to provide, such as (i) information regarding the enforcement of the environmental law at issue, including any actions taken in connection with the matter in question; (ii) whether the matter was previously the subject of a judicial or administrative proceeding and (iii) whether private remedies in connection with the matter are available to the person making the submission and whether they have been pursued."

[8] The *International Maritime Organization (IMO)* is a specialized agency of the United Nations that sets global standards for the safety, security, and environmental performance of international shipping. It has established a comprehensive framework that sets the basis for its member states, including Canada which has been a member since 1948, to establish their own maritime regimes.

Annex". Pursuant to this, an approved EGCS can be used both inside and outside of ECAs to reduce SOx emissions to a level that would be produced by using fuels that fall within the allowable limits.

There are three main types of scrubbers:

- ***Open-loop scrubbers:*** Exhaust gases are washed, generally with non-treated seawater, and the washwater containing the dissolved pollutants, including sulphur compounds, are separated out of the washwater. The washwater is then discharged into the sea**,** with some post-treatment to meet the discharge water quality criteria. Residues containing pollutants are disposed of at a port reception facility (i.e., an operation provided at international shipping ports to collect residues, oily mixtures, and garbage generated from vessels);
- ***Closed-loop scrubbers*****:** Exhaust gases are washed, generally using treated freshwater carried on board for this purpose. The vast majority of the washwater is recycled, with a small volume of continuous bleed-off water discharged to the receiving waters. Sludge from the process is extracted and stored on-board for disposal in port reception facilities; and
- ***Hybrid scrubbers***: These systems can be set for either open-loop or closed-loop operations.

Canada has domestic legislation relevant to the protection of the marine environment, in line with international standards, that are under the authorities of various federal departments including ECCC, TC and Fisheries and Oceans Canada (DFO).

2.2 Environment and Climate Change Canada

ECCC is the lead federal department for a wide range of environmental issues. The department's mandate is focused on minimizing threats to Canadians and their environment from pollution; equipping Canadians to make informed decisions on weather, water and climate conditions; and conserving and restoring Canada's natural environment. The department addresses environmental issues through various actions including science-based research; monitoring; policy and regulatory development and implementation; and, enforcement of environmental laws. Policy and regulatory development is informed by engagement with Indigenous peoples, industry, other federal departments, provincial and territorial governments, and international partners.[10]

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;

[10] Mandate and role: Who we are and what we do - Canada.ca

- renewable resources, including migratory birds and other non-domestic flora and fauna;
- meteorology; and,
- the enforcement of acts and regulations.

ECCC's Enforcement Branch Organization and Authorities

ECCC's Enforcement Branch (ECCC Enforcement) is responsible for enforcing all departmental legislation, including the following:

- *Pollution prevention provisions of the FA, including ss. 36(3)*
- *Canadian Environmental Protection Act, 1999 (CEPA)*[11]
- *Greenhouse Gas Pollution Pricing Act (GGPPA)*
- *Migratory Birds Convention Act, 1994 (MBCA)*
- *Canada Wildlife Act (CWA)*
- *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA)*
- *Species at Risk Act (SARA)*

ECCC Enforcement has two operational directorates: the Environmental Enforcement Directorate (EED), and the Wildlife Enforcement Directorate (WED). ECCC enforcement officers are spread across the following five administrative regions:

- Pacific and Yukon Region (British Columbia and Yukon Territory);
- Prairie and Northern Region (Alberta, Manitoba, Saskatchewan, the Northwest Territories and Nunavut);
- Ontario Region (Ontario);
- Quebec Region (Quebec); and,
- Atlantic Region (Newfoundland and Labrador, New Brunswick, Nova Scotia, and Prince Edward Island).

The enforcement officers in EED are responsible for enforcing CEPA, GGPPA, and the pollution prevention provisions of the FA. The enforcement officers in WED are responsible for enforcing the MBCA, the CWA, WAPPRIITA, and SARA. Throughout this document, the term "enforcement officer" refers only to officers in EED. These officers are designated by ECCC as both inspectors and fishery officers under the FA. Officers are provided with training with respect to the application of the FA and have legal authorities, including powers of inspection and search, seizure, and detention.

[11] Canada is Party to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (London Convention) and the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Protocol). These are two international treaties to control disposal of waste at sea and protect the marine environment. Canada implements its obligations under both treaties domestically and meets its obligations through the CEPA.

2.3 Transport Canada

TC's mandate is to ensure a transportation system in Canada that is recognized worldwide as safe and secure, efficient, and environmentally responsible. In carrying out this mandate, TC is responsible for developing and overseeing the Government of Canada's transportation policies and programs to ensure that all parts of the transportation system across Canada work together effectively. TC's organizational structure consists of program and support groups working both at headquarters in the National Capital Region and in five regions across Canada including Atlantic, Quebec, Ontario, Prairie and Northern, and Pacific regions. Further, TC collaborates with various partners including Indigenous peoples, industry, other federal departments, provincial and territorial governments, and international partners. The Minister of Transport has the authority to propose and enforce laws and regulations for shipping and navigation in Canada, which seek to offer protections to freshwater and marine habitats.

TC works towards achieving its objectives by:

- Proposing and updating policies, laws and regulations;
- Conducting inspections, enforcement activities and surveillance of the transportation industry's equipment, operations, and facilities; and
- Providing funding to organizations for projects that strengthen the transportation network, including those related to safety, technological innovations, and green transportation.

TC's Regulatory Oversight and Authorities

TC's Marine Safety and Security (TC MSS) Program develops and implements policies and regulations and administers the CSA 2001. It conducts regulatory oversight and compliance activities of domestic and foreign vessels, including those related to the prevention of pollution from shipping in Canadian waters.

Effective oversight of the transportation system is a key part of TC's mandate and mission, and the top priorities of TC MSS are vessel safety and pollution prevention. Ship owners, operators, authorized representatives, masters, and crew must operate their vessels in accordance with the provisions of the CSA 2001 and the *Arctic Waters Pollution Prevention Act* (AWPPA), and regulations made pursuant to those Acts.

Marine Safety Inspectors (MSI), Pollution Prevention Officers (PPO) and other authorized persons, classification societies, or organizations, conduct regulatory oversight of the marine industry to determine compliance with the provisions of the CSA 2001 and the AWPPA.

- MSIs are appointed under the CSA 2001. MSIs are located across Canada in the TC regions of Atlantic, Quebec, Ontario, Prairies and Northern, and Pacific.
- PPOs are appointed under the AWPPA. PPOs are located in Atlantic, Quebec, Prairies and Northern region.

2.4 Fisheries and Oceans Canada

DFO is responsible for safeguarding Canadian waters and managing Canada's fisheries and oceans resources. Supported by the best available scientific evidence, the department works to protect Canada's three oceans, waterways, fisheries and marine habitat; ensuring they remain healthy for future generations and providing economic opportunities to Canadians and coastal communities.

The Canadian Coast Guard

The Canadian Coast Guard (CCG) operates Canada's civilian fleet to meet its departmental mandate and to deliver important services to Canadians, including services for the safe, economical and efficient movement of ships in Canadian waters. In recognition of its specific mandate, the CCG was established as a Special Operating Agency within DFO in 2005.

See **Annex 1** for further information on DFO and CCG's mandate.

3. ECCC ENFORCEMENT ACTIVITIES UNDER THE FISHERIES ACT, 1985

3.1 Pollution Prevention Provisions of the *Fisheries Act, 1985*

The FA is an act of general application and the main federal legislation to manage and protect Canada's fisheries resources. The FA provides the Minister of Fisheries, Oceans and the Canadian Coast Guard and the Minister of Environment and Climate Change with powers and authorities to conserve and protect fish and fish habitat, including the waterways that sustain fish over the course of their life cycles.

Since 1978, ECCC has been responsible for the administration and enforcement of the pollution prevention provisions of the FA, the key requirements of which are found in subsections 36(3) to 36(6), with respect to the deposit of deleterious substances in water frequented by fish. ECCC's responsibilities were later formalized by a Governor in Council Order published in Canada Gazette, Part II on March 12, 2014, which resulted in the Minister of Environment and Climate Change having legal responsibility for the administration and enforcement of subsection 36(3) to (6) of the FA for all purposes and subject matters with the exception of aquaculture, and aquatic invasive species or aquatic species that constitute a pest to fisheries, which remain the responsibility of the Minister of Fisheries, Oceans and the Canadian Coast Guard. The 2020 amendments to the order were made to reflect the June 2019 amendments to the FA. They do not change the division of responsibilities established in 2014 between the two ministers. DFO has the responsibility for the administration and enforcement of the remainder of the FA.

Subsection 36(3) of the FA, which is the subject of the submission, establishes a general prohibition against the deposit of deleterious substances in waters frequented by fish. It provides that:

> *"Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water."*

The following FA provisions identified in both the submission and determination are used to support the administration and enforcement of the FA. For completeness, these provisions are described below. However, these descriptions are provided for explanatory purposes and are not a substitute for the FA. In the event of an inconsistency between this document and the FA, the latter prevails.

- Section 2.5 paragraphs (a), (c), (d), (e), and (g)
- Subsections 34(1)
- Subsections 36(4) and 36(5)
- Subsections 38(1) and 38(3)
- Paragraphs 40(2)(a) and 40(2)(b)
- Section 88

Section 2.5 paragraphs (a), (c), (d), (e), and (g) provide considerations for decision making by the Minister under the FA, such as when making a regulation. These considerations do not apply to the exercise of enforcement activities.

Subsection 34(1) of the FA defines a "deleterious substance" as:

> *(a) any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water, or*
> *(b) any water that contains a substance in such 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 other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water.*

It should be noted that Canadian case law has clarified that it is not necessary that the receiving water be rendered deleterious to fish. In *R. v. Kingston* (2004 ONCA), the Court stated: "The focus of s. 36(3) is on the substance being added to water frequented by fish. It prohibits the deposit of a deleterious substance in such water. It does not prohibit the deposit of a substance

that causes the receiving water to become deleterious. It is the substance that is added to water frequented by fish that is defined, not the water after the addition of the substance. A deleterious substance does not have to render the water into which it is introduced poisonous or harmful to fish; it need only be likely to render the water deleterious to fish."[12]

Subsection 36(4) of the FA is the subsection that establishes the authority to create different types of regulations that allow for deposits of deleterious substances, subject to certain conditions. There have been no regulations made under this subsection of the FA that are applicable to vessel exhaust gas cleaning systems.

Subsections 36(5) and (5.2) explain the potential purposes and types of conditions (e.g. such as monitoring and reporting) that can be used in FA regulations made under subsection 36(4) by the Governor in Council and the Minister of Environment and Climate Change, respectively, concerning the deposit of deleterious substances.

Subsection 38(1) gives the Minister the power to designate "inspectors for the purposes of the administration and enforcement of this Act", while subsection 38(3) outlines some of the inspection powers and authorities available to inspectors.

Paragraphs 40(2)(a) and 40(2)(b) set out the penalties for contraventions of 36(3) on conviction on indictment and on summary conviction, respectively.

Section 88 confirms the jurisdiction of courts and justices with respect to offences under the FA.

3.2 Wastewater Systems Effluent Regulations

The Submitter sought the number of applications ECCC approved authorizing cruise ship operations to discharge deleterious substances pursuant to the *Wastewater Systems Effluent Regulations*.

The *Wastewater Systems Effluent Regulations*, under the FA, establish strict conditions for the release of wastewater from land-based wastewater systems, primarily those in municipalities. They set minimum effluent quality standards for deleterious substances that are designed to be achievable through secondary wastewater treatment. The owners or operators of wastewater systems must monitor and report the quality of their effluent to show that they are meeting the standards. As these regulations only apply to land-based wastewater facilities, they therefore do not apply to ship source pollution.

[12] *R. v. Kingston* (2004) ONCA, at paragraph 65. This Court of appeal decision is available at: https://www.canlii.org/en/on/onca/doc/2004/2004canlii39042/2004canlii39042.pdf

3.3 Enforcement Activities over the last 10 years

Responding to the Submitter's allegations

The FA applies equally to domestic and foreign vessels. The provisions of the FA are enforced in accordance with the Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the FA. The Compliance and Enforcement Policy outlines general principles for the application of the provisions of the FA. It explains the role of regulatory officials in promoting and enforcing the FA. It sets out principles of fair, predictable, and consistent enforcement governing the application of the law, and responses by enforcement officers to alleged violations.

Enforcement officers carry out two main enforcement activities: inspections (and administrative verifications) and investigations.

- **Inspections:** Inspection powers are set out in subsections 38 and 49 of the FA, and are further described in the Compliance and Enforcement Policy. The objective of an inspection is to monitor or verify compliance with the relevant environmental laws and regulations. Officers can conduct planned or proactive inspections, and employ a risk-based enforcement planning process, which establishes national and regional projects. Officers also conduct reactive inspections in response to complaints, incidents such as spills, other deposits self-reported by industry, or referrals from partners or from within ECCC.
- **Administrative verifications:** An administrative verification involves gathering information similar to that obtained in an inspection, without an on-site presence. They are used as a means to gather and evaluate information to determine if an inspection is necessary and practical.
- **Investigations:** An investigation is used to gather evidence to support or refute a suspected violation. ECCC enforcement officers gather, from a variety of sources, evidence and information relevant to suspected violations to be presented before a Court in the context of a prosecution. An officer will conduct an investigation when they have reasonable grounds to believe that an offence has been committed and that a prosecution would be the appropriate enforcement measure.

The FA establishes several enforcement measures to address alleged violations, which are outlined in the Compliance and Enforcement Policy. Officers may: (i) issue warnings in response to alleged violations, (ii) issue directions where immediate action is necessary to counteract adverse effects of a deposit of a deleterious substance or to prevent a serious and imminent deposit of a deleterious substance, (iii) recommend that the Minister of ECCC consider exercising the authority to issue an order requiring that a person provide plans or other information, (iv) recommend that the Attorney General seek an injunction from a court to stop an alleged violation, or (v) recommend a file for prosecution to the Public Prosecution Service of Canada.

When taking enforcement action, an enforcement officer considers each element of an offence. For ss. 36(3), the elements of the offence include the following:

- that a substance was deposited;
- that one or more persons have deposited or have permitted the deposit of the substance;
- that the substance deposited is deleterious to fish; and,
- that the substance was deposited in water frequented by fish, or in a place where it may enter such water.

When deciding on the appropriate response to a violation, enforcement officers consider factors set out in the Compliance and Enforcement Policy including the nature of the violation, effectiveness in achieving the desired result, and consistency in enforcement. To take an enforcement action, an enforcement officer needs reasonable grounds to believe that an offence is about to happen, is ongoing or has occurred. With regards to prosecutions, the minimum standard to lay a charge is reasonable grounds to believe that an offence has occurred. However, for conviction of an accused, each element of an offence must be proven to the higher threshold of beyond a reasonable doubt.

The standards of "reasonable grounds to believe" and "beyond a reasonable doubt" have specific, legal meanings, and have been addressed in case law:

- Reasonable grounds requires the "person in authority" to believe both subjectively and objectively that a criminal offence has been committed (*R. v. Storrey* (1990), 1990 CarswellOnt 78 (S.C.C.)).
- Proof "beyond a reasonable doubt" is closer to an absolute certainty than to a reasonable probability (*R. v. Starr* (2000), 147 C.C.C. (3d) 449 (S.C.C.)).

Prioritization of Enforcement Resources

As described above, ECCC administers and enforces a broad range of laws and regulations designed to prevent or minimize threats to the environment and human health, and to conserve habitat and biodiversity.

ECCC has made significant investments since 2019 to develop a risk-based approach to enforcement activities. As non-compliance has varying impacts on the environment and human health, ECCC considers environmental and human health risks when allocating enforcement resources. To accomplish this, risk rankings and threat risk assessments inform the planning and priority setting process. ECCC sets its risk-based enforcement priorities using intelligence and operational considerations. This directs ECCC's enforcement officers to proactively and efficiently target sectors with the highest risk of non-compliance that pose the greatest potential harm to the environment and human health, in addition to other departmental enforcement priorities such as incident responses, referrals, to mention others.

ECCC Enforcement sets priorities each fiscal year and develops an Integrated Enforcement Plan (IEP) that describes planned inspections, intelligence work and organizational priorities for both environmental and wildlife/conservation enforcement. The IEP is based on the following principles:

- **Evidence-Based**: Informed by the latest information on compliance and the severity of impact of non-compliance.
- **Risk-Based**: The risk of non-compliance, based on evidence, is ranked according to clear criteria.
- **Operationally Advisable**: Taking into consideration operational realities, health and safety issues, international commitments, and legal obligations.
- **Accountable and Transparent**: The planning process is clear and results are reported.
- **Adaptive**: The framework is tested, revised, and strengthened over time, and is responsive to innovation.

ECCC Enforcement completed its Water Threat-Risk Assessment (TRA) in 2020. TRAs assess the risk of non-compliance with ECCC statutes, including the pollution prevention provisions of the FA and the regulations made under them. While water transportation was determined to be a high-risk sector, the analysis did not assess at a detailed level what within the sector was high risk. ECCC Enforcement also takes into account where other government departments have relevant jurisdiction (see **Section 5** for further information), although it continues to conduct inspections, investigations, and take enforcement action where warranted.

In addition, under the Oceans Protection Plan (OPP) and the *Initiative to Protect and Recover Endangered Whale Populations* (Whales Initiative, or "WI"), ECCC received funding to hire additional enforcement officers to increase its capacity to respond to spills in the marine environment on all three coasts and renewed funding to target and undertake inspections to address contaminant threats to the Southern Resident Killer Whales (SRKW), as well as the St. Lawrence Estuary Beluga, their habitat, and their prey under the FA and CEPA. This work is on-going. As of 2018, ECCC has also participated in INTERPOL's 30 Days at Sea Initiative, a joint international operation to identify and address pollution crime in the marine environment.

Section 7 includes further information on the OPP and the Whales Initiative.

Prioritization of Enforcement Activities in Pacific and Yukon Region

Since the scope of this submission is mainly related to vessel pollution in Pacific Canada, this section focuses on ECCC's enforcement activities in the Pacific and Yukon Region (PYR).

PYR is broken up into five districts: Central and Northern, Coastal, Southern Interior, Vancouver Fraser, and Yukon. ECCC enforcement officers conduct inspections and investigations throughout the region. Due to the coastline, general geographic area and weather of PYR, the region has developed regional projects that focus inspections under the general prohibition of

the FA, as well as the Disposal at Sea (DAS) provisions of CEPA. Under CEPA Part seven (7) Controlling Pollution and Managing Wastes, Division three (3), Disposal at Sea (DAS), subsection 125(1): "No person or ship shall dispose of a substance in an area of the sea referred to in any of paragraphs 122(2)(a) to (e) unless (a) the substance is waste or other matter; and (b) the disposal is done in accordance with a Canadian permit." CEPA's DAS provisions and regulations allow for certain deposits in marine waters subject to conditions established in permits. Section 125 does not apply in respect of any disposal that is authorized under the CSA 2001. If a disposal at sea permit is issued, and the person disposes of the material in accordance with the permit, then subsection 36(3) of the FA does not apply to the deposit.

Since 2014, there have been twenty-six (26) successful prosecutions for violations of the pollution prevention provisions of the FA in PYR. Some notable cases include the following:

- On July 16, 2019, Kirby Offshore Marine Operating LLC was sentenced to pay $2.9 million after pleading guilty to three charges of violating federal legislation. This included depositing a deleterious substance into water frequented by fish, in violation of the FA. The charges were in connection with an October 13, 2016, spill involving diesel fuel and lubricants from the vessel *Nathan E. Stewart* into Seaforth Channel near Bella Bella, British Columbia (BC);
- After a seven-year investigation, Teck Coal Limited (Teck Coal) pleaded guilty on March 26, 2021, to two charges under the pollution prevention provisions of the FA for the leaching of selenium and calcite from two coal mines into Fording River in BC. Teck Coal was ordered to pay a total of $60 million in fines and monetary orders. In addition to the penalty, the company must also comply with a FA Direction aimed at preventing the discharge of deleterious substances and mitigating the adverse effects of selenium and calcite deposits;
- The Canadian National Railway Company (CN Rail) pleaded guilty on September 15, 2021, to one charge of violating subsection 36(3) of the FA in relation to the deposit of pesticides along a rail corridor in BC. This rail corridor runs along the Skeena River and over many tributaries and wetlands. The company was fined $2.5 million;
- On December 8, 2022, Michels Canada Co. (Michels) pleaded guilty to two charges laid under subsection 36(3) of the FA. The charges stem from the deposits of drilling fluid and sediment-laden waters into Cape Horn Creek in Coquitlam, BC, on August 22, 2017, and Quibble Creek in Surrey, BC, on September 2, 2017. Twenty dead fish were found after the Cape Horn Creek release and 533 dead fish were found after the Quibble Creek release. Michels was ordered to pay $2.8 million in penalties;
- On January 10, 2023, Teck Metals Ltd. (Teck Metals) pleaded guilty to two charges laid under the FA and one charge under the *Provincial Environmental Management Act*. Teck Metals was sentenced to pay $2.2 million in penalties. The charges relate to the release of approximately 2.5 million liters of low pH effluent into the Columbia River in BC on February 26, 2019.

Over the same period, ECCC has also had one successful prosecution for CEPA-DAS in BC:

- In September 2013, ECCC enforcement officers issued an environmental protection compliance order to ensure the proper disposal of the fishing vessel Elling K, after it sank while docked in Masset. After measures outlined in the order were not met, an investigation was initiated. It concluded that the vessel vanished without a trace after being towed from the Masset dock. On January 11, 2018, the vessel owner was ordered to pay $12,000 after pleading guilty to one count of contravening CEPA.

In addition to prosecutions, ECCC enforcement officers can also issue administrative monetary penalties (AMPs) for CEPA-DAS violations. AMPs are penalties designed to create a financial disincentive to non-compliance with designated legislative requirements and to supplement existing enforcement measures, which may not be effective or available in all situations. Between 2014 and 2024, ECCC enforcement officers have issued AMPs involving three organizations in BC for DAS violations. AMPs are not currently available under the FA.

The process of closing an enforcement file is dynamic and can be influenced by various factors such as complexity, environmental conditions, impact severity, evidence availability, and the extent of information required for analysis. ECCC enforcement officers conduct thorough assessments and consultations with partners. Inspections and investigations demand significant time and resources to ensure a comprehensive understanding of the situation at hand. By applying a risk-based approach to enforcement activities, Canada prioritizes actions that effectively address environmental risks.

Cruise Ships

Cruise ships travel the full length of the coastal waters of BC. Many originate in the United States south of BC and stop in ports along the BC coast (Vancouver, Victoria and Prince Rupert). Some travel through to Alaska and return.

Since 2014, ECCC enforcement officers conducted a total of one hundred and twenty (120) enforcement activities in relation to vessel pollution in PYR. Of these, sixty-nine (69) were inspections, forty-four (44) were administrative verifications, and seven (7) were investigations. Of these seven (7) investigations, which were related to four (4) cases, two (2) investigations were in relation to cruise ships. Eighty-two (82) enforcement activities were conducted under the General Prohibition of the FA, twenty-four (24) were conducted under the CEPA-DAS provisions, and fourteen were conducted under other implicated CEPA instruments.

The results of the two (2) separate investigations in relation to cruise ships are described below:

Investigation one (1)

- ECCC Enforcement conducted an inspection regarding a potential oil slick, based on satellite imagery collected by ECCC a year prior, which initially found a lack of evidence to proceed. Due to the delay in obtaining the initial report, no on-site inspection or sample collection was possible. Following a later investigation based on new information, the decision was made to close the file, due to insufficient evidence.

Investigation two (2)

- ECCC Enforcement conducted a second inspection based on satellite imagery which indicated a potential oil slick. No on-site inspection or sample collection during the release was possible due to the delay in receiving the imagery. The file was initially led by TC, which later conducted a port-side inspection. The vessel confirmed that three substances had been released, but internal records indicated they met TC limits.
- ECCC Enforcement opened an investigation but determined there was insufficient evidence to continue it and/or proceed with an enforcement measure. TC concluded the same under its legislation.

Most recently, in the 2023-2024 federal fiscal year, fourteen (14) of the inspections conducted in PYR are directly related to cruise ship discharges, including scrubber washwater, and were conducted under a regional IEP project. ECCC Enforcement is working with partners and continuing to gather information relevant to the inspections. As the matter is ongoing, it would not be appropriate to divulge further information at this time.

To date, ECCC Enforcement had taken six (6) enforcement measures in response to vessel pollution since 2014. There has been one (1) prosecution, three (3) warnings, and two (2) AMPs issued. In addition, ECCC Enforcement's Atlantic Region has also conducted four inspections, which looked at scrubber washwater, in 2023-2024. Further detail on these inspections is not provided as the Atlantic Region falls outside the scope of the Submission, which relates to the Pacific Coast.

4. TRANSPORT CANADA ENFORCEMENT ACTIVITIES UNDER THE CANADA SHIPPING ACT, 2001

4.1 Pollution Prevention Provisions of the Canada Shipping Act, 2001

The CSA 2001 is the principal legislation governing safety of marine transportation and recreational boating, and the protection of the marine environment. The Pollution Prevention and Response Provisions comprise Parts 8 and 9 of the CSA 2001. These parts outline the responsibilities and powers of the responsible Minister of Fisheries and Oceans and of the Minister of Transport in the administration of provisions intended to protect the marine environment.

Under Part 8 of the CSA 2001, the Minister of Fisheries and Oceans Canada is empowered to appoint pollution response officers, with the authority to board ships, sample cargo, and to direct the route and speed of ships if it is in the interest of pollution prevention. Under Part 9, the Minister of Transport has primary responsibility for directing the activities of a ship reasonably expected to discharge a pollutant or that has discharged a pollutant and to regulate oil handling facilities.

The CSA 2001 applies, as per section 8 of that Act, to "*Canadian vessels everywhere and in respect of foreign vessels in Canadian waters*". Regulations made under paragraph 35(1)(d) of the CSA 2001 regarding pollution may also apply to foreign vessels within Canada's exclusive economic zone (EEZ). The EEZ is an area of the sea beyond and adjacent to Canada's territorial sea extending out to 200 nautical miles outward from Canada's baselines and in which Canada has special rights regarding the exploration and use of marine resources, as prescribed by the United Nations Convention on the Law of the Sea (UNCLOS).

As part of their responsibilities under the CSA 2001, the Minister of Transport or the Minister of Fisheries and Oceans may, under ss 10(1), establish consultative bodies, issue bulletins, guidelines and standards or enter into agreements or arrangements respecting the administration or enforcement of any provision of the CSA 2001, the regulations or an interim order made under subsection 10.1(1) or (1.1). In addition, they can authorize any person or organization to exercise the powers under the CSA 2001 that are specified in the agreement or arrangement.

Paragraph 35(1)(d) of the CSA 2001 authorizes the Governor in Council (GIC), on the recommendation of the Minister of Transport, to make regulations implementing (or exceeding) pollution prevention measures of MARPOL and other treaties. In addition, ss 35.1 (1) states that the GIC may also make regulations respecting the protection of the marine environment from the impacts of navigation and shipping activities, including, but not limited to, those that respect the design, construction, manufacture and maintenance of vessels (ss 35.1(1)(a)) , the inspection of their machinery, equipment and supplies or and "the development, maintenance and implementation of a management system that sets out the manner in which marine environment protection measures are to be integrated into day-to-day navigation and shipping operation" (ss. 35.1(1)(i)). A person or vessel who contravenes one of these regulations is liable on summary conviction to a fine of up to $1,000,000 or to imprisonment for up to 18 months, or both (s. 38(1)) and 40.1(2)).

Section 187 of the CSA 2001 prohibits the discharge of a prescribed pollutant by any person or vessel, "except in accordance with the regulations made under this Part (or a permit granted under Division 3 of Part 7 of the CEPA.)" Under s. 190(1), regulations may be made respecting the protection of the marine environment, including those that prescribe pollutants for the purpose of section 187 and subsection 189(1) and the circumstances in which such pollutants may be discharged.

Where the Minister of Transport believes on reasonable grounds that a vessel may discharge, or may have discharged, a prescribed pollutant, they may direct the vessel to proceed to a designated location, by a route and in a manner specified by the Minister to (a) unload the pollutant, or (b) moor, anchor or remain there for any reasonable period that the Minister may specify (s. 189(1)(d)).

A person or vessel that discharges a pollutant in contravention of section 187 is liable to a fine of up to $1,000,000 or up to 18 months imprisonment upon summary conviction (s. 191(1) and

(2)). If an offence is committed or continued on more than one day, the person or vessel is liable to be convicted for a separate offence for each day on which it is committed or continued (s. 191(3)). The punishment under subsection (2), will be determined in consideration of factors including the harm or the risk of harm caused by the offence. Under 191(4) the court may have regard to the various factors in determining the punishment. These include the harm or risk of harm caused by the offence, an estimate of the total costs of clean-up, of harm caused, and of the best available mitigation measures and the remedial action taken, or proposed to be taken, by the offender to mitigate the harm. They also include whether the discharge or anticipated discharge was reported in accordance with the regulations made under paragraph 190(1)(b), any economic benefits accruing to the offender that, but for the offence, the offender would not have received; and any evidence from which the court may reasonably conclude that the offender has a history of non-compliance with legislation designed to prevent or to minimize pollution.

If a foreign vessel is determined to be in contravention of an international convention, protocol or resolution the Minister may, under s. 227, direct the vessel to leave or not to enter Canadian waters subject to any terms and conditions that the Minister may specify.

Section 256(1) informs that proceedings by way of summary conviction under the CSA 2001 may be instituted within two years after the day on which the responsible Ministers become aware of the subject-matter of the proceedings. In addition, the CSA 2001 informs that Canadian courts have the jurisdiction to enforce pollution prevention provisions against foreign vessels, their owners and crew, "situated on the coast of a sea, or abuts on or projects into navigable waters, the court, justice or provincial court judge has jurisdiction over any vessel on, or lying or passing off, that coast or in or near those navigable waters, and over all persons on board within the limits of the original jurisdiction of the court, justice or provincial court judge" (ss. 257-258).

4.2 Vessel Pollution and Dangerous Chemicals Regulations

Pursuant to the Pollution Prevention and Response Provisions of the CSA 2001, the VPDCR were enacted to introduce strict environmental standards to help prevent deliberate, negligent, and accidental discharge of vessel-source pollutants into Canadian waters. Made under the authority of the CSA 2001, the VPDCR are made, amongst other things, to protect the marine environment and to implement, in whole or in part, international conventions that Canada has signed that relate to matters that are within the scope of the CSA 2001.

Under the VPDCR Section 4, substances, including oil and any oily mixture, garbage, and organotin compounds that act as biocides are listed as prescribed pollutants. Section 30, applicable to Section I waters (meaning Fishing Zones 1-3- Fishing Zone 3 referring to Queen Charlotte Sound, Hecate Strait and Dixon Entrance) and section 31, applicable to Section II waters and seaward (waters under Canadian jurisdiction that are not in fishing zone 1, fishing zone 2, fishing zone 3, or in any other portion of the internal waters of Canada or arctic waters) list conditions by which the substances in Section 4 are permitted to be discharged. These

include but are not limited to, if the vessel is enroute, if the discharge is processed through oil filtering equipment that meets the requirements of regulation 14 of Annex I to MARPOL and produces an undiluted effluent that has an oil content of not more than 15 ppm and if the discharge does not contain chemicals or any other substances introduced for the purpose of circumventing the detection of concentrations of oil that exceed the oil content limits.

Section 126 prohibits any person or vessel from discharging any "pollutant substances" listed in Schedule 1 of the regulation. Under ss 126 (1), vessels in waters under Canadian jurisdiction, and a person on such a vessel, must not discharge, with the exception of a noxious liquid substance which may be discharged from a vessel in Section II waters, if the discharge is made in accordance with any of sections 68 to 71.

Regulations regarding greywater discharge are found in section 131.1, while the obligations of a ship's master or operator of an oil-handling facility to report discharge of pollutants are found under ss. 132 to 133.

Division 6 of the VPDCR regulates air pollution and includes exhaust gas cleaning systems (EGCS). Within that Division, section 111(6) states that if a vessel operates a EGCS that has been certified meeting the requirements of Resolution MEPC.184(59), it must ensure that:

> *(a) any exhaust gas cleaning system residues are delivered to an onshore reception facility; and*
> *(b) the washwater from the operation of the system, as well as the monitoring and recording of the washwater, meets the requirements of section 10 of the Resolution.*

Under ss. 111.2, if a vessel operates an exhaust gas cleaning system:

> *(a) the vessel must hold and keep on board a certificate of type approval certifying that the system meets the applicable requirements referred to in Resolution MEPC.184(59);*
> *(b) the vessel must keep on board an EGC System Technical Manual "Scheme A" that meets the requirements of section 4.2.2 of Resolution MEPC.184(59) or an EGC System Technical Manual "Scheme B" that meets the requirements of section 5.6 of Resolution MEPC.184(59);*
> *(c) the vessel must keep on board a SOx Emissions Compliance Plan that meets the requirements of section 9.1.1 of Resolution MEPC.184(59);*
> *(d) the authorized representative must ensure that the information required by Resolution MEPC.184(59) respecting the operation, maintenance, servicing, adjustments and monitoring of the system is recorded as required by the Resolution; and*
> *(e) the vessel must keep on board the information referred to in paragraph (d) in the form and manner required by Resolution MEPC.184(59).*

The 2021 *Exhaust Gas Cleaning Systems Guidelines* were developed by the IMO to allow for the testing, survey, certification, and approval of EGCSs in accordance with Regulation 4 of MARPOL Annex VI. These Guidelines ensure that EGCS installed on vessels meet the emission

equivalence requirement while also adhering to discharge water quality criteria. Section 10 of the guidelines establishes criteria relating to washwater discharge. These include limits on pH, Polycyclic Aromatic Hydrocarbons (PAHs), turbidity, suspended solids, nitrates, and additives in discharged washwater. Subsection 10.1 directs the continuous monitoring and recording of washwater when the EGCS is in operation of washwater. Monitoring of the system is also required to ensure proper functioning, with data to be provided upon request.

Exemptions based on the age of vessels are addressed under VPDCR Section 84. Those with a building contract or keel laid before May 3, 2007 or delivered before May 3, 2010 are exempt from sewage regulations, with some exceptions: operating in the Great Lakes, the St. Lawrence River and vessels operating in designated sewage areas.

The relevant regulations that apply to exhaust gas cleaning systems apply to all vessels equally.

4.3 Enforcement Activities over the last 10 years

Responding to the Submitter's allegations

Under TC's oversight regime, inspections can be carried out on both foreign and domestic vessels. Inspections under the Port State Control (PSC) Program focus on foreign vessels (which can be coordinated with other member states of IMO), while the Domestic Vessel Regulatory Oversight Program focusses on vessels registered in Canada.

Port State Control (Foreign Vessels)

Canada's Port State Control Program is administered through a National Policy on Inspection of Non-Canadian Commercial Vessels Under Port State Control Program and complementary policies, guidelines, and procedures of the IMO and the Paris Memorandum of Understanding on Port State Control (Paris MOU) and the Tokyo Memoranda of Understanding (Tokyo MOU) on Port State Control to which Canada is a signatory state.

The Paris MOU is an international inspection regime for foreign ships in other national ports. It is an official document between the 27 participating Maritime Authorities outlining the implementation of a harmonized system of Port State Control. The Paris MOU provides for the inspection of foreign ships by Port State Control officers to verify that the competency of the master, officers and crew on board, the condition of a ship and its equipment comply with the requirements of international conventions and that the vessel is manned and operated in compliance with applicable international law.

The Tokyo MOU establishes an effective Port State Control regime in the Asia-Pacific region through co-operation of its members and harmonization of their activities, to promote the highest standards for shipping to advance maritime safety, to protect the marine environment and to safeguard working and living conditions on board ships.

The Port State Control Program obtains its authority to inspect and enforce operations of foreign vessels pursuant to the CSA 2001, subsection 211(1). Further, subsection 227(1) of the

Act provides the authority for a Marine Safety Inspector to direct a foreign vessel out of Canadian waters.

As part of TC's international obligations under the IMO as well as Paris MOU and Tokyo MOU Canada's Port State Control Program implements adopted international guidelines, instructions, and procedures. In this regard, as it relates to the prevention of pollution in the marine environment, Canada continues to implement *Resolution A.1185(33) Procedures for Port State Control 2023* (IMO) and *Guidelines for Port State Control Officers Checking Compliance with MARPOL Annex VI* (Paris and Tokyo MoU).

To further promote prevention of pollution in the marine environment, Canada actively participates in international Concentrated Inspection Campaigns with its Paris and Tokyo MOU partners. Most recently, Canada participated in such Campaign in 2018. As a result, the Paris and Tokyo MoU bodies indicated that industry has achieved a satisfactory level of compliance with MARPOL Annex VI.

Between January 2014 to January 2024, 12,623 inspections were conducted under the Port State Control Program. During this period a total of 188 total deficiencies and corrective actions in relation to international convention of marine pollution by air (MARPOL Annex VI) were undertaken by the vessel operator prior to departure from Canada. Four of those deficiencies were specifically related to EGCS. Two of the deficiencies were corrected within the allotted time, while the remaining resulted in a detention of the vessel in question until the issue was rectified.

Flag State Inspection (Canadian Vessels)

TC conducts oversight of the transportation system in multiple ways, such as through mandatory inspections, risk-based inspections, concentrated inspections campaigns, or through the National Aerial Surveillance Program (NASP). The Vessel Safety Certificate Regulations specify which Canadian vessels require certification. If certification is required, a mandatory inspection of the vessel is completed prior to the issuance of a Safety Inspection Certificate. The periodicity of these inspections is outlined in TP15456 *Canadian Vessel Plan Approval and Inspection Standard*. Risk-based inspections are those which are not required for the purposes of certification. These inspections are completed on vessels which do not require a Safety Inspection Certificate for operation, these inspections can be announced, or unannounced. Reactive inspections are those in response to events, such as inspections to confirm deficiencies have been addressed, or inspections that occur after an incident. A concentrated inspection campaign is a series of inspections that target specific areas of concern on Canadian vessels. These campaigns typically focus on areas where high levels of deficiencies have been found or where new regulatory requirements have recently come into effect. NASP conducts oversight by detecting pollution from above and providing evidence for the investigation of pollution incidents.

For the inspection of vessels that require certification, the requirements are based on the IMO Harmonized System of Survey and Certification guidelines. The process of inspection and certification begins before the vessel is constructed and includes verification of plans, oversight of the construction of the vessel, and verification and testing of all equipment. This verification runs throughout the construction of the vessel and is only completed following conclusive sea trials.

Following the initial issuance of the required certificates, vessels are inspected annually (with the exception of non-passenger and fishing vessels less than 150 Gross Tonnage), where a review of the documentation, record books and targeted verifications will be conducted. The vessels will also require an intermediate inspection, between the second and third year of a five-year cycle, where more in-depth verifications and operational tests of equipment will be carried out. At the end of the five-year cycle, the vessel undergoes a full renewal inspection, where a comprehensive inspection is completed. This includes extensive equipment and system verification and operational testing, including an inspection in a dry dock. The inspection and certification of vessels under this regime is also delegated to Registered Organizations.

Section 12 (1) of the CSA 2001 allows the Minister of Transport to authorize any classification society (Recognized Organizations (ROs)) to carry out inspections or issue Canadian Maritime documents on TCs behalf. This program is administered through the Delegated Statutory Inspection Program. ROs fulfill some of Canada's domestic vessel inspection and certification responsibilities, including the issuance of the International Air Pollution Prevention Certificates (IAPPC). The IAPPC certifies that the vessel has been surveyed in accordance with MARPOL Annex VI and that the relevant equipment, systems, and fittings fully comply with Annex VI of MARPOL, including confirming that there is an approved Emissions Compliance Plan, an Onboard Monitoring Manual, and approved documentation in respect of other technological means of achieving compliance.

If a Marine Safety Inspector or a delegated person, following any type of inspection, finds that a person or vessel is found to be in contravention of a relevant Act, action to address non-compliances under the CSA 2001 or AWPPA are done in accordance with TC's Enforcement Policy. This policy implements a graduated, risk-based, consistent, and transparent set of actions to encourage compliance before moving to enforcement. Possible enforcement measures are to issue a detention order, direct a vessel, enter into an assurance of compliance, issue an administrative monetary penalty, or prosecution.

5. ECCC & TRANSPORT CANADA COORDINATION

TC administers and enforces the VPDCR, developed pursuant to the CSA 2001. Those regulations address inter alia the discharge of pollutants and dangerous chemicals from vessels. ECCC is responsible for the administration and enforcement of the pollution prevention provisions of the FA. Given the broad application of the FA, it often interacts with other legislation, both federal

and that of other jurisdictions. There are no provisions in either the FA, or the CSA 2001, that give one Act precedence over the other. As such, neither Act takes precedence, and both apply in relation to pollution from vessels.[13]

ECCC and TC have a Memorandum of Understanding (MOU), effective as of 2006, that describes how the Departments should cooperate in enforcing pollution prevention and wildlife legislation for the protection of the marine environment from ship source pollution. ECCC and TC are working together to review and update the MOU to ensure it reflects the current legislative framework that governs vessel pollution.

ECCC and TC make efforts to conduct joint inspections, whenever feasible, when both departments have applicable legal authorities. This helps to promote a unified Government of Canada approach and to minimize disruptions to the shipping industry. ECCC and TC will explore the feasibility of joint investigation procedures related to vessel pollution.

6. PRIVATE REMEDIES UNDER CANADIAN LAW

Article 24.27.4(b)(iii) of the CUSMA provides that other information the Party may wish to provide to the Secretariat could include "whether private remedies in connection with the matter are available to the person or organization making the submission and whether they have been pursued." In addition, the Guidelines for Submissions on Enforcement Matters (under Articles 14 and 15), states that the CEC Secretariat will be guided by reasonable actions that have been taken by the submitter to pursue private remedies prior to making a submission, bearing in mind that barriers to the pursuit of some remedies may exist in particular cases.

Private remedies are available under the CSA 2001. Under Part 11, Section 216 (1) of the CSA 2001, any individual can report an alleged contravention if they have reasonable grounds to believe that a person or vessel has contravened or intends to contravene a provision. The person may also request that their identity be kept confidential. This notification can be done by contacting TC's headquarters or any of the regional Transport Canada Centres who will then determine if an inspection should be carried out. The Submitter did not demonstrate efforts to contact TC directly prior to submitting their claim to the CEC Secretariat, and therefore did not demonstrate the pursuit of this available private remedy.

Other private remedies are also available to relevant stakeholders. Private remedies are available under C*ommon Law* for the FA to fishermen, while private remedies under CEPA are available to victims of pollution. Private legal remedies can be found and litigated in *Common Law* doctrines such as private nuisance and negligence. Both the FA (under ss. 42(5)) and the CEPA (ss. 42(2)) provide that their respective provisions do not prevent civil remedies such as damages claims litigations and injunctive relieves available in Canadian law. While these

[13] The only exception is in relation to a direction. In the event of a violation, ECCC Enforcement may issue a FA direction to stop or prevent further deposits of [a] deleterious substance[s]. However, a direction issued under the CSA 2001 takes precedence if there is any inconsistency between them.

avenues available under the FA and CEPA may not be directly applicable to the Submitter, they are detailed below to demonstrate that there are various avenues available to Canadian citizens.

Subsection 42(3) of the FA provides for a private remedy available to fishermen for damages caused by the deposit of deleterious substances in violation of subsection 36(3).

- The CEPA provides at section 17 that a Canadian resident may apply to the Minister for an investigation on any alleged offence under the Act. The conditions for that investigation request, the Minister's response and follow-up reports are prescribed by the Act. When the Minister failed to conduct an investigation and/or report within a reasonable time; or when the Minister's response to the investigation was unreasonable, the person who applied for the investigation has a private remedy in the form of an *Environmental Protection Action* (CEPA s. 22-38). In such litigation, the petitioner may seek from the Court:
    - A declaratory order;
    - An order, including an interlocutory order, requiring the defendant to refrain from doing anything that, in the opinion of the court, may constitute an offence;
    - An order, including an interlocutory order, requiring the defendant to do anything that, in the opinion of the court, may prevent the continuation of an offence;
    - An order to the parties to negotiate a plan to correct or mitigate the harm to the environment or to human, animal or plant life or health, and to report to the court on the negotiations within a time set by the court;
        - Any other appropriate relief, including the costs of the action, but not including damages.

CEPA contains many provisions supporting the compensation of victims of pollution when damages result from violations. Section 39 provides that a person who suffers, or is about to suffer, loss or damage as a result of a violation of the Act may seek either a mandatory or a prohibitive injunction against the author of the alleged violation. Section 40 provides that a person who suffers, or is about to suffer, loss or damage as a result of a violation of the Act may bring an action to recover damages from the author of the violation and an amount to compensate for the costs incurred in connection with the matter and proceedings. CEPA also provides evidentiary presumptions that the record of proceedings than lead to a conviction is evidence that the defendant committed the offence. Section 291 provides courts with broad court orders powers. Amongst those, the court may order a convicted offender to:

- Publish, in the manner specified by the court, the facts relating to the commission of the offence and the details of the punishment imposed, including any orders made.
- Notify, at the offender's own cost and in the manner specified by the court, any person aggrieved or affected by the offender's conduct of the facts relating to the commission of the offence and of the details of the punishment imposed, including any orders made under;

- Post any bond or pay any amount of money into court that will ensure compliance with any of the court order issued under CEPA;
- Compensate any person, monetarily or otherwise, in whole or in part, for the cost of any remedial or preventive action taken, caused to be taken or to be taken as a result of the act or omission that constituted the offence, including costs of assessing appropriate remedial or preventive action.

Subsection 292 (1) further adds an important court order power where the court may, at sentencing, order the offender to pay an amount to the victim for the property damages resulting from the offence by way of satisfaction or compensation for loss. This court order may be enforced by filing the order, enter as a judgment, in the superior court of the province in which the trial was held. The amount ordered to be paid, and that judgment are enforceable against the offender in the same manner as if it were a judgment rendered against the offender in that court in civil proceedings.

Those private remedies in CEPA are not exclusive of *Common Law* and *Civil Law* remedies. The Act specifies that "*No civil remedy for any conduct is suspended or affected by reason only that the conduct is an offence under this Act (…)" and that CEPA should* "not be interpreted so as to repeal, remove or reduce any remedy available to any person under any law in force in Canada."[14]

In summary, as described above, there are private remedies available in Canada to the public, including for individuals, fishermen and victims of pollution. The Submitter did not illustrate

[14] Of note, while the FA (under ss. 42(7)) and CEPA (under ss. 42(3)) both contain provisions excluding those private remedies provisions when a claim for damage may be made either under the *Marine Liability Act* (MLA), this Act does not include private remedies for damages from effluents from exhaust gas cleaning systems ('scrubbers'). Rather, the MLA holds shipowners liable for costs and expenses incurred by the Minister of Fisheries and Oceans for repairing, remedying, minimizing or preventing pollution damage from the vessel if it has discharged, is discharging or may discharge a pollutant. Shipowners are also liable for costs and expenses incurred by any person following directions of the Minister of Fisheries and Oceans to take measures as a result of a discharge of pollutants. Under the MLA, a pollutant means oil and any substance or class of substances identified by the regulations as a pollutant for the purposes of this Part and includes:

> **(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 waters' quality to an extent that their use would be detrimental to humans or animals or plants that are 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 waters' quality to an extent that their use would be detrimental to humans or animals or plants that are useful to humans.

Individuals may seek private remedies through common law for damages from effluents from exhaust gas cleaning systems ('scrubbers'), but shipowners may still have a right to limit their liability under the MLA and the Convention on Limitation of Liability for Maritime Claims 1976, as amended by the Protocol of 1996.

attempts to pursue remedies available under the CSA 2001, which allows individuals to report an alleged contravention directly to TC.

7. MONITORING AND ADDRESSING INCREASING SCRUBBER USE IN CANADA

Canada recognizes that the use of scrubbers in Canadian and international waters has increased rapidly in recent years, raising the importance of better understanding the impacts of scrubbers on air and water quality. Canada has been working to assess the potential impacts.

In 2020, ECCC contracted the International Council for Clean Transportation (ICCT) to evaluate the available literature and advise on appropriate air pollutant and washwater discharge emission rates from the use of scrubbers. The ICCT found that open loop scrubbers typically discharge washwater into the ocean at a rate of 45 tonnes/MWh, in order to meet requirements for maximum allowable release of PAHphe. This washwater is low in pH and high in turbicity and contains toxic substances listed on Schedule 1 of the CEPA, including PAHs, nitrates, sulphuric acid, and heavy metals. ICCT also found that closed loop scrubbers typically produce bleed off washwater at a rate of 0.125 tonnes/MWh which is highly concentrated in metals.In 2021, Canada submitted the ICCT report to the IMO's Pollution Prevention and Response Subcommittee (reference document PPR 9/INF.21) to inform the international shipping community of these data and that Canada plans to continue to evaluate the impacts of the growing use of scrubbers.

Growth of scrubber use in Canada

Data collected by Canada is used to estimate environmental impacts from shipping, for example in ECCC's Marine Emissions Inventory Tool. According to collected data, prior to 2018 the use of scrubbers in Canadian waters was relatively rare; scrubbers were primarily used by cruise ships operating in emission control areas. As the January 1, 2020, implementation of the IMO global 0.5% sulphur fuel limit approached, other ship types were increasingly fitted with scrubbers to enable continued use of heavy fuel oil. The number of unique vessels operating in Canadian waters equipped with scrubbers increased four-fold from 2019-2022, from 5% to 18% of the total number of unique ships operating in Canadian waters (Figure 1).

Figure 1: Number of Unique Ships with Scrubbers in Canadian Waters by Year

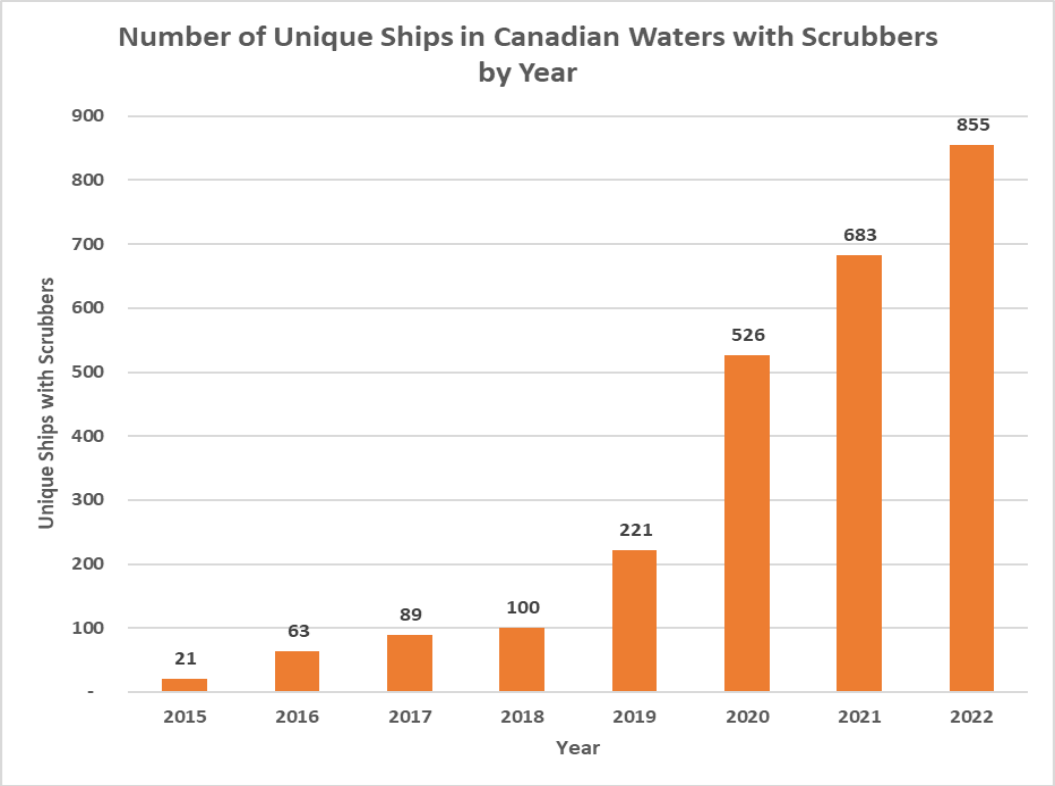
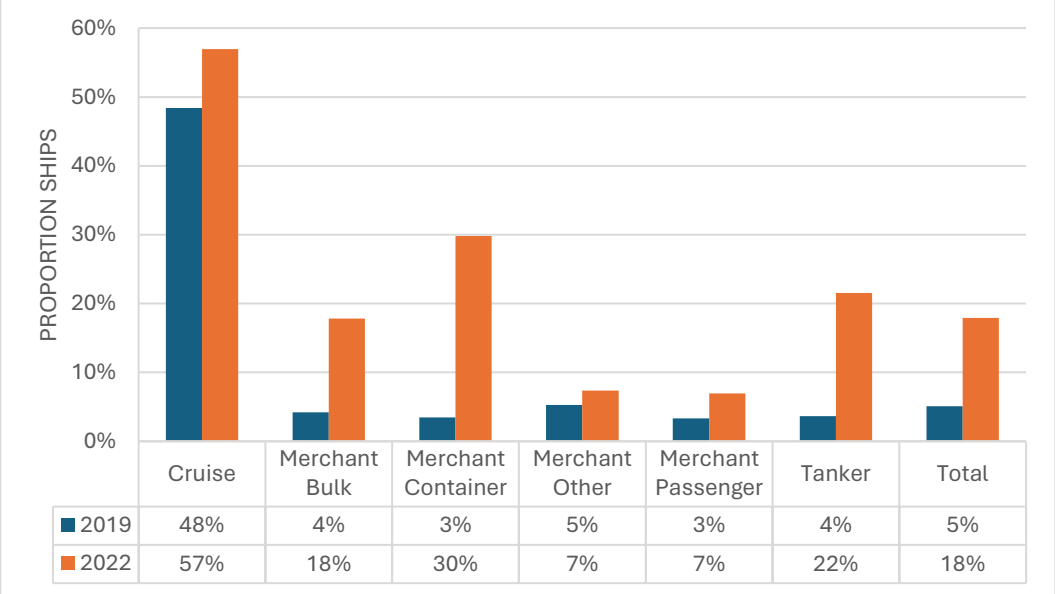


Figure 2: Proportion of Unique Ships Operating in Canadian Waters Fitted With Scrubbers in 2019 and 2022, by Ship Type



	Cruise	Merchant Bulk	Merchant Container	Merchant Other	Merchant Passenger	Tanker	Total
2019	48%	4%	3%	5%	3%	4%	5%
2022	57%	18%	30%	7%	7%	22%	18%

This growth has been more pronounced on the Pacific Coast. In 2022 a total of 466 ships fitted with scrubbers were operating in waters off Canada's Pacific Coast, with cruise ships accounting for 5% of the total (22 unique ships). This represents a four-fold increase since 2019, and a 14-fold increase since 2018.

Analysis of Washwater Discharge from Scrubbers on Canada's Pacific Coast

ECCC's Marine Emissions Inventory Tool calculates that in 2022, ships equipped with scrubbers discharged over 88 million tonnes of washwater on Canada's Pacific Coast. In 2019, ships discharged 44 million tonnes – therefore the washwater discharged nearly doubled from 2019-2022. Cruise ships accounted for nearly 46% of the total washwater discharged in 2022. Scrubber washwater contained 226 kg of PAHphe, and nearly 26,000 kg of metals in 2022.

Table 1: Washwater and Pollutants Discharged from Scrubbers on Canada's West Coast, 2019 and 2022

Parameter	2019	2022
Unique Vessels with Scrubbers	125	466
Washwater (tonnes)	44 200 000	88 300 000
PAHphe (kg)	117	226
Nitrates (kg)	19 600	37 9100
Vanadium (kg)	9140	17 700
Nickel (kg)	2540	4910
Copper (kg)	2140	4130
Cadmium (kg)	5	9
Mercury (kg)	7	13
Lead (kg)	509	984

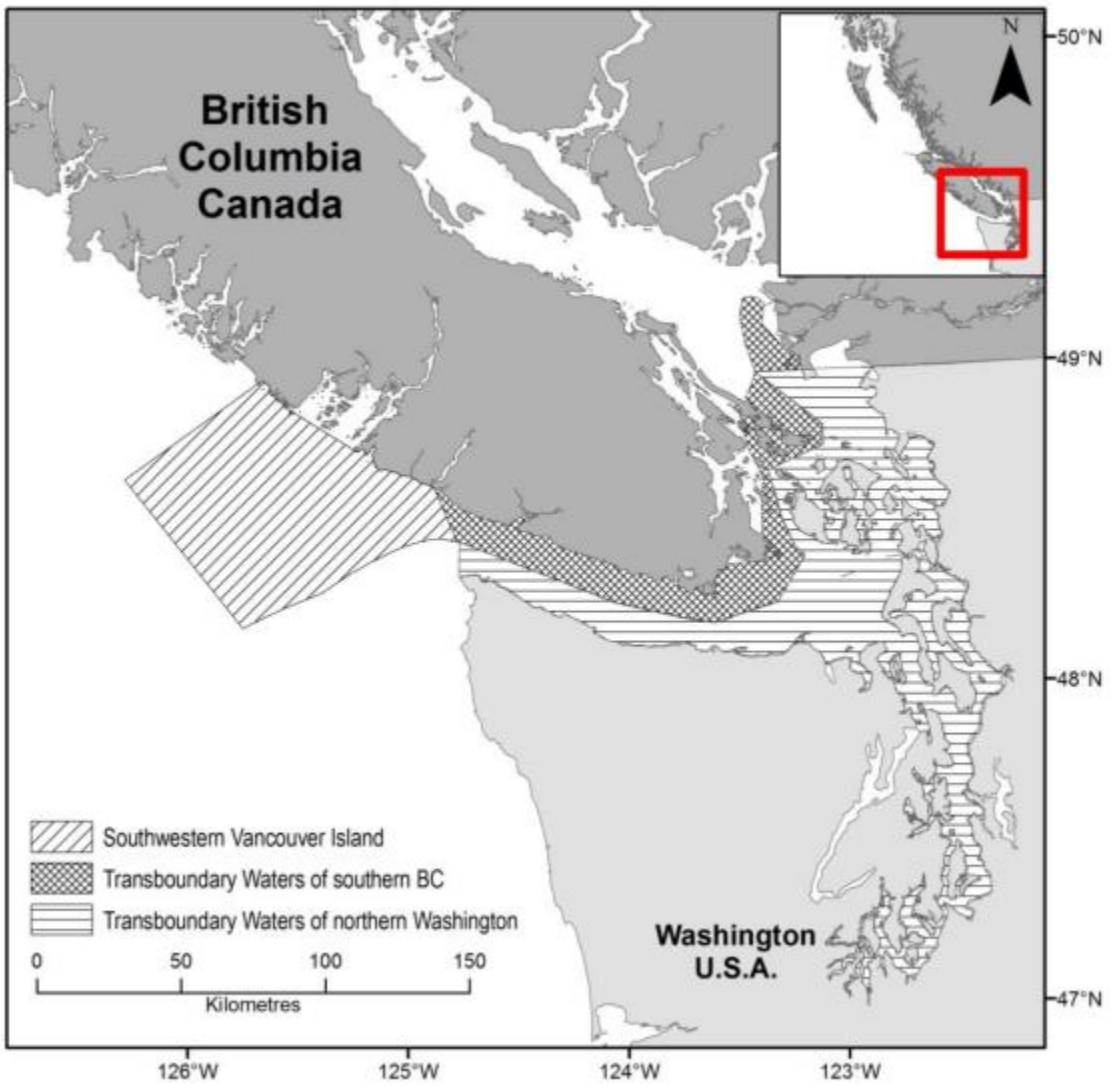
Analysis of scrubber use in critical habitat of Southern Resident Killer Whales

Killer Whales are marine mammals, and are captured under the definition of "fish" under the FA. The Southern Resident Killer Whale (SRKW) population, found along Canada's Pacific Coast, is listed as endangered under Canada's *Species at Risk Act*. The Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada identifies environmental contaminants as a key threat to viability and recovery of Killer Whale populations. According to

the Contaminants Technical Working Group for SRKW recovery, PAHs, copper, cadmium, and lead are priority contaminants for SRKW primary prey, Chinook salmon, based on presence, health concerns, and likelihood of exposure. Mercury is a priority contaminant for both SRKW and Chinook salmon.

SRKW critical habitat is identified in the Recovery Strategy as necessary for their survival and recovery, and is located between the southern Salish Sea, Juan de Fuca Strait and southwestern Vancouver Island (Figure 3). ECCC estimates that over 26 million tonnes of scrubber washwater was discharged into SRKW critical habitat in 2022, including 69 kg of PAHphe and over 8,000 kg of metals. Cruise ships accounted for 44% of the washwater discharge and 40% of the PAHphe and 44% of the metals in this habitat. ECCC has developed an online tool to inventory pollutants called the Pollutants Affecting Whales and their Prey Inventory Tool (PAWPIT). PAWPIT shows estimates of pollutant releases by all identified sources within the habitats of SRKW, Northern Resident Killer Whales and Chinook salmon. ECCC has added scrubber washwater into this tool to investigate its significance as a source of pollution. ECCC used this inventory tool to calculate estimates of the proportion of priority contaminants affecting SRKW from different sources, such as scrubber washwater, using data from ECCC's Marine Emissions Inventory Tool. ECCC estimates that marine vessel scrubbers contribute between 40-98% of the loading of priority contaminants within 300m of SRKW critical habitat. Further, ECCC calculated that scrubbers are estimated to be responsible for the largest proportion of vanadium within 300 m of the SRKW critical habitat.

Figure 3. Critical habitat areas identified for Southern Resident Killer Whale in the 2018 Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada. The hatched areas represent critical habitat. The hatched area in US waters is designated as Southern Resident Killer Whale critical habitat under the US Endangered Species Act.



Protecting the critical habitat of Southern Resident Killer Whales

A high priority of the Government of Canada is ocean protection and protection of marine endangered species, such as the SRKW. As described in **Section 3.3**, ECCC received renewed funding under the Oceans Protection Plan (OPP) and the Whales Initiative (WI) to hire additional enforcement officers to increase its capacity to target and undertake inspections to address contaminant threats to the SRKW.

The national, whole-of-government OPP represents the largest investment the federal government has ever made to protect our coasts and waterways from the potential impacts of marine shipping, and to ensure the health of our oceans. It further improves marine safety and

responsible shipping, protects Canada's marine environment, and offers new possibilities for Indigenous and coastal communities. Ultimately, the OPP will help to keep Canadian waters and coasts safe and clean, for today's use and for future generations. The implementation of OPP is shared across TC (lead), DFO, CCG, ECCC, Natural Resources Canada, and Health Canada.

The Government of Canada has also made significant investments through the WI to protect and support the recovery of three critically endangered whale species: the SRKW, the St. Lawrence Estuary Beluga, and the North Atlantic right whale. Under WI, DFO, TC, ECCC, and Parks Canada (PC) are responsible for implementing a number of activities that are intended to help mitigate threats that affect the survival and recovery of these endangered whale species. In addition to enhancing enforcement and compliance capacities, the Government of Canada is addressing the main threats to the SRKW by improving prey availability (including the Chinook salmon which is one of the primary food sources for the SRKW), reducing disturbance from underwater vessel noise and enhancing monitoring under water and in the air to protect the SRKW's critical habitat. The Government of Canada works in partnership with Indigenous Peoples and in close collaboration with local stakeholders. The WI was renewed under Budget 2023 to continue the existing activities to protect these species, their prey and their habitats.

8. CONCLUSION

The Government of Canada exercises its enforcement functions in a manner consistent with its domestic laws.

As demonstrated above, Canada, through ECCC and TC, exercises enforcement functions in a manner consistent with the FA and the CSA 2001.

ECCC administers and enforces a broad range of laws and regulations designed to prevent or minimize threats to the environment and human health. ECCC applies a risk-based approach to its enforcement activities. Since 2014, ECCC enforcement officers conducted a total of one hundred and twenty (120) enforcement activities in relation to vessel pollution in PYR. Of the two (2) investigations related to cruise ships, neither one resulted in an enforcement action. Activities and decisions taken by ECCC Enforcement Officers were guided by the Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the FA. Moreover, in order to collect information on cruise ship discharges that can be used to support future planning and priority setting, ECCC Enforcement conducted fourteen (14) inspections in PYR in the 2023-24 fiscal year. As described in Section 3.3, further disclosure is not appropriate at this time as these matters are ongoing.

TC's MSS Program conducts regulatory oversight and compliance activities of both domestic and foreign vessels to ensure compliance with the provisions of the CSA 2001 and VPDCR. Of the four deficiencies related to EGCS identified between January 2014 to January 2024 under the Port State Control Program, two of the deficiencies were corrected within the allotted time,

while the remaining resulted in a detention of the vessel in question until the issue was rectified.

The Government of Canada is conducting ongoing research on scrubber use in Canada.

As demonstrated in Section 7, the use of scrubbers in Canadian waters has increased rapidly since 2019. The Government of Canada is already conducting relevant technical and scientific work to understand the use and impacts of scrubbers in Canadian waters, continues to share information with the IMO and adapt ongoing regulatory and enforcement operations based on findings.

The Government of Canada considers that Private Remedies under Canadian law have not been pursued.

As described in Section 6, an individual can report an alleged contravention under Part 11, Section 216 (1) of the CSA 2001. As the Submitter did not illustrate attempts to pursue remedies available under the CSA 2001, it is the Government of Canada's view that the submission does not meet the criteria set out in CUSMA under Article 24.27(3)(c) as the Submitter has not demonstrated that private remedies available under Canadian law have been pursued. Private remedies available to the public, specifically for fishermen and victims of pollution, under the FA and CEPA are described to illustrate the breadth of private remedies available.

Canada strongly supports the SEM process as a unique mechanism to hold governments accountable for the effective enforcement of environmental laws in North America, and to provide an avenue for persons and nongovernmental organizations to continue engaging with Canada, the United States and Mexico to promote transparency, accountability, and public participation, to continue advancing the environmental objectives to foster the protection and improvement of the environment for the well-being of present and future generations.

9. TABLE OF ACRONYMS

AMP - Administrative Monetary Penaltie
AWPPA - *Arctic Waters Pollution Prevention Act*
CCG - The Canadian Coast Guard
CEC - The Commission for Environmental Cooperation
CEPA - *Canadian Environmental Protection Act*, 1999
CSA 2001 - *Canada Shipping Act, 2001*
CUSMA - *Canada-United States-Mexico Agreement*
CWA - *Canada Wildlife Act*
DAS - Disposal at Sea
DFO – Department of Fisheries and Oceans
ECA - Emission Control Areas
ECCC - Environment and Climate Change Canada
EED - Environmental Enforcement Directorate
EEZ - Exclusive Economic Zone
EGCS - Exhaust Gas Cleaning Systems
FA - *Fisheries Act, 1985*
GGPPA -*Greenhouse Gas Pollution Pricing Act*
GIC - Governor in Council
IAPPC - International Air Pollution Prevention Certificates
ICCT - International Council for Clean Transportation
IEP - Integrated Enforcement Plan
IMO - International Maritime Organization
MARPOL - *International Convention for the Prevention of Pollution from Ships*
MBCA - *Migratory Birds Convention Act*, 1994
MEIT - ECCC's Marine Emissions Inventory Tool
MSI - Marine Safety Inspectors
NA-ECA - North American Emission Control Area
NOx - Nitrogen oxides
OPP - Oceans Protection
PAHs - Polycyclic Aromatic Hydrocarbons
PAWPIT - Pollutants Affecting Whales and their Prey Inventory Tool
PM - Particulate Matter
PPO - Pollution Prevention Officers
PSC - Port State Control
PYR - The Pacific and Yukon Region
RO - Recognized Organizations
SARA - *Species at Risk Act*
SEM - Submission on Enforcement Matters
SOx - Sulphur oxides

SRKW - Southern Resident Killer Whales
TC - Transport Canada
TC MSS - Marine Safety and Security
TRA - Water Threat-Risk Assessment
UNCLOS - United Nations Convention on the Law of the Sea
VPDCR - *Vessel Pollution and Dangerous Chemicals Regulations*
WAPPRIITA - *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*

10. ANNEX 1

Further information on Fisheries and Oceans Canada and the Canadian Coast Guard

Fisheries and Oceans Canada (DFO) has responsibility for administration and enforcement of the Fish and Fish Habitat Protection and Pollution Prevention provisions of the *Fisheries Act* (FA), which contains three key subsections that provide protection to fish and fish habitat:

- Subsection 34.4 (1) of the FA: *No person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish*;
- Subsection 35 (1) of the FA: *No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat;*
- Subsection 36(3) of the FA: *See description in Section 3.1 Pollution Prevention Provisions of the Fisheries Act, 1985.*

DFO Enforcement Branch Organization and Authorities

DFO's Conservation and Protection (C&P) Program is tasked with the compliance and enforcement provisions of the various environmental laws related to protecting Canada's fisheries and oceans resources. Over 600 fishery officers across Canada work to enforce these laws, which include the following:

- *Fisheries Act*
- *Oceans Act*
- *Coastal Fisheries Protection Act*
- *Fishery General Regulations*
- *Marine Mammal Regulations*
- *Species at Risk Act*

C&Ps Fishery Officer work includes:

- promoting fisheries and habitat compliance and conservation
- carrying out surveillance of fishing activities by land, sea and air
- participating in planning, managing and controlling Canada's fisheries and aquatic habitats
- acting as a contact or representative of the federal government in remote communities
- collecting evidence of illegal activity during routine patrols and special investigations to use in court

To accomplish their work, fishery officers work collaboratively with the public, harvesters, Indigenous communities, industry and other stakeholders.

Canadian Coast Guard

The Canadian Coast Guard's (CCG) mandate is derived from the *Oceans Act*, the *Canada Shipping Act, 2001* (CSA 2001), and the *Wrecked, Abandoned or Hazardous Vessels Act (*WAHVA), giving the CCG the authority to provide essential services, to deliver the following:

- aids to navigation systems and services,
- marine communications and traffic management services,
- ice breaking and ice management services, and
- channel maintenance;
- the marine component of the federal search and rescue program;
- response to wrecks and hazardous or dilapidated ships;
- marine pollution response; and,
- the support of departments, boards and agencies of the Government of Canada through the provision of ships, aircraft and other marine services.

CCG's Compliance and Enforcement Program

In June 2023, the CCG also launched its new compliance and enforcement program. The program will increase the accountability for those whose actions create maritime hazards as defined in CSA 2001 and WAHVA by using all the legislated tools available to the CCG in line with the "polluter pays principle". The CCG has various tools at its disposal such as cost recovering the costs of CCG response to hazardous or polluting vessels, imposing Administrative Monetary Penalties under WAHVA. Not complying with the Acts can result in penalties of up to $50,000 for individuals and $250,000 for companies or corporations, while regulatory offence prosecution could result in a maximum fine of $1 million for individuals, and/or up to 3 years of jail, and $6 million for companies or corporations.