

Secretariat of the Commission for Environmental Cooperation
Secretariat Notification in accordance with Article 24.28(1) of the
United States-Mexico-Canada Agreement

Submitter: Stand Environmental Society
Party: Canada
Date of the original submission: 2 November 2023
Date of the revised submission: 11 January 2024
Date of the notification: 14 June 2024
Submission No.: SEM-23-007 (*Vessel Pollution in Pacific Canada*)

EXECUTIVE SUMMARY

On 30 October 2023, Stand Environmental Society, also known as Stand.earth, (“Submitter”) filed a submission with the CEC Secretariat, asserting that Canada (“the Party”) is failing to effectively enforce its environmental laws, particularly section 36(3) of the *Fisheries Act*, 1985 to prevent pollution of the marine environment by cruise ships and other vessels using “exhaust gas cleaning systems” along the Pacific coast of Canada.

On 4 December 2024, the Secretariat determined that submission SEM-23-007 (*Vessel Pollution in Pacific Canada*) met the eligibility requirements of CUSMA Articles 24.27(1) and 24.27(2) and met the criteria in Article 24.27(3)(a), (b), (d), but *did not* meet the criterion of Article 24.27(3)(c) and notified the Submitter accordingly. The Secretariat found that the Submitter did not provide information on whether private remedies have been pursued to satisfy the criterion of Article 24.27(3)(c) and must do so to allow the Secretariat to determine whether to request a response from the Party.

On 11 January 2024, the Secretariat received a revised submission with additional information from the Submitter. On 12 February 2024, the Secretariat determined that the submission met the criterion of Article 24.27(3)(c) and determined that it merited a response from the Party under Article 24.27(3).

On 12 April 2024, the Secretariat received Canada’s response. Canada responds by explaining the legal framework of the *Fisheries Act*, 1985 and how Environment and Climate Change Canada (ECCC) enforces the *Fisheries Act*. The Party also explains the legal framework of the *Canada Shipping Act*, 2001 and how Transport Canada (TC) enforces the *Shipping Act*. The Party describes how ECCC and TC coordinate their enforcement efforts to address marine pollution issues and the ongoing monitoring related to increasing use of exhaust gas cleaning systems in waters under Canadian jurisdiction. The Party also provides information on private remedies under Canadian law that the public could pursue to address some of the assertions raised by the Submitter.

The Response acknowledges that vessels are depositing scrubber washwater, which contains PAHs, nitrates, and heavy metals, into waters off the coast of Canada which are frequented by fish and that the Party has not made regulations applicable to vessel exhaust gas cleaning systems under the *Fisheries Act*. The Response provides information on scrubber washwater discharges into and near the critical habitat of the endangered Southern Resident Killer Whale population.

The Secretariat has considered the submission in light of Canada’s response and finds that the Response leaves open central questions regarding whether scrubber washwater meets the definition of a

“deleterious substance” under the *Fisheries Act*. The Secretariat also finds the Response leaves open central questions regarding the Party’s enforcement of s. 36(3) of the *Fisheries Act* with respect to discharges of scrubber washwater into waters frequented by fish, considering data from the Party showing that such discharges are introducing pollutants into the marine environment.

Given the increasing use of scrubbers and the increasing volume of washwater discharges in recent years, as discussed in the Response, the Secretariat believes a factual record could present information about the current state of research in this area, exploring the effects of scrubber washwater, including its pollutant components, on the Southern Resident Killer Whale population, Chinook salmon, and other fish species, as well as the marine environment in general.

The Secretariat finds that the Response leaves open central questions regarding whether scrubber washwater meets the definition of “pollutant” under the *Shipping Act* and the Party’s enforcement of the prohibition in s. 187 with respect to scrubber washwater, particularly regarding Canadian vessels for which no enforcement-related data is provided. The Secretariat also believes that a factual record could present information related to the enforcement of s. 187, including the use of enforcement tools and measures like interim orders under subsection 10.1(1) of the *Shipping Act*.

Regarding the *Vessel Pollution and Dangerous Chemicals Regulations*, the Secretariat finds the Response leaves open central questions regarding enforcement of s. 132 of these regulations, concerning reports of any discharge or anticipated discharge prohibited by s. 187 of the *Shipping Act*.

The Secretariat presents its reasoning below and thereby notifies the Council in accordance with CUSMA Article 24.28(1).

I. INTRODUCTION

1. On 1 July 2020, the Canada-United States-Mexico Agreement (CUSMA) and the Environmental Cooperation Agreement (ECA) entered into force. After this date, the Submissions on Enforcement Matters (SEM) process originally established by Articles 14 and 15 of the North American Agreement on Environmental Cooperation (NAAEC) is governed by CUSMA Articles 24.27 and 24.28. The Secretariat of the Commission for Environmental Cooperation (“CEC Secretariat”)¹ remains responsible for implementing the SEM process, as stipulated in the ECA.²

¹ The Commission for Environmental Cooperation (CEC) was established in 1994 under the North American Agreement on Environmental Cooperation (NAAEC), an instrument signed by Canada, Mexico, and the United States (the “Parties”). The constituent bodies of the CEC are its Council, Secretariat, and Joint Public Advisory Committee (JPAC).

² The Secretariat takes the view that although the provisions governing the SEM process are set forth in Chapter 24 of the CUSMA, certain related procedures are also established under the Agreement on Environmental Cooperation among the Governments of the United States of America, the United Mexican States, and Canada (ECA), namely: the Secretariat’s role in the implementation of the Submissions on Enforcement Matters process, the Council’s role in exchanging information with the Environment Committee, the preparation and publication of factual records, and the Council’s cooperation activities. The Secretariat is mindful of ECA Article 2(3) which states in part: “The Commission will continue to operate under the modalities in place as of entry into force of this Agreement, including its rules, policies, guidelines, procedures, and resolutions, to the extent these modalities are consistent with this Agreement.” Environmental Cooperation Agreement, Articles 2(3); 4(1)(1)–(m); 4(4); and 5(5).

2. Articles 24.27 and 24.28 of the CUSMA provide a process for any national of a Party or entity organized under the laws of a Party to file a submission asserting that a Party to the CUSMA is failing to effectively enforce its environmental laws. The CEC Secretariat initially reviews submissions based on the requirements set out in CUSMA Article 24.27(1) and (2). Where the Secretariat finds that a submission meets these requirements, it then determines, in accordance with the criteria of Article 24.27(3), whether the submission merits a response from the Party in question. In light of the Party's response, the Secretariat then determines whether the matter warrants the preparation of a factual record and, if so, it informs the CEC Council and the Environment Committee,³ providing its reasons as prescribed by CUSMA Article 24.28(1); otherwise, it terminates the review of the submission.⁴
3. On 30 October 2023, Stand Environmental Society, also known as Stand.earth, ("Submitter") filed a submission with the CEC Secretariat, asserting that Canada ("the Party") is failing to effectively enforce its environmental laws, particularly section 36(3) of the *Fisheries Act*, 1985 to prevent pollution of the marine environment by cruise ships and other vessels using "exhaust gas cleaning systems" along the Pacific coast of Canada.
4. On 2 November 2023, the Secretariat informed the Submitter of minor errors of form, specifically the length of the submission exceeded 15 typed pages. The Submitter filed a corrected submission, condensing the submission down to 18 pages, on 15 November 2023.⁵
5. On 4 December 2024, the Secretariat determined that submission SEM-23-007 (*Vessel Pollution in Pacific Canada*) met the eligibility requirements of CUSMA Articles 24.27(1) and 24.27(2) and met the criteria in Article 24.27(3)(a), (b), (d), but *did not* meet the criterion of Article 24.27(3)(c) and notified the Submitter accordingly.⁶
6. The Secretariat found that the Submitter did not provide information on whether private remedies have been pursued to satisfy the criterion of Article 24.27(3)(c) and must do so to allow the Secretariat to determine whether to request a response from the Party.
7. On 11 January 2024, the Secretariat received a revised submission with additional information from the Submitter.⁷

³ The Environment Committee is established by CUSMA Article 24.26(2) and its role is to "oversee the implementation" of CUSMA Chapter 24.

⁴ More details on the various stages of the submissions on enforcement matters process, the public registry of submissions, and previous Secretariat determinations and factual records can be found on the CEC website at <http://www.cec.org/submissions-on-enforcement/>.

⁵ SEM-23-007 (*Vessel Pollution in Pacific Canada*), Submission pursuant to CUSMA Article 24.27(1) (15 Nov. 2023), [Submission], at: http://www.cec.org/wp-content/uploads/wpallimport/files/23-7-sub_corrected_redacted_en.pdf.

⁶ SEM-23-007 (*Vessel Pollution in Pacific Canada*), Determination in accordance with CUSMA Articles 24.27(2) and (3) (4 Dec. 2023), [First Determination], at: http://www.cec.org/wp-content/uploads/wpallimport/files/23-7-det_en.pdf.

⁷ SEM-23-007 (*Vessel Pollution in Pacific Canada*), Submission (11 Jan. 2024), [Revised Submission], at: http://www.cec.org/wp-content/uploads/wpallimport/files/23-7-rsub_en.pdf.

8. On 12 February 2024, the Secretariat determined that the submission met the criterion of Article 24.27(3)(c) and determined that it merited a response from the Party under Article 24.27(3).⁸
9. On 12 April 2024, the Secretariat received Canada's response.⁹ Canada responds by explaining the legal framework of the *Fisheries Act*, 1985 and how Environment and Climate Change Canada (ECCC) enforces the *Fisheries Act*. The Party also explains the legal framework of the *Canada Shipping Act*, 2001 and how Transport Canada (TC) enforces the *Shipping Act*. The Party describes how ECCC and TC coordinate their enforcement efforts to address marine pollution issues and the ongoing monitoring related to increasing use of exhaust gas cleaning systems in waters under Canadian jurisdiction. The Party also provides information on private remedies under Canadian law that the public could pursue to address some of the assertions raised by the Submitter.
10. Pursuant to Article 24.28(1), the CEC Secretariat reviewed submission SEM-23-007 (*Vessel Pollution in Pacific Canada*) in light of the response provided by the Government of Canada. The Secretariat determines that some of the matters raised in the submission remain open and warrant the preparation of a factual record.
11. The Secretariat finds that the submission warrants development of a factual record in relation to:
 - a. Effective enforcement of the *Fisheries Act* with regard to the discharge of washwater into Canadian fisheries waters from exhaust gas cleaning systems on vessels.
 - b. Effective enforcement of the *Canada Shipping Act* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.
 - c. Effective enforcement of the *Vessel Pollution and Dangerous Chemicals Regulations* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.

The Secretariat's reasoning is set out below.

II. SUMMARY OF THE SUBMISSION

12. The Submitter asserts that Canada is failing “to prevent pollution of the marine environment, particularly pollution from cruise ships using ‘exhaust gas cleaning systems’ along the Pacific coast of Canada.”¹⁰

⁸ SEM-23-007 (*Vessel Pollution in Pacific Canada*), Determination in accordance with CUSMA Articles 24.27(2) and (3) (12 Feb. 2024), [Second Determination], at: <http://www.cec.org/wp-content/uploads/wpallimport/files/23-7-det31_en.pdf>.

⁹ SEM-23-007 (*Vessel Pollution in Pacific Canada*), Article 24.27(4) Canada Response (12 April 2024) [Response], at: <http://www.cec.org/wp-content/uploads/wpallimport/files/23-7-rsp_en.pdf>.

¹⁰ Submission at 1.

13. Specifically, the Submitter alleges that Canada is failing to effectively enforce section 36(3) of the *Fisheries Act*, which prohibits the deposit of a deleterious substance in water frequented by fish.¹¹
14. The Submitter asserts that this prohibition aligns with the purpose of the *Fisheries Act* “to provide a framework for the conservation and protection of fish and fish habitat, including by preventing pollution.”¹² The submission also references and describes other provisions of the *Fisheries Act* that provide relevant definitions, regulatory authority, authorization for inspectors, the duty to notify, the duty to take corrective measures, and offenses and liabilities for violations of the Act.¹³ These provisions provide additional context and support for the assertion that Canada is failing to effectively enforce s. 36(3) of the *Fisheries Act*.
15. The Submitter also alleges that Canada is failing to effectively enforce various provisions of the *Canada Shipping Act, 2001*¹⁴ and the *Vessel Pollution and Dangerous Chemicals Regulations*¹⁵ which implement Canada’s obligations under International Convention for the Prevention of Pollution from Ships (“MARPOL”) and regulate marine pollution from vessels.¹⁶ The Submitter notes that Canada has undertaken obligations as a signatory to MARPOL, “including obligations to enact and enforce regulations to prevent pollution of the marine environment or air pollution.”¹⁷
16. Regarding the *Shipping Act*, the submission references and describes provisions that provide its objectives, application/jurisdiction, regulatory authority, authorization to issue interim orders, prohibition on discharging a “prescribed pollutant” except in accordance with regulations or a permit, and the penalties for violation of the prohibition on discharging a “prescribed pollutant.”¹⁸
17. The submission references sections of the *Vessel Pollution and Dangerous Chemicals Regulations*, enacted pursuant to the *Shipping Act*, that govern the discharge of residues and washwater from exhaust gas cleaning systems, also called “scrubbers,” and incorporate by reference MARPOL Resolution MEPC.184(59), the 2009 Guidelines for Exhaust Gas Cleaning Systems.¹⁹
18. The submission also references and describes other sections of the *Vessel Pollution and Dangerous Chemicals Regulations* that provide a definition for “prescribed pollutant,” authorize the discharge of specific substances under certain circumstances, provide exemptions for certain vessels, regulate air pollution from vessels, prohibit the discharge of “pollutant substances” except in certain circumstances, regulate greywater discharges, and require reporting of discharge of pollutants.²⁰

¹¹ Id. at 2.

¹² Id.

¹³ Id. at 2-3.

¹⁴ Id. at 6-8.

¹⁵ Id. at 8-9.

¹⁶ Id. at 4.

¹⁷ Id.

¹⁸ Id. at 6-7.

¹⁹ Id. at 8.

²⁰ Id at 9.

19. The submission cites the Ship Safety Bulletin from 2022 and the *Interim Order Respecting the Discharge of Sewage and the Release of Greywater by Cruise Ships in Canadian Waters* as examples of recent actions by the Canadian Government to try to manage vessel discharges into the marine environment. The submitter notes that the 2022 bulletin provided voluntary measures and the 2023 interim order provided mandatory measures for sewage and greywater discharges, but neither one covered scrubber washwater.²¹
20. The submission also refers to local regulations like the amended guidelines issued by the Port of Vancouver in 2022 to prohibit the discharge of scrubber washwater while vessels are at berth or anchor and the 2023 amendments to the Port of Prince Rupert's guidelines to prohibit open-loop scrubbers.²²
21. The submission explains how exhaust gas cleaning systems on vessels operate and their potential to deposit substances into waters under Canadian jurisdiction, citing a report by the International Council for Clean Transportation, which found that "...all scrubbers—open loop, closed loop, and hybrid—discharge water that is more acidic and turbid than the surrounding water. Additionally, all scrubbers emit nitrates, PAHs [Polycyclic Aromatic Hydrocarbons], and heavy metals."²³
22. The Submitter asserts that scrubbers discharge wastewater that causes pollution that is harmful to the marine environment and marine species, in violation of Canada's commitment under the *Fisheries Act* to protect fish and fish habitat, which includes the endangered Southern Resident Killer Whale population.²⁴

III. SUMMARY OF THE RESPONSE

23. Canada responds by providing information on the international standards and guidelines for exhaust gas cleaning systems (EGCS) set by the International Maritime Organization (IMO), noting that "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 [Environment and Climate Change Canada], TC [Transport Canada] and Fisheries and Oceans Canada (DFO)."²⁵
24. The Party provides an overview of each department (ECCC, TC and DFO), including their mandates and relevant authority.²⁶

²¹ Id.

²² Id.

²³ Id. at 11-13, citing Comer, Georgeoff and Osipova, *Air Emissions and Water Pollution Discharges from Ships with Scrubbers* (2020), page 29 at: <<https://theicct.org/publication/air-emissions-and-water-pollution-discharges-from-ships-with-scrubbers>> [hereinafter 2020 ICCT Scrubber Report]. Note: Polycyclic Aromatic Hydrocarbons (PAHs) are referred to collectively because there are more than 100 different PAHs and they "...generally occur as complex mixtures (for example, as part of combustion products such as soot), not as single compounds." US Agency for Toxic Substances and Disease Registry, *Public Health Statement for Polycyclic Aromatic Hydrocarbons (PAHs)* (2014), at: <<https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=120&toxid=25>>.

²⁴ Id. at 14, 16-17.

²⁵ Response at 5.

²⁶ Id. at 5-8.

25. The Party describes ECCC’s enforcement activities under the *Fisheries Act*, detailing the department’s efforts to enforce the environmental law provisions raised in the submission²⁷ over the last 10 years.²⁸
26. The Party explains that enforcement officers carry out two main types of enforcement activities: (1) inspections (planned, proactive, or reactive) and administrative verifications (information gathering without an on-site presence) and (2) investigations (gathering evidence to support or refute a suspected violation),²⁹ and discusses ECCC’s risk-based approach to enforcement activities.³⁰
27. The Party states that there have been 26 successful prosecutions for violations of the pollution prevention provisions of the *Fisheries Act* in the Pacific and Yukon Region from 2014 to date.³¹
28. Regarding vessel pollution, the Party reports that since 2014, ECCC enforcement officers have conducted a total of 120 enforcement activities in relation to vessel pollution in the Pacific and Yukon Region which represents 69 inspections, 44 administrative verifications, and seven investigations, two of which were related to cruise ships (both closed due to insufficient evidence).³² Specifically, “[e]ighty-two (82) enforcement activities were conducted under the General Prohibition of the FA [*Fisheries Act*]...”³³
29. The Response provides information on inspections conducted in the Pacific and Yukon Region during the 2023-2024 federal fiscal year, stating that 14 inspections were directly related to cruise ship discharges, including scrubber washwater and information gathering is ongoing.³⁴
30. The Party describes TC’s enforcement activities under the *Shipping Act*, including the *Vessel Pollution and Dangerous Chemicals Regulations*, and explaining efforts to enforce the provisions raised in the submission and its enforcement activities over the last 10 years.³⁵

²⁷ Except for ss. 2.1, 2.2, 38(5), and 38(6) of the *Fisheries Act*, R.S.C. 1985, c F-19, [*Fisheries Act*], available at: <<https://canlii.ca/t/543j4>>. Those sections were referenced in the Submission and are not addressed in the Response. These sections set out, respectively, the purpose of the Act, the territorial application of the Act, the duty to notify if a deposit of a deleterious substance occurs in water frequented by fish, and the duty to take corrective measures if a deposit of a deleterious substance occurs in water frequented by fish.

²⁸ Response at 8-16.

²⁹ Id. at 11.

³⁰ Id. at 12 (The approach “...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...”).

³¹ Id. at 14. The Response also notes on page 15 that there has been one successful prosecution and administrative monetary penalties have been issued involving three organizations in British Columbia for violation of the Disposal at Sea provisions of the *Canadian Environmental Protection Act*.

³² Id. at 15-16.

³³ Id. Note: The Party uses the phrase “the General Prohibition of the FA” to refer to section 36(3) of the *Fisheries Act* which prohibits the deposit of deleterious substance in water frequented by fish.

³⁴ Id. at 16 (“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.”).

³⁵ Id. at 16-22.

31. The Party explains TC’s inspection and oversight regime under the Port State Control Program for foreign vessels and the Domestic Vessel Regulatory Oversight Program for vessels registered in Canada.³⁶
32. The Party provides details on the Port State Control Program’s inspections of foreign vessels and results over the last 10 years:
- 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.³⁷
33. The Response provides information on how TC conducts oversight for Canadian vessels, including mandatory inspections, risk-based inspections, concentrated inspections campaigns, the National Aerial Surveillance Program, and issuance of the International Air Pollution Prevention Certificates in accordance with MARPOL Annex VI.³⁸
34. The Party briefly discusses coordination between ECCC and TC, including joint inspections and a Memorandum of Understanding (MOU) “...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.”³⁹ The response notes that this MOU is currently under review and may be updated “to ensure it reflects the current legislative framework that governs vessel pollution.”⁴⁰
35. Although not raised in the Submission, the Party discusses Disposal at Sea (DAS) provisions of the *Canadian Environmental Protection Act* (CEPA) to clarify the relationship between CEPA, the *Fisheries Act*, and the *Shipping Act* and how Canada permits certain deposits in marine waters.⁴¹ Subsection 125(1) of the DAS provisions of CEPA prohibits any person or ship from disposing of a substance in areas of the sea⁴² under Canadian jurisdiction “...unless (a) the substance is waste or other matter; and (b) the disposal is done in accordance with a Canadian permit.”⁴³ The Party explains, “[s]ection 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

³⁶ Id. at 20.

³⁷ Id. at 21.

³⁸ Id. at 22 (noting that “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).”

³⁹ Id. at 23.

⁴⁰ Id.

⁴¹ Id. at 14; *See also* footnote 11 on page 6 of the Response.

⁴² As defined in *Canadian Environmental Protection Act, 1999*, S.C. 1999, c. 33, paragraphs 122(2)(a) to (e), [*Canadian Environmental Protection Act*], available at: <<https://laws-lois.justice.gc.ca/eng/acts/c-15.31/page-13.html#h-64639>>.

⁴³ *Canadian Environmental Protection Act*, s. 125(1).

- person disposes of the material in accordance with the permit, then subsection 36(3) of the FA does not apply to the deposit.”⁴⁴
36. The Party also describes various “...private remedies available in Canada to the public, including for individuals, fisherman and victims of pollution.”⁴⁵ Specifically, the Party discusses reporting alleged contraventions under Part 11, section 216(1) of the *Shipping Act*,⁴⁶ a private remedy for fisherman subsection 42(3) of the *Fisheries Act*,⁴⁷ private remedies under multiple sections of the *Canadian Environmental Protection Act*,⁴⁸ and remedies under common law like private nuisance and negligence, as well as civil remedies like damage claims and injunctive relief.⁴⁹
37. The Party asserts that “[t]he Submitter did not illustrate attempts to pursue private remedies available under the CSA 2001, which allows individuals to report an alleged contravention directly to TC.”⁵⁰
38. The Party response concludes with a discussion of Canada’s efforts to monitor and address the potential impacts of increasing scrubber use in recent years.⁵¹ Data collected by ECCC shows that “prior to 2018 the use of scrubbers in Canadian waters was relatively rare.”⁵² After the implementation of the IMO global sulphur limit for marine fuels on 1 January 2020, “[t]he number of unique vessels operating in Canadian waters equipped with scrubbers increased four-fold from 2019-2022, from 5% to 18%...”⁵³
39. According to the Party, ECCC has calculated 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 2022.⁵⁴
40. The Party provides recent data on scrubber washwater discharges and the levels of pollutants contained in the washwater and describes the potential impacts on the endangered Southern Resident Killer Whale (SRKW) population on Canada’s Pacific Coast.⁵⁵ The Response notes that “[t]he 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

⁴⁴ Response at 14.

⁴⁵ Id. at 23, 25.

⁴⁶ Id. at 23.

⁴⁷ Id. at 24.

⁴⁸ Id. at 24-25, citing *Canadian Environmental Protection Act*, ss. 17, 22-38, 39, 40, 291, 292(1).

⁴⁹ Id. at 23.

⁵⁰ Id. at 25-26.

⁵¹ Id. at 26-31.

⁵² Id. at 26.

⁵³ Id.

⁵⁴ Id. at 28, citing the ECCC Marine Emissions Inventory Tool, at: <<https://www.canada.ca/en/environment-climate-change/services/managing-pollution/marine-emissions-inventory-tool.html>>.

⁵⁵ Id. at 28 (noting that Killer Whales are marine mammals that meet the definition of “fish” under the *Fisheries Act* and are listed as endangered under Canada’s Species at Risk Act).

of Killer Whale populations.”⁵⁶ And “ECCC estimates that marine vessel scrubbers contribute between 40-98% of the loading of priority contaminants within 300 m of SRKW critical habitat.”⁵⁷

IV. ANALYSIS

A. Preliminary matters

i. The submission demonstrates that private remedies available under the Party’s law have been pursued

41. Canada asserts that there are private remedies available that the Submitter has not pursued, listing various private remedies available to individuals, fisherman and victims of pollution.⁵⁸ Some of the private remedies raised in the Response were addressed by the Submitter in the Revised Submission, explaining the barriers to pursuing those remedies.⁵⁹
42. Regarding reporting alleged violations under Part 11, section 216(1) of the *Shipping Act*, the Response states that “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.”⁶⁰ Although not referring to this specific provision of the *Shipping Act*, the Submitter addressed the issue of evidentiary barriers to collecting samples of scrubber washwater or to even know when vessels are discharging such washwater.⁶¹ The challenges of collecting evidence of environmental harm, explained by the Submitter in relation to private litigation, are the same challenges the Submitter would face when seeking to assemble “reasonable grounds” to support a report of an alleged contravention under Part 11, section 216(1) of the *Shipping Act*.
43. Regarding pursuing private remedies under various sections of the *Canadian Environmental Protection Act* (CEPA),⁶² the Submitter does not assert that the Party is failing to effectively

⁵⁶ Id., citing Fisheries and Oceans Canada, *Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada*, (2018), at: <https://wildlife-species.az.ec.gc.ca/species-risk-registry/virtual_sara/files/plans/Rs-ResidentKillerWhale-v00-2018dec-Eng.pdf>.

⁵⁷ Id. at 29.

⁵⁸ See paragraph 29 above.

⁵⁹ Id. at 24; See also Revised Submission at 3-4.

⁶⁰ Response at 23.

⁶¹ Revised Submission at 4 (“An additional consideration is the evidentiary barriers faced by a non-governmental and non-profit entity such as Stand in collecting and testing samples of washwater effluent from dozens (or hundreds) of vessels, including vessels operating in off-shore areas and restricted port areas. Vessel owners and operators do not disclose the schedule or timing of discharges of “exhaust gas cleaning system” washwater, further complicating the process of gathering evidence of environmental harm in support of private litigation. There are also restrictions on navigating in proximity to other vessels under Canadian law, which complicate the gathering of washwater samples of appropriate concentration to support litigation.”).

⁶² Response at 24-25, citing *Canadian Environmental Protection Act*, ss. 17, 22-38, 39, 40, 291, 292(1).

enforce CEPA.⁶³ The provisions cited and described in the Response all refer to remedies related to violations of CEPA.⁶⁴

44. Regarding civil remedies like damage claims and injunctive relief,⁶⁵ the Submitter stated that, pursuing Notices of Civil Claim in the British Columbia Supreme Court against dozens of individual vessel owners and operators (including many non-Canadian entities) (as well as civil claims in the courts of other Canadian provinces and territories where deleterious substances are being deposited) poses substantial financial, procedural and evidentiary barriers.⁶⁶
45. The Submitter explained those barriers in detail,⁶⁷ which also serve as barriers to pursuing remedies under common law doctrines like “private nuisance and negligence,” as raised in the Response.⁶⁸ The Submission acknowledges that “...Stand has not directly experienced harm arising from Canada’s failure to effectively enforce section 36(3) of its *Fisheries Act*...”⁶⁹ Specifically in relation to tort law, the Submitter discusses the limitations on filing tort actions due to the current doctrine of standing,
- There is no ‘guardian’ (or equivalent entity) representing the legal interests of non-human entities in Canadian law... Stand therefore faces a substantial barrier in having its standing recognized by the courts of British Columbia to pursue a civil claim on behalf of Southern Resident Killer Whales and other species of wild fauna and flora impacted by the deposit of deleterious substances into Canada’s coastal waters by private vessel owners and operators.⁷⁰
46. Regarding the private remedy for fisherman in subsection 42(3) of the *Fisheries Act*,⁷¹ it would not be appropriate for the Submitter to pursue this remedy given that the Submitter is not engaged in any fishing activities and the remedy is limited to liability for “...loss of income incurred by any licensed commercial fisherman...”⁷²

⁶³ There is only one reference to CEPA in the Submission, on page 7, but it is a reference to a permit under CEPA that would make certain discharges legal and not an assertion of a failure to enforce CEPA (“Section 187 of the *Shipping Act* prohibits any person or vessel from discharging a “prescribed pollutant”, except in accordance with regulations made under this part or a permit granted under *Canadian Environmental Protection Act*, 1999, Part 7.”).

⁶⁴ Response at 24-25.

⁶⁵ Id. at 25.

⁶⁶ Revised Submission at 3.

⁶⁷ Id. at 3-4.

⁶⁸ Response at 23.

⁶⁹ Submission at 1.

⁷⁰ Revised Submission at 3.

⁷¹ *Fisheries Act*, s. 42(3) (“Where, as a result of a deposit that is not authorized under section 36, a deleterious substance enters water frequented by fish, the persons described in paragraphs (1)(a) and (b) are, subject to subsection (4) in the case of the persons described in paragraph (1)(a) and to the extent determined according to their respective degrees of fault or negligence in the case of the persons described in paragraph (1)(b), jointly and severally liable for all loss of income incurred by any licensed commercial fisherman, to the extent that the loss can be established to have been incurred as a result of the deposit or of a prohibition to fish resulting therefrom, and all such loss is recoverable with costs in proceedings brought or taken therefor in any court of competent jurisdiction.”).

⁷² Id. Note: the Submitter is a public-interest, environmental advocacy organization. Submission at 1.

47. The Secretariat has found that pursuing private remedies is to be interpreted broadly and this criterion can be met by filing a complaint or referencing a complaint filed by another person, organization, or entity. This criterion is evaluated according to a standard of reasonableness, keeping in mind that in some cases barriers exist to pursuing such remedies.⁷³
48. The Secretariat has previously found that “there is no requirement under NAAEC Article 14(2)(c) to exhaust all remedies.”⁷⁴
49. The Secretariat has also previously concluded “that the availability of private remedies does not bar further consideration of the submission or the recommendation of a factual record.”⁷⁵
50. During its Article 24.27(3) analysis in the determination dated 12 February 2024, the Secretariat found that “transmission of the letter to the Minister of the Environment and consideration of other private remedies constitute reasonable actions that have been taken to pursue private remedies given the widespread nature of the alleged failures and in light of the barriers identified by the Submitter.”⁷⁶
51. The Secretariat has found no reason to revise its Article 24.27(3) determination dated 12 February 2024.

B. On the assertions in submission SEM-23-007

52. The Secretariat proceeds to consider whether, in light of Canada’s response, the preparation of a factual record is warranted regarding the asserted failure to effectively enforce its environmental laws.
 - i. **Failure to effectively enforce section 36(3) of the *Fisheries Act* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.**
53. The Submitter asserts that Canada is not effectively enforcing section 36(3) of the *Fisheries Act* to prevent pollution of the marine environment, caused by cruise ships and other vessels using exhaust gas cleaning systems and discharging associated washwater along the Pacific Coast of Canada.⁷⁷ Specifically, the submission explains that “[s]crubbers remove sulfur dioxides, heavy metals, polycyclic aromatic hydrocarbons (‘PAHs’), and other toxins from ships’ air-borne exhaust emissions and put these toxins into the ocean through washwater discharges.”⁷⁸

⁷³ SEM-18-001 (*Transboundary Agricultural Burning*) Article 14(1) and (2) Determination, §27-28 (19 Feb. 2018), at: <http://www.cec.org/wp-content/uploads/wpallimport/files/18-1-det_141-142_en.pdf>. (“In similar situations, the Secretariat has considered if reasonable actions were taken prior to file a submission. It has also considered that in some cases, the lack of resources may limit a submitter’s ability to undertake private remedies before filing a submission. The Secretariat considers that a barrier to a private remedy may include economic and social factors”).

⁷⁴ SEM-19-004 (*Barred Owl*), Determination in accordance with Article 14(3) of the NAAEC, §16 (20 Mar. 2020), at: <http://www.cec.org/wp-content/uploads/wpallimport/files/19-4-det143_en.pdf>. (in response to a submitter that asserted that it has “completely exhausted all available private, domestic remedies.”). The text of NAAEC Article 14(2)(c) is identical to CUSMA Article 24.27(3)(c).

⁷⁵ SEM-04-005 (*Coal-fired Power Plants*), NAAEC Article 15(1) Notification, pages 15-16 (5 December 2005), [*Coal-fired Power Plants*], at: <http://www.cec.org/wp-content/uploads/wpallimport/files/04-5-adv_en.pdf>.

⁷⁶ Second Determination at 4.

⁷⁷ Submission at 11.

⁷⁸ Id.

54. Per s. 2.2, the *Fisheries Act* applies to Canadian fisheries waters, which includes “all waters in the fishing zones of Canada, all waters in the territorial sea of Canada and all internal waters of Canada.”⁷⁹
55. Section 36(3) of the *Fisheries Act* provides the general prohibition on the deposit of a deleterious substance:
- 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.
56. The term “deleterious substance” is defined in s. 34(1) and is defined, in part, 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”⁸⁰
57. Regarding the definition of “deleterious substance,” the Response notes 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.”⁸¹
58. The Response explains that “[s]ubsection 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.”⁸² And then it states, “There have been no regulations

⁷⁹ *Fisheries Act*, s. 2.2(1) (“This Act applies in Canada, and also to (a) Canadian fisheries waters....”) “Canadian fisheries waters” are defined under s. 2(1) as “all waters in the fishing zones of Canada, all waters in the territorial sea of Canada and all internal waters of Canada; (*eaux de pêche canadiennes*).”

⁸⁰ *Fisheries Act*, s. 34(1) the definition goes on to also include:

(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, and without limiting the generality of the foregoing includes

(c) any substance or class of substances prescribed pursuant to paragraph (2)(a),

(d) any water that contains any substance or class of substances in a quantity or concentration that is equal to or in excess of a quantity or concentration prescribed in respect of that substance or class of substances pursuant to paragraph (2)(b), and

(e) any water that has been subjected to a treatment, process or change prescribed pursuant to paragraph (2)(c); (*substance nocive*).

⁸¹ Response at 9-10, citing *R. v. Kingston* (2004) Ontario Court of Appeals, paragraph 65, at: <<https://www.canlii.org/en/on/onca/doc/2004/2004canlii39042/2004canlii39042.pdf>>.

⁸² *Id.* at 10.

made under this subsection of the FA that are applicable to vessel exhaust gas cleaning systems.”⁸³

59. In the absence of regulations pursuant to subsection (4) for vessel exhaust gas cleaning systems, there is currently no mechanism for regulating and thus legalizing deposits of deleterious substances from vessel exhaust gas cleaning systems into waters frequented by fish. Without such regulations, any deposits of deleterious substances into waters frequented by fish from vessel exhaust gas cleaning systems would amount to the alleged failure to effectively enforce section 36(3) of the *Fisheries Act*. Adoption of appropriate regulations or regulatory instruments for implementing requirements under statutory law has been addressed in the past under the SEM process.⁸⁴ The absence of a regulatory framework to implement federal laws of the Party has also been noted as part of the Factual Record process, particularly involving subsection 36(3) of the *Fisheries Act*.⁸⁵
60. The Submitter states that “the Government of Canada’s approach of ‘voluntary compliance’ by industry has been shown to produce unsatisfactory results and fails to uphold the public interest in protecting marine ecosystems.”⁸⁶
61. The Submitter asserts that the Party is failing to effectively enforce subsection 36(3) of the *Fisheries Act* based on the number of enforcement actions in light of the number of vessels operating exhaust gas cleaning systems and potentially depositing deleterious substances into Canadian fisheries waters.⁸⁷ The submission notes that only two enforcement investigations related to cruise ship operations were initiated under subsection 36(3) of the *Fisheries Act* between January 1, 2018, and December 31, 2022, and both are closed and neither resulted in enforcement action.⁸⁸

⁸³ Id.

⁸⁴ *Coal-fired Power Plants, supra* note 74, at 21-22 (“Upon EPA approval, ‘the identified waters and TMDLs are incorporated by the state into its continuing planning process established under § 303(e)(3),’ and become part of the federal law of water pollution control.”) (internal citations omitted). See also SEM-21-003 (*North Atlantic right whale*) Notification in accordance with USMCA Article 24.28(1) (3 June 2022) §§ 48-49 (noting the submitter’s assertions that the Final Risk Reduction Rule fails to meet statutory requirements under the MMPA—the zero-mortality rate goal and the requirement for a take reduction plan for a strategic stock to reduce incidental mortality or serious injury to levels less than the established potential biological removal level—but excluding these assertions from further consideration due to pending judicial proceedings that had the potential to resolve these issues).

⁸⁵ SEM-17-001 (*Alberta Tailings Ponds II*) Factual Record pursuant to Article 15(7) (1 September 2020), §7, at: <http://www.ccc.org/wp-content/uploads/wpallimport/files/17-1-ffr_en.pdf>:

No federal regulations currently exist that apply to the deposit of substances from oil sands tailings ponds, nor have they during the period covered by the Submission. As discussed in section 3.1, however, Canada is currently in the process of developing oil sands effluent regulations under the *Fisheries Act*. Thus, 36(3) of the *Fisheries Act* constitutes a prohibition of the deposit of any oil sands processed water (OSPW), including deposits from tailings ponds, into fish-bearing waters or into any place where it may enter such waters. (internal citations omitted).

⁸⁶ Submission at 15.

⁸⁷ Id. at 1, 11-12, 17 (discussing the “Proliferation of ‘EGCS’s (or ‘scrubbers’) on cruise ships in recent years” and quoting from a background document by the International Council for the Exploration of the SEA: “While a single ship with an installed scrubber may pose limited, local risk to marine ecosystem health, a global shipping community employing scrubbers to meet air emission limits is of serious concern.”).

⁸⁸ Id. at 1.

62. Canada's response elaborates on these two investigations, indicating that both were initiated in response to a potential oil slick based on satellite imagery, and that both were closed due to insufficient evidence.⁸⁹
63. The Party states that there have been 26 successful prosecutions for violations of the pollution prevention provisions of the *Fisheries Act* in the Pacific and Yukon Region over the last 10 years.⁹⁰ Of the five "notable cases" detailed in the Response as examples, none of them involve discharges of scrubber washwater from vessels into Canadian fisheries waters. The Response does not indicate whether any of the 26 prosecutions involve discharges of scrubber washwater.
64. The Response provides specific information on vessel pollution enforcement, stating that 120 enforcement activities have been conducted since 2014 in relation to vessel pollution in the Pacific and Yukon Region which represents 69 inspections, 44 administrative verifications, and seven investigations, two of which were related to cruise ships.⁹¹ The Response shares the legal basis for some of these enforcement activities, noting that 82 of them were conducted under s. 36(3) of the *Fisheries Act*,⁹² but the Response does not indicate whether any of these enforcement activities related to discharges of scrubber washwater, which is the issue raised by the Submitter.
65. During the 2023-2024 federal fiscal year, there have been 14 inspections in Pacific and Yukon Region directly related to cruise ship discharges, including scrubber washwater, and information gathering is ongoing.⁹³ The Response does not state how many of the 14 recent inspections involve scrubber washwater.
66. The Party "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." The Response notes that scrubber washwater "...contains toxic substances listed on Schedule 1 of the CEPA, including PAHs, nitrates, sulphuric acid, and heavy metals."⁹⁴
67. As part of the Party's efforts to "assess the potential impacts" of scrubber use, "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."⁹⁵ The Response discusses some of the findings of the report prepared by ICCT in 2020, specifically, some of the differences between the amount and composition of discharges from open-loop and closed-loop scrubber systems. Open-loop scrubbers typically discharge more washwater which contains polycyclic aromatic hydrocarbons (PAHs), nitrates,

⁸⁹ Response at 15-16.

⁹⁰ Id. at 14. The Response also notes on page 15 that there has been one successful prosecution and administrative monetary penalties have been issued involving three organizations in British Columbia for violation of the Disposal at Sea provisions of the *Canadian Environmental Protection Act*.

⁹¹ Id. at 15-16.

⁹² Id. at 16. Note: The Party uses the phrase "the General Prohibition of the FA" to refer to section 36(3) of the *Fisheries Act* which prohibits the deposit of deleterious substance in water frequented by fish.

⁹³ Id.

⁹⁴ Id. at 26.

⁹⁵ Id.

and heavy metals.⁹⁶ Closed-loop scrubbers typically discharge less washwater, referred to as “bleed-off water,” and it tends to contain higher concentrations of heavy metals.⁹⁷ The ICCT report notes additional differences: “[d]ischarge from open-loop scrubbers was typically more acidic than bleed-off water discharges from closed-loop systems...[and] closed-loop bleed-off water was more turbid than open-loop discharges.”⁹⁸

68. The Submitter asserts that the Party’s failure to effectively enforce s. 36(3) is resulting in pollution of the marine environment in violation of the *Fisheries Act* which is meant to conserve and protect fish and fish habitat, including by preventing pollution.⁹⁹
69. The submission describes the “ecological values that are harmed by Canada’s decision to not effectively enforce its *Fisheries Act* with respect to scrubber pollution”¹⁰⁰ and asserts there is “...harm to the marine environment—and diverse plant and animal species—arising from Canada’s lack of effective enforcement....”¹⁰¹
70. The submission specifically points to the endangered Southern Resident Killer Whale population, among other fish species, within the meaning of the *Fisheries Act*, as experiencing harm from the discharges of scrubber washwater.¹⁰² The Submitter describes the species and the area in question, including Puget Sound, the Strait of Juan De Fuca, and the Strait of Georgia, as

...a unique transboundary marine ecosystem known by Indigenous Peoples and the geographic boards of both Canada and the U.S. as the Salish Sea. It is home to the endangered southern resident killer whale population and the declining chinook salmon population on which they depend. Cruise ships also sail through the Johnstone Strait into the Great Bear Sea, another of B.C.’s unique marine ecosystems, where a threatened population of sea otters and the threatened northern resident killer whale population eke out an existence alongside dwindling salmon populations.¹⁰³

71. The Response provides data that indicates the extent to which scrubber usage has increased over the last few years following the implementation of the IMO global sulphur limit for marine fuels on 1 January 2020: “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

⁹⁶ 2020 ICCT Scrubber Report, *supra* note 23, at 29, states “...all scrubbers emit nitrates, PAHs, and heavy metals.” Canada’s response, summarizing the 2020 ICCT Report states, “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 PAH_{phe}. This washwater is low in pH and high in turbidity [sic] and contains toxic substances listed on Schedule 1 of the CEPA, including PAHs, nitrates, sulphuric acid, and heavy metals.” There is no mention of sulphuric acid in the ICCT report, only the finding that “discharge water that is more acidic and turbid than the surrounding water.”

⁹⁷ Response at 26.

⁹⁸ 2020 ICCT Scrubber Report, *supra* note 23, at 29.

⁹⁹ Response at 10.

¹⁰⁰ Submission at 2.

¹⁰¹ *Id.* at 1.

¹⁰² *Id.* at 13, 16-17, citing Elise Georgeff, Xiaoli Mao, Bryan Comer, *A whale of a problem? Heavy fuel oil, exhaust gas cleaning systems, and British Columbia’s resident killer whales*, ICCT Consulting Report, prepared for World Wildlife Fund (2019), at: <<https://wwf.ca/report/killer-whale-habitat-consulting-paper-2019>>.

¹⁰³ *Id.* at 16, citing Stand, *Covid Pandemic Results in a Cleaner Coast* (2020), page 8, at: <<https://stand.earth/resources/covid-pandemic-results-in-a-cleaner-coast>>.

unique ships operating in Canadian waters....”¹⁰⁴ Specifically, from 125 unique vessels with scrubbers in 2019 to 466 unique vessels with scrubbers in 2022.¹⁰⁵

72. The Response, relying on calculations from ECCC’s Marine Emissions Inventory Tool, also describes the associated rise in scrubber washwater discharge over the last few years,

...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 2022.¹⁰⁶

73. The Response contains a table reflecting the washwater discharged and constituent pollutants discharged from scrubbers on Canada’s West Coast, comparing 2019 and 2022. The table shows the amount of vanadium discharged from scrubbers increased from 9,140 kg in 2019 to 17,700 kg in 2022 and other pollutants like mercury increased from 7 kg to 13 kg and lead increased from 509 kg to 984 kg between 2019 and 2022, respectively.¹⁰⁷

74. The Response confirms that scrubber washwater is responsible for increasing levels of heavy metals and other pollutants in the marine environment, specifically in Killer Whale habitat,

ECCC estimates that over 26 million tonnes of scrubber washwater was discharged into SRKW critical habitat in 2022, including 69 kg of PAHphe [phenanthrene equivalent] 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.¹⁰⁸

75. Regarding the impacts of these discharges in the broader context of other pollutant in the habitat area,

ECCC estimates that marine vessel scrubbers contribute between 40-98% of the loading of priority contaminants within 300 m 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.¹⁰⁹

¹⁰⁴ Response at 26.

¹⁰⁵ Id. at 28, Table 1.

¹⁰⁶ Id. at 28.

¹⁰⁷ Id. at 28, Table 1.

¹⁰⁸ Id. at 29. Note: The United States Environmental Protection Agency has explained why PAHs are often measured in phenanthrene equivalents (“PAHphe”) when analyzing scrubber washwater: “While a set of 16 PAHs is customarily analyzed and measured as individual chemicals, the IMO Guidelines set the washwater criteria for PAH in phenanthrene equivalents. The rationale for this is unclear but may be that measuring PAH is a surrogate for hydrocarbons and phenanthrene was found to be the most abundant PAH in the analysis of washwater during trials on the *Pride of Kent*.” United States Environmental Protection Agency, Office of Wastewater Management, Exhaust Gas Scrubber Washwater Effluent, EPA-800-R-11-006, (November 2011) page 31, at: <https://www3.epa.gov/npdes/pubs/vgp_exhaust_gas_scrubber.pdf>.

¹⁰⁹ Response at 29.

76. The Response acknowledges that Fisheries and Oceans Canada has identified environmental contaminants "...as a key threat to viability and recovery of Killer Whale populations."¹¹⁰
77. The ICCT Report, cited by both the Submitter and the Party, provides an explanation of how discharges of washwater may affect marine life:
- PAHs are carcinogenic and heavy metals are toxic, and both can accumulate in the water, sediments, and marine life. They bioaccumulate up the food chain and have been linked to cancer and immune system suppression in marine mammals including in killer whales and belugas. Open-loop systems emit substantially more PAHs than closed-loop systems, often orders of magnitude higher, whereas closed-loop systems tended to emit more heavy metals....¹¹¹
78. The *Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada*, produced by Fisheries and Oceans Canada and cited in the Response, states that "Some [trace metals], such as cadmium, mercury, copper and lead may have toxic effects even at relatively low concentrations, and could impact Killer Whales, although effects on their prey and/ or habitat are more likely."¹¹² The report also noted although that PAHs are persistent and are carcinogenic, it listed them as not bioaccumulating.¹¹³
79. The Response also notes that "[a]ccording 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."¹¹⁴
80. Having considered the information in the submission in light of Canada's response, the Secretariat finds that the Party acknowledges that vessels are depositing scrubber washwater, which contains PAHs, nitrates, and heavy metals, into the waters off the coast of Canada which are frequented by fish.¹¹⁵ The Party also acknowledges that it has not made regulations applicable to vessel exhaust gas cleaning systems under s. 36(4) the *Fisheries Act*.¹¹⁶ The Secretariat determines that the Response leaves open central questions raised in the submission regarding whether scrubber washwater meets the definition of a "deleterious substance" under the *Fisheries Act*, considering data from the Party showing that such discharges are introducing pollutants into the marine environment.¹¹⁷ The Secretariat determines that the Response also leaves open central questions regarding the Party's enforcement of s. 36(3) of the *Fisheries Act* with respect to discharges of scrubber washwater into waters frequented by fish that would benefit from the development of a factual record.

¹¹⁰ Id. at 28, citing Fisheries and Oceans Canada, *Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada* (2018), at: <https://wildlife-species.az.ec.gc.ca/species-risk-registry/virtual_sara/files/plans/Rs-ResidentKillerWhale-v00-2018dec-Eng.pdf>.

¹¹¹ 2020 ICCT Scrubber Report, *supra* note 23, at 29.

¹¹² Fisheries and Oceans Canada, *Recovery Strategy for the Northern and Southern Resident Killer Whales (Orcinus orca) in Canada*. Species at Risk Act Recovery Strategy Series, Ottawa (2018) page 22.

¹¹³ Id. at 20, Table 1.

¹¹⁴ Response at 28-29.

¹¹⁵ Id. at 26-28.

¹¹⁶ Id. at 10.

¹¹⁷ Id. at 26-29.

81. Given the increasing use of scrubbers and the increasing volume of washwater discharges in recent years, as discussed in the Response,¹¹⁸ the Secretariat believes a factual record could present information about the current state of research in this area, exploring the effects of scrubber washwater, including its pollutant components, on fish and the marine environment.
- ii. Failure to effectively enforce the *Canada Shipping Act* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.**
82. The Submitter asserts that Canada is failing to effectively enforce the *Shipping Act* to regulate marine pollution. The submission references and describes several sections of the *Shipping Act* that authorize the creation of regulations and interim orders to protect the marine environment from pollution and risks and that prohibit discharges of prescribed pollutants except in accordance with regulations or a permit.¹¹⁹
83. The submission references section 35.1(1) of the *Shipping Act* which authorizes the creation of regulations for “the protection of the marine environment from the impacts of navigation and shipping activities”, and section 35(1)(d) which authorizes the Government of Canada to make regulations implementing MARPOL and other treaties, including stricter standards than those in the international agreements.¹²⁰
84. Additionally, the submission notes that the Minister of Transport could introduce an interim order under section 10.1(1), containing any provision that could be contained in a regulation, if the Minister “...believes that immediate action is required to deal with a direct or indirect risk to marine safety or to the marine environment.”¹²¹ The submission cites the 2022 Ship Safety Bulletin, providing environmental measures for cruise ships in Canadian waters¹²² and the *Interim Order Respecting the Discharge of Sewage and the Release of Greywater by Cruise Ships in Canadian Waters*¹²³ as examples of recent actions by the Party to address vessel discharges into the marine environment. The submission notes that while the 2022 bulletin provided voluntary measures related to the treatment and discharge of sewage and greywater

¹¹⁸ Response at 26-28.

¹¹⁹ Submission at 6-8.

¹²⁰ Id. at 7.

¹²¹ *Canada Shipping Act, 2001*, SC 2001, s. 10.1(1) [*Shipping Act*], available at: <<https://www.canlii.org/en/ca/laws/stat/sc-2001-c-26/latest/sc-2001-c-26.html>>.

¹²² Transport Canada, New environmental measures for cruise ships in waters under Canadian jurisdiction – 2022 season, *Ship Safety Bulletin SSB No.:10/2022* (April 12, 2022; modified August 18, 2022), at: <<https://tc.canada.ca/en/marine-transportation/marine-safety/ship-safety-bulletins/new-environmental-measures-cruise-ships-waters-under-canadian-jurisdiction-2022-season-ssb-no-10-2022-modified-august-18-2022>> (providing “new non-mandatory environmental measures” related to related to the treatment and discharge of sewage and greywater and noting that “Transport Canada...will initiate further engagement with the entire shipping industry and any interested partners to develop and implement further discharge measures for other areas of concern, such as scrubber discharges.”).

¹²³ *Interim Order Respecting the Discharge of Sewage and the Release of Greywater by Cruise Ships in Canadian Waters*, (June 9, 2023), at: <<https://tc.canada.ca/en/ministerial-orders-interim-orders-directives-directions-response-letters/interim-order-respecting-discharge-sewage-release-greywater-cruise-ships-canadian-waters>>.

- and the 2023 interim order established mandatory measures for sewage discharge and greywater release,¹²⁴ neither one covered discharges of scrubber washwater.¹²⁵
85. Finally, the submission cites section 187 of the *Shipping Act*¹²⁶ which prohibits any person or vessel from discharging a prescribed pollutant,¹²⁷ except in accordance with regulations under Part 9 of the *Shipping Act*¹²⁸ or a permit granted under CEPA.¹²⁹ Section 187 is in Part 9 of the *Shipping Act* which is focused on pollution prevention and “applies in respect of vessels in Canadian waters or waters in the exclusive economic zone of Canada.”¹³⁰
86. Canada’s Response lists and summarizes the provisions of the *Shipping Act* raised in the submission.¹³¹ The Response explains TC’s inspection and oversight regime (1) the Port State Control Program for foreign vessels and (2) the Domestic Vessel Regulatory Oversight Program for vessels registered in Canada.¹³²
87. Regarding the relationship between international standards and domestic law, the Response explains that “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.” And

¹²⁴ *Vessel Pollution and Dangerous Chemicals Regulations*, SOR/2012-69, s. 131.1(1) [*Vessel Pollution and Dangerous Chemicals Regulations*], available at: <<https://www.canlii.org/en/ca/laws/regu/sor-2012-69/latest/sor-2012-69.html>> (“**greywater** means drainage from sinks, laundry machines, bath tubs, shower-stalls or dishwashers. It does not include sewage, or drainage from machinery spaces or workshop areas. (*eaux grises*).”).

¹²⁵ Submission at 9.

¹²⁶ *Shipping Act*, s. 187 (“No person or vessel shall discharge a prescribed pollutant, except in accordance with the regulations made under this Part or a permit granted under Division 3 of Part 7 of the *Canadian Environmental Protection Act, 1999*.”).

¹²⁷ The relevant definition of “pollutant” is provided in s. 185 of the *Shipping Act* as:

(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.

It includes oil, hazardous and noxious substances and any substance or class of substances that is prescribed for the purpose of Part 8 (Pollution Prevention and Response — Department of Transport and Department of Fisheries and Oceans) to be a pollutant. (*polluant*)

¹²⁸ Such regulations could be made pursuant to s. 190(1) of the *Shipping Act* regarding protection of the marine environment, including regulations that prescribe pollutants for section 187 and subsection 189(1) and provide the circumstances in which such pollutants may be discharged.

¹²⁹ *Canadian Environmental Protection Act*, Part 7, Division 3.

¹³⁰ *Shipping Act*, s. 186(1).

¹³¹ Response at 17-18.

¹³² *Id.* at 20.

“[t]he Port State Control Program obtains its authority to inspect and enforce operations of foreign vessels pursuant to the CSA 2001, subsection 211(1).”¹³³

88. The Party provides details on the Port State Control Program’s inspections of foreign vessels and results over the last 10 years:

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.¹³⁴

89. For vessels registered in Canada, “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).”¹³⁵
90. The Response explains each type of inspection for vessels registered in Canada,¹³⁶ and notes that “Recognized Organizations” may be authorized “...to carry out inspections or issue Canadian Maritime documents on TCs behalf,” per s. 12(1) of the *Shipping Act*.¹³⁷
91. The Response provides no data on deficiencies or corrective actions for Canadian vessels. It states that actions to address non-compliance with the *Shipping Act* are taken in accordance with TC’s Enforcement Policy, which “...implements a graduated, risk-based, consistent, and transparent set of actions to encourage compliance before moving to enforcement.” The Response notes that “[p]ossible enforcement measures are to issue a detention order, direct a vessel, enter into an assurance of compliance, issue an administrative monetary penalty, or prosecution.”¹³⁸
92. Having considered the information in the submission in light of Canada’s response, the Secretariat determines the Response leaves open central questions raised in the submission regarding whether scrubber washwater meets the definition of “pollutant” under the *Shipping Act*. The Secretariat also determines the Response leaves open central questions regarding the Party’s enforcement of the prohibition in s. 187 of the *Shipping Act* with respect to scrubber washwater, particularly regarding Canadian vessels for which no enforcement-related data is provided.
93. The Secretariat believes that a factual record could present information related to the enforcement of s. 187, including the use of enforcement tools and measures like interim orders under subsection 10.1(1) of the *Shipping Act*. The Secretariat has recommended factual records, and the Council has previously “...instructed preparation of factual records that have presented facts regarding the manner in which a government exercises its discretion, so as to

¹³³ Id.

¹³⁴ Id at 21.

¹³⁵ Id.

¹³⁶ Id.

¹³⁷ Id. at 22.

¹³⁸ Id.

allow interested persons to reach their own conclusions as to whether the government's exercise of its discretion constitutes a failure to effectively fulfill its obligations."¹³⁹

iii. Failure to effectively enforce the *Vessel Pollution and Dangerous Chemicals Regulations* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.

94. The Submitter asserts that Canada is failing to effectively enforce the *Vessel Pollution and Dangerous Chemicals Regulations* (VPDCR), enacted pursuant to the *Shipping Act* and meant to regulate discharges of scrubber washwater in line with Canada's obligations under MARPOL.¹⁴⁰
95. The submission references sections 111(6) and 111.2 of the VPDCR which govern the discharge of residues and washwater from exhaust gas cleaning systems. These sections provide requirements for scrubbers and incorporate by reference the IMO's 2009 Guidelines for Exhaust Gas Cleaning Systems, which include criteria for washwater, monitoring and recording requirements, as well as requirements for testing, monitoring, and recording exhaust gas cleaning systems.¹⁴¹
96. The submission also references and describes other sections of the VPDCR that provide a definition for "prescribed pollutant," authorize the discharge of certain substances under certain circumstances, exemptions for certain vessels, regulate air pollution from vessels, prohibit the discharge of "pollutant substances" except in certain circumstances, regulate greywater discharges, and require reporting of pollutant discharges.¹⁴²
97. Notably, section 132 requires master of a vessel in waters under Canadian jurisdiction to "...report any discharge or anticipated discharge from the vessel if the discharge or anticipated discharge is prohibited by section 187 of the Act or by these Regulations..."¹⁴³ Similarly, for a Canadian vessel in waters that are not under Canadian jurisdiction, the master of the vessel "...must report any discharge or anticipated discharge from the vessel of oil, a noxious liquid substance carried in bulk or a marine pollutant that is not carried in bulk if the discharge or anticipated discharge is prohibited by section 187 of the Act or by these Regulations..."¹⁴⁴
98. Canada responds that the VPDCR were created pursuant to the Pollution Prevention and Response Provisions of the *Shipping Act* and "...enacted to introduce strict environmental standards to help prevent deliberate, negligent, and accidental discharge of vessel-source pollutants into Canadian waters."¹⁴⁵ The VPDCR apply to "vessels in waters under Canadian jurisdiction and Canadian vessels everywhere."¹⁴⁶

¹³⁹ *Coal-fired Power Plants*, *supra* note 74, at 27.

¹⁴⁰ Submission at 8-9

¹⁴¹ *Id.* at 8.

¹⁴² *Id.* at 7-9.

¹⁴³ *Vessel Pollution and Dangerous Chemicals Regulations*, s. 132(1)(a).

¹⁴⁴ *Vessel Pollution and Dangerous Chemicals Regulations*, s. 132(2)(a).

¹⁴⁵ Response at 18.

¹⁴⁶ *Vessel Pollution and Dangerous Chemicals Regulations*, s. 3(1).

99. The Response explains that "...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 and that relate to matters that are within the scope of the CSA 2001."¹⁴⁷
100. The Response states that the IMO developed the 2021 Guidelines for Exhaust Gas Cleaning Systems "...to allow for the testing, survey, certification, and approval of EGCS in accordance with Regulation 4 of MARPOL Annex VI."¹⁴⁸ Notably, Canada's *Vessel Pollution and Dangerous Chemicals Regulations* still implement and incorporate by reference the IMO's 2009 Guidelines for Exhaust Gas Cleaning Systems,¹⁴⁹ rather than the 2021 Guidelines for Exhaust Gas Cleaning Systems.¹⁵⁰
101. The data referenced in paragraph 88 above related to the Port State Control Program's inspections and results over the last 10 years for foreign vessels is relevant to the VPDCR assertions. The data demonstrates that the Party is taking action to enforce MARPOL Annex VI and inspecting EGCS on foreign vessels to determine if there are deficiencies requiring corrective actions.¹⁵¹
102. The Response provides no data on enforcement of the VPDCR in terms of deficiencies or corrective actions for Canadian vessels. There is no information on whether the Vessel Safety Certificate Regulations incorporate the VPDCR and whether the other types of inspections outlined in the Response ensure Canadian vessels are in compliance with the VPDCR.¹⁵²
103. Having considered the information in the submission in light of Canada's response, the Secretariat finds the Response leaves open some questions regarding how the Vessel Safety Certificate Regulations and inspection processes verify that Canadian vessels are in compliance with sections 111(6) and 111.2 of the VPDCR. However, the Secretariat also finds that these questions are operational in nature and do not relate to the central questions raised in the submission regarding the discharge of scrubber washwater from vessels.
104. Having considered the information in the submission in light of Canada's response, the Secretariat finds the Response leaves open central questions raised in the submission regarding enforcement of s. 132 of the VPDCR, concerning reports of any discharge or anticipated discharge prohibited by s. 187 of the *Shipping Act*, that would benefit from the development of a factual record.

¹⁴⁷ Response at 18.

¹⁴⁸ Id. at 19-20.

¹⁴⁹ See *Vessel Pollution and Dangerous Chemicals Regulations*, ss. 111(6), 111.2. International Maritime Organization, Marine Environment Protection Committee, "2009 Guidelines for Exhaust Gas Cleaning Systems," Resolution MEPC.184(59), Annex 9 (17 July 2009), at: <[https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.184\(59\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.184(59).pdf)>.

¹⁵⁰ International Maritime Organization, Marine Environment Protection Committee, "2021 Exhaust Gas Cleaning Systems Guidelines," Resolution MEPC.340(77), Annex 1 (26 November 2021), at: <[https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.340\(77\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MEPCDocuments/MEPC.340(77).pdf)>.

¹⁵¹ Response at 20.

¹⁵² Id. at 21 (listing types of inspections as mandatory, risk-based, and part of concentrated inspection campaigns).

iv. Failure to effectively enforce the *Wastewater Systems Effluent Regulations* to regulate marine pollution from vessels.

105. The Submitter cites the *Wastewater Systems Effluent Regulations*, asserting that the Party has “[r]egulations governing the discharge of deleterious substances in wastewater...” that “...include[e] an application procedure for authorizing discharges pursuant to s. 36(4) of the *Fisheries Act*”¹⁵³ as part of its assertions that Canada is failing to effectively enforce the *Fisheries Act* to address scrubber washwater discharges.¹⁵⁴
106. Canada responds that the cited regulations only apply to “...land-based wastewater systems, not ship based pollution.”¹⁵⁵
107. The Secretariat finds that the cited regulations are not relevant to the assertions in the submission because they are not applicable to wastewater discharges from vessels.

V. NOTIFICATION

108. Having reviewed submission SEM-23-007 (*Vessel Pollution in Pacific Canada*) in the light of the response from Canada, the Secretariat finds that central questions remain open in relation to the discharge of washwater from exhaust gas cleaning systems on vessels and recommends the development of a factual record with regard to the effective enforcement of the *Fisheries Act*, *Canada Shipping Act*, and *Vessel Pollution and Dangerous Chemicals Regulations*, specifically:
- a. Whether Canada is effectively enforcing ss. 36(3), 38(3), 40(2)(a), and 40(2)(b) of the *Fisheries Act* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.
 - b. Whether Canada is effectively enforcing ss. 10.1(1), 187, 191(1), and 191(3) of the *Canada Shipping Act* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.
 - c. Whether Canada is effectively enforcing s. 132 of the *Vessel Pollution and Dangerous Chemicals Regulations* with regard to the discharge of washwater from exhaust gas cleaning systems on vessels.
109. Pursuant to CUSMA Article 24.28(1), the Secretariat hereby notifies the CEC Council and the Environment Committee created under CUSMA Chapter 24 of its determination that in the interests of achieving the goals of Chapter 24 of the Agreement, a factual record is warranted and should be developed with respect to submission SEM-23-007 (*Vessel Pollution in Pacific Canada*).
110. Pursuant to CUSMA Article 24.28(2), the Secretariat “shall prepare a factual record if at least two members of the Council instruct it to do so.”

¹⁵³ Submission at 4.

¹⁵⁴ Id.

¹⁵⁵ Response at 4, 10.

Respectfully submitted for your consideration,

Secretariat of the Commission for Environmental Cooperation

(original signed)

Per: Jorge Daniel Taillant
Executive Director

cc: Sandra McCardell, Alternate Representative of Canada
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