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Via email: MSSRegulations-ReglementsSSM@tc.gc.ca

January 19, 2025

RE: Submission on Let's Talk Transportation - Scrubber Systems in Canada

I. INTRODUCTION

West Coast Environmental Law Association (WCELA) is dedicated to safeguarding the environment through law. Since 1974, our staff lawyers have successfully worked to develop proactive legal solutions to protect and sustain the environment. Our marine program seeks to strengthen Canada's legal framework for ocean conservation.

In 2021, WCELA and Stand.earth released *Regulating the West Coast Cruise Industry: Canada at the Low Water Mark*, a report on Canada's regulation of the discharge of pollution from the Pacific Coast cruise ship industry.¹ The report found significant gaps in Canada's regulations and highlighted, in particular, Canada's failure to regulate the dumping of scrubber washwater from cruise ships, which was a growing issue on the Pacific coast.

Our submission below outlines concerns over the impacts of scrubber washwater, gaps in the existing regulatory framework, and our recommendation for a ban on scrubber discharges. In addition to this submission, WCELA endorses the submission of WWF-Canada to the scrubber systems in Canada consultation.

II. CONCERNS OVER IMPACTS OF SCRUBBER WASHWATER

The discharge of scrubber washwater is a very recent phenomenon that has arisen in response to a new international legal limit on the sulphur content of ship fuel, introduced by the International Maritime Organization (IMO) in 2020.² The regulations allow vessels to comply with this limit through the use of exhaust gas cleaning systems, or scrubbers, which remove sulphur oxides from ship exhaust and mix them with

¹ West Coast Environmental Law and Stand.earth, [Regulating the West Coast Cruise Industry: Canada at the Low Water Mark](#) (2021).

² *International Convention for the Prevention of Pollution from Ships*, November 2, 1973, 12 ILM 1319 (never entered into force); *Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973*, February 17, 1978, 1340 UNTS 184 (entered into force November 26, 1983), Annex VI, Regulation 14.1 [MARPOL].

seawater, which is then discharged into the ocean.³

Scrubber wastewater accounts for the vast majority of vessel discharges in Canada. A recent report from WWF-Canada found that 97% of the total waste being dumped by ships into Canadian waters was scrubber washwater.⁴ The volume of scrubber wastewater discharges on Canada's Pacific coast doubled between 2019 and 2022, from 44 million tonnes to 88 million tonnes.⁵

Recent studies have demonstrated the toxicity of scrubber washwater. Scrubber washwater in the Canadian Pacific is known to contain contaminants such as polycyclic hydrocarbons, nitrates, and metals including vanadium, nickel, copper, cadmium, mercury, and lead.⁶ Studies of the impacts of scrubber washwater on marine life have demonstrated a negative effect on invertebrates in dilutions as low as 1 part per million (ppm) and in other species such as mussels, polychaetes, and crustaceans and dilutions of 10ppm.⁷ These impacts include reduced fertilization, reduced egg production, and caused deformations and abnormal development of species larvae.⁸ Effluents from scrubber discharges were found to remain at harmful concentrations from 2 to 10 days from the time of discharge, in areas from 10 to 30 km beyond shipping lanes.⁹

Canada's Pacific waters are particularly at risk from scrubber washwater because of the growing Alaskan cruise ship industry. Cruise ships, which were early adopters of scrubbers, produce most of this scrubber washwater. While cruise ships account for only 2% of ships in Canadian waters, they account for nearly 46% of scrubber washwater discharges.¹⁰ Given the growing size of the Alaskan cruise ship industry on the BC coast, a disproportionate amount of this waste is generated in Canada's Pacific waters.

A significant amount of scrubber washwater discharges on the Pacific coast occur within sensitive marine habitats, including in marine protected areas (MPAs) and in critical habitat areas for species at risk. For example, WWF-Canada has found that the three MPAs where the highest amounts of waste were being generated were all on the west coast of Canada.¹¹ Additionally, Canada has estimated that over 26 million tonnes of scrubber washwater were discharged into southern resident killer whale critical habitat in 2022.¹²

³ *Ibid*, Annex VI, Regulation 4.

⁴ WWF-Canada, [National Vessel Dumping Assessment: Quantifying the threat of ship waste to Canada's marine protected areas](#), prepared by Davin S, Saunders S, Liang C, Merritt W. (World Wildlife Fund Canada, 2022) at p 5.

⁵ IMO MEPC 82/5/4 (26 July 2024), "EGCS pollution in Pacific Canada: investigation of Canada", submitted by FOEI, WWF, CSC and Pacific Environment at para 12.

⁶ Commission for Environmental Cooperation, (12 April 2024), [VESSEL POLLUTION IN PACIFIC CANADA Government of Canada Response to Submission SEM 23-007](#), prepared by: Environment and Climate Change Canada for the Government of Canada at p 28.

⁷ IMO MEPC 81/INF.21 (12 January 2024), "Environmental impact assessment of EGCS effluents", submitted by Finland at para 13.

⁸ *Ibid* at para 14.

⁹ *Ibid* at paras 18, 19.

¹⁰ WWF-Canada, *supra* note 4, at p 7; Commission for Environmental Cooperation, *supra* note 6, at p 28.

¹¹ WWF-Canada, *supra* note 4, at p 8.

¹² Commission for Environmental Cooperation, *supra* note 6, at p 29.

Communities across British Columbia are deeply alarmed about the threat posed by scrubber washwater being dumped at a massive scale in Pacific waters. In 2022, the Union of British Columbia Municipalities passed a unanimous resolution calling for action to prevent the discharge of scrubber washwater on the west coast.¹³ Both the Port of Vancouver and the Port of Prince Rupert have banned the dumping of scrubber washwater in their waters.

III. GAPS IN THE CURRENT REGULATORY FRAMEWORK

Currently, there are no binding international regulations governing scrubbers. The IMO has issued two guideline documents, including the 2021 Guidelines for Exhaust Gas Cleaning Systems and the 2022 Guidelines for Risk and Impact Assessments of the Discharge Water from Exhaust Gas Cleaning Systems.¹⁴ The 2022 Guidelines advise States to consider restrictions or a ban on scrubber discharges when they pose an additional risk of deteriorating the marine environment.¹⁵ The 2022 Guidelines also advise States to consider restricting or banning scrubber discharge where it would conflict with obligations under other international laws, specifically naming Article 195 of the *United Nations Convention on the Law of the Sea*, which prohibits transforming one type of pollution into another.¹⁶

In response to growing concerns over the impact of scrubber washwater, and in the absence of international regulations, many jurisdictions have banned or restricted scrubber discharge around the world, including Finland, Denmark, France, Belgium, and California.¹⁷ Five of Canada's seventeen port authorities have also imposed restrictions. The absence of Canadian federal restrictions on scrubber washwater is conspicuous.

In Canada, scrubbers are currently regulated under the *Canada Shipping Act, 2001*, and particularly the *Vessel Pollution and Dangerous Chemicals Regulations*.¹⁸ Section 111.1 of these regulations imposes limits on sulphur emissions and permits the use of exhaust gas cleaning systems, or scrubbers, to meet these limits, in alignment with the IMO's 2009 Guidelines for Exhaust Gas Cleaning Systems.¹⁹ The regulations do not otherwise restrict discharges of scrubber washwater.

Transport Canada does not currently restrict the discharge of scrubber washwater within MPAs. In 2023, Canada adopted a Marine Protected Areas (MPA) Protection Standard "to provide greater consistency and

¹³ Union of BC Municipalities, [Resolution NR47: Protecting BC Coasts from Acidic Washwater Dumping](#) (2022).

¹⁴ IMO MEPC, "2021 Guidelines for Exhaust Gas Cleaning Systems", Resolution MEPC.340(77) (26 November 2021); IMO MEPC, "2022 Guidelines for Risk and Impact Assessments of the Discharge Water from Exhaust Gas Cleaning Systems", MEPC.1/Circ.899 (10 June 2022).

¹⁵ *Ibid* at para 7.4.

¹⁶ United Nations Convention on the Law of the Sea, December 10, 1982, 1833 UNTS 3 (entered into force November 16, 1994, ratified by Canada November 7, 2003).

¹⁷ NorthStandard, "[No Scrubs: Countries and Ports where Restrictions on EGCS Discharges apply](#)", (31 December 2024).

¹⁸ SC 2001, c 26; SOR/2012-69.

¹⁹ IMO MEPC, "2009 Guidelines for Exhaust Gas Cleaning Systems", Resolution MEPC.184(59) (17 July 2009).

clarity on prohibited activities in federal MPAs.”²⁰ The standard proposed “additional limitations or prohibitions” for certain vessel discharges, including scrubber washwater, up to 12 nautical miles in existing and new MPAs.²¹ However, no measures to address scrubber washwater have thus far been developed.

In 2023, Transport Canada introduced an *Interim Order Respecting the Discharge of Sewage and the Release of Greywater by Cruise Ships in Canadian Waters*, which was updated in 2024. As the name indicates, this order restricts discharges of greywater and sewage, but not scrubber washwater, despite scrubber effluent making up the majority of cruise ship discharges.

The result is that Canada is permitting commercial vessels, including cruise ships, to dump significant amounts of wastewater into some of the most unique and important marine ecosystems in the country, waters that we rely on for fish and other seafood. These discharges also occur in the vicinity of many coastal communities. Many of the First Nations, communities, and regions where this dumping occurs receive little financial benefit from these industries.

IV. RECOMMENDATION: TRANSPORT CANADA SHOULD BAN THE DISCHARGE OF SCRUBBER WASHWATER

WCELA recommends that Transport Canada should ban open-loop and close-loop scrubber discharges in Canada’s territorial waters and internal waters. Cruise ships, which are responsible for a disproportionate amount of scrubber washwater should be prioritized for this ban. Transport Canada should implement this ban as quickly as possible through an interim ministerial order under the *Canada Shipping Act, 2001*, followed by measures in regulation. WCELA also recommends that, while legal restrictions are in development, Transport Canada should pursue voluntary restrictions with commercial vessels to address the harms caused by scrubbers immediately.

V. CONCLUSION

We thank you for the opportunity to contribute to the discussion on protecting Canadian waters from scrubber discharges and look forward to continuing to engage on this important topic.

²⁰ Government of Canada, [Federal Marine Protected Areas Protection Standard](#) (Fisheries and Oceans Canada, 2023).

²¹ *Ibid* at 8.