



January 26, 2021

Dr. Marcos A. Orellana
Special Rapporteur on Hazardous Substances and Wastes
U.N. Office of the High Commissioner for Human Rights
VIA email: srtoxicshr@ohchr.org

Re: SR Toxics/IMO

I. Introduction

Kawerak, Inc. and Ocean Conservancy are grateful for the opportunity to submit information relevant to your analysis and assessment of the International Maritime Organization's (IMO) efforts to regulate hazardous substances, wastes and toxics. While this joint submission includes examples from the Northern Bering Sea and Bering Strait region, it also addresses broader issues and gaps related to IMO's responsibility to implement anti-pollution conventions.

Kawerak, Inc. is a regional Tribal consortium composed of 20 federally recognized Tribes in the Bering Strait region with its main office in Nome, Alaska, USA. Kawerak strives in advancing the capacity of its people and Tribes for the benefit of the region. As Arctic marine transits increased in the last decade through ice-free Arctic waters, Kawerak engaged in important local, regional, national, and international discussions to lessen potential impacts to our traditional way of life.

Ocean Conservancy is a nonprofit marine conservation organization headquartered in Washington, DC, with regional offices and staff throughout the United States, including in Anchorage, Eagle River and Juneau, Alaska, USA. Ocean Conservancy works to protect the ocean from today's greatest global challenges, creating science-based solutions for a healthy ocean and the wildlife and communities that depend on it.

The sections below address different topics suggested in the call for submissions. Each topic addresses impacts to local communities and weaknesses or gaps in IMO conventions or the implementation of those conventions. When possible, we recommend areas for improvement or additional research.

With respect to all these topics, we underscore the urgent need for policymakers to engage meaningfully with Indigenous peoples, who—despite their desire to be included—have been largely left out of Arctic Policy discussions and decision-making, especially at the international level. Policymakers must plan and carry out community engagement activities designed to identify solutions that have the greatest potential for local sustainability

II. The people of the Bering Strait and a changing marine environment

The U.S. Arctic terrestrial region is home to Indigenous communities whose residents belong to Iñupiaq, Central Yupik, Saint Lawrence Island Yupik, Alutiiq, and Aleut cultural groups. Arctic people rely upon a vast array of rich resources using knowledge gained from Indigenous perspectives that have been developed over thousands of years—since at least the time of “killigvak” or mammoth, and perhaps as early as when lava flowed on the Seward Peninsula 70,000 years ago. Though we may not know how long people have lived in the Bering Strait region, we do know that a sustainable life of fishing, hunting, and gathering as maritime experts has allowed a rich culture to thrive. Traditional knowledge of the region has shed light into how ecosystems performed in the past and how humans interacted with changes over that time. That knowledge is still used to this day to cope and adapt with the climate crisis across the globe and significantly impacting the Indigenous way of life.

Arctic peoples today rely on living marine resources as a source of fresh and healthy food; for material for clothing, equipment and handicrafts; to support limited commercial fishing, hunting and ecotourism activities. At the same time, climate change and ocean warming are transforming the region. In the last few years, pelagic fish have moved north, increased sea-bird die-offs, harmful algal blooms and marine mammal strandings. Growing vessel traffic could lead to additional adverse impacts on the marine ecosystem—including pollution, ship strikes, commercial fisheries interactions, noise pollution and migration pattern changes—that further jeopardize food security.

III. Oil and hazardous substances

Despite international conventions designed to prevent the release of oil and other hazardous substances from ships, these types of pollution remain all too common. Whether through deliberate action, mechanical failures or human error, vessels continue to release oil and hazardous substances into the ocean.

Oil spill events are frequent in the waters off the coast of Western Alaska, even if the source of the spills cannot always be identified.¹ Some of these spills have directly impacted subsistence resources such as marine mammals. For instance, late in 2012, authorities confirmed sightings of oiled marine life near the St. Lawrence Island communities of Gambell and Savoonga, but could not determine the source of the discharge.² The incident prompted issuance of an advisory to subsistence users in the area.³ The frequency of spills reveals gaps in the effectiveness of IMO conventions, or at least the ability to effectively enforce and track violations.

Ocean Conservancy and Kawerak, along with other NGOs and Indigenous organizations, worked for five years to ban heavy fuel oil (HFO)—the world’s dirtiest fuel—for use and carriage for use in the Arctic. While IMO’s Marine Environment Protection Committee (MEPC) approved a ban in November 2020, the ban included various exemptions and loopholes that will allow HFO to be used in the region until 2029. These loopholes leave Arctic waters, Indigenous communities and wildlife at risk of a HFO spill for another decade.

We urge the IMO to implement a full HFO ban by 2024; without waivers and exemptions. More broadly, the frequency and impact of fossil fuel spills is further evidence of the need for the IMO to take bolder, faster action to shift the shipping sector toward renewable fuels.

III. Wastewater

Discharges of sewage and grey water can lead to oxygen depletion, spread pathogenic bacteria and viruses, and increase nutrient levels in the surrounding ecosystem, possibly leading to toxic algal blooms and eutrophication that can cause harmful disturbances throughout food chains. The increase of nutrients is of particular concern in cold Arctic marine ecosystems where the cold water inhibits decomposition of nutrients. People consuming marine resources can contract a range of illnesses from contaminated waters and through transference of ingested food. This is of particular concern considering the number of Indigenous people who heavily rely on marine resources in their diet.

We applaud the current work to amend MARPOL Annex IV by addressing concerns over the lack of effectiveness of current sewage treatment regulation, by incorporating record keeping, sampling and monitoring to ensure sewage treatment performance. However, there should be further protections for the Arctic—untreated sewage and grey water should not be allowed to be discharged within Polar Code-defined waters.

There are no provisions in MARPOL or the Polar Code regarding grey water, even though grey water can be just as detrimental to the marine environment as raw sewage. Grey water may contain bacteria, metals, chemicals, pathogens, food waste, and high concentrations of nutrients

¹ See, e.g., Nuka Research and Planning LLC, *Bering Sea Vessel Traffic Risk Analysis* (Dec. 2016), at 21 (summarizing statistics of oil spills in the Bering Sea and Aleutian Islands). Available at <https://oceanconservancy.org/wp-content/uploads/2017/01/bering-sea-vessel-traffic-1.pdf>.

² Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, *St. Lawrence Oiled Wildlife Incident Situation Report* (Dec. 12, 2012), available at <https://dec.alaska.gov/spar/ppr/spill-information/response/2012/18-stlawrence/>.

³ Unified Command, *St. Lawrence Oiled Wildlife Incident Subsistence Advisory for St. Lawrence Island* (Nov. 9, 2012), available at <https://dec.alaska.gov/spar/ppr/spill-information/response/2012/18-stlawrence/>.

such as nitrogen and phosphorus. Fecal coliform concentrations in untreated vessel grey water have been found to be higher than untreated domestic wastewater.

Effluent from gas cleaning systems (EGCSs), also known as scrubbers, also poses a threat to the marine environment. Scrubbers remove sulphur oxides (SO_x) from exhaust gases emitted by ships, and open-loop systems dump the resulting washwater directly into the ocean. Polycyclic aromatic hydrocarbons (PAH) and heavy metals from scrubber effluent, and its acidic nature, may detrimentally affect species and the surrounding ecosystems. While open-loop, closed-loop, and hybrid system discharge comply with IMO guidelines, they still discharge acidic and turbid water. These concerns have led to unilateral decisions of some countries (like China and Singapore) to ban their use in national port areas. The broader question of protecting sensitive ecosystems like the Arctic has not been effectively addressed at the IMO.

Going forward, the IMO should continue its work to amend MARPOL Annex IV to strengthen monitoring and treatment of sewage, prohibit discharges of both sewage and grey water in Arctic waters, and to better protect sensitive ecosystems from the potential impact of discharge from scrubbers by prohibiting scrubber discharges in Arctic waters.

IV. Marine debris

Marine debris is an increasing problem in Arctic waters. In the summer and fall of 2020, residents of Alaska's Seward Peninsula and St. Lawrence Island experienced a major influx of foreign marine debris. While characteristics of the debris suggested that it originated from foreign vessels,⁴ local people were left to cope with the pollution and bear the costs of cleanup on their own.⁵ While MARPOL prohibits the intentional dumping of plastics and hazardous materials into the ocean, it has not prevented vessels from contributing to a substantial and growing marine debris problem—one that is affecting even relatively remote Arctic waters.

While we applaud recent action taken by the IMO to address marine plastic litter from ships, we encourage the IMO to take stronger action to reduce marine debris from Arctic vessel traffic. Marine debris is a seriously harmful contributor to marine pollution in remote Arctic waters. This can be addressed specifically as part of its marine plastic litter Action Plan and it must occur by strengthening international cooperation.

V. Climate change/emissions

As noted above, the climate crisis is having profound impacts on the Arctic region, including potential partial ecological collapse. Greenhouse gas emissions from international shipping account for roughly 3% of the global total, but are not included in the Paris Agreement. Although the IMO has proposed weak short-term measure to reduce greenhouse gas emissions from the shipping industry, carbon dioxide emissions from shipping will continue to grow as much as 15% the coming decade, contradicting the targets in IMO's own Initial GHG Strategy. Unless IMO changes course soon, its actions will not effectively address the climate crisis.

⁴ <http://www.nomenugget.com/news/foreign-trash-continues-wash-regional-shores>.

⁵ <https://kawerak.org/foreign-marine-debris-found-in-the-bering-sea/>.

After carbon dioxide, black carbon is the second greatest contributor to human induced climate warming. When black carbon is deposited on snow and ice surfaces, it reduces albedo and increases warming. The warming impact of black carbon is increased by at least a factor of three in the Arctic region.

The recently approved 0.5 percent global sulfur cap will decrease sulfur and black carbon emissions, which will be of benefit to Arctic regions. Overall, however, there are no requirements specifically designed to limit harmful air emissions from vessel traffic in the U.S. Arctic. The Polar Code does not strengthen emissions standards for the Arctic, and the North American Emission Control Area (ECA) does not extend to Arctic waters.

The IMO must take bolder action to address emissions from vessel traffic. This should include establishment of an Arctic ECA (or extension of the North American ECA to include the Arctic), eliminating loopholes that allow continued use of HFO in the Arctic, and implementation of other best practices to reduce emissions, like installation of particulate filters, slow steaming and other measures. More broadly, IMO should fast-track the adoption and implementation of a program that will decarbonize the global shipping fleet. This will require nothing short of a transformation.

VI. Noise

In most marine areas, low frequency noise from propellers and engines of commercial vessels is the dominant source of anthropogenic noise. Until recently, the underwater environment of the Arctic remained relatively free of anthropogenic noise. However, underwater noise caused by vessel traffic, military use of sonar, seismic exploration and resource extraction is becoming more prevalent in the region. Icebreakers in particular produce louder and more variable sounds than other vessels.

Since cetaceans and pinnipeds use sound for communication, echolocation and predator avoidance, anthropogenic noise can disturb marine mammals in variety of ways, including by adversely affecting feeding, breeding, resting or migration behaviors; causing stress or injury, including temporary or permanent hearing loss; masking other sounds in the environment; and reducing prey availability.

Subsistence users are concerned that sound from transiting vessels may displace the marine mammals they depend on. Whales are particularly sensitive to low frequency vessel noise. Researchers in Canada observed that belugas avoided ice-breaking vessels and altered their behavior for several days.

While the IMO took a first step to addressing the impacts of noise on the marine environment with the 2014 voluntary Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life, subsequent studies show their uptake is limited at best. Canada, the United States and Australia submitted a workplan item proposal to MEPC 75 (now deferred to MEPC 76) to review the guidelines, in hopes to improve the uptake of meaningful noise reduction measures. This new workplan item should be adopted, and IMO

should approve and implement more effective measures to curb the shipping sector's noise impacts.

VII. Safety of navigation

In 2018, IMO approved voluntary two-way shipping routes and Areas to be Avoided in the Bering Sea and Bering Strait region. These measures apply to large vessels only. Smaller vessels, as well as vessels making port calls in the region, are permitted to deviate from the routing scheme and enter protected areas.

Since 2018 large catcher processors have operated north of Saint Lawrence Island within the Saint Lawrence Island Area To Be Avoided (ATBA) but have not been visible on AIS. This has caused safety of life at sea issues as those vessels operate hundreds of miles longline with potential for small vessel entanglements.

The IMO should address weaknesses in the structure or implementation of existing ATBAs in the Arctic to improve safety, especially for Indigenous residents who often operate small vessels far from shore. At the same time, the United States and the Russian Federation should collaborate on a new joint ATBA to ensure vessel safety and to help protect the Diomed Islands from impacts associated with vessel traffic. Enhancements to communication and monitoring systems would also improve vessel traffic safety in the region.

VII. Conclusion

International shipping causes significant and growing impacts to the marine ecosystem, including impacts to Indigenous peoples in Arctic Alaska. Weaknesses or omissions in IMO conventions and the implementation of those conventions must be remedied. Present power regimes are conservative in nature and are occupied disproportionately by non-Indigenous people. Those power regimes are failing the people of the Arctic and are part of a broader economic system that threatens to destroy Alaska Native cultural lifestyles. It is possible to address the impacts of global shipping, but it will require a massive renovation and re-shaping of the industry.

Sincerely,



Melanie Bahnke, President
KAWERAK, INC.



Sarah Bobbe, Arctic Program Manager
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