

# **CHAMBER OF SHIPPING**

## **Study on Marine Cargo Container Spills**

## **Submission by the Chamber of Shipping**

To the

**Standing Committee on Fisheries and Oceans**

**April 2022**

## INTRODUCTION

The Chamber of Shipping represents the interests of international ship owners, agents, and Canadian exporters/importers responsible for over 60 per cent of Canadian international trade by ship. Marine transportation includes everything from people in ferries and cruise ships, to bulk commodities such as grain that is exported to Asia, to large container ships moving goods Canadian companies sell globally and manufactured goods that Canadians use in their day-to-day lives. Marine transportation and its many spin-off benefits touch the lives of almost all Canadians.

The commercial marine sector is very involved and supportive of Canada's effort to protect our pristine coasts in a variety of ways, including through the *Canada Shipping Act*, the *Oceans Act*, and the *Species at Risk Act*, but also through specific initiatives and pilot programs. The Oceans Protection Plan is an additional positive initiative in coordinating this effort amongst the three key federal departments, Indigenous groups, and with external stakeholders. The Chamber of Shipping developed and committed to the first Aquatic Species Conservation Agreement in Canada under the *Species at Risk Act* with both the Department of Fisheries, Oceans, and the Canadian Coast Guard and Transport Canada.

The Chamber of Shipping welcomes the opportunity to provide the Standing Committee on Fisheries and Oceans our views on the study regarding Marine Cargo Container Spills. This brief includes relevant background information and specific recommendations relating to prevention. Preventing the loss of containers is critical to the continued protection of Canada's coastal ecosystems and key to Canada's international trading reputation.

## BACKGROUND

On October 23, 2022 the M/V ZIM KINGSTON lost 109 shipping containers approximately 40 nautical miles West of the Straits of Juan de Fuca. At the time, the ship had been loitering in coastal waters West of Vancouver Island. Following the loss of the containers, the vessel proceeded to anchor at Constance Bank, in the vicinity of the city of Victoria, British Columbia. Subsequently, a fire was detected onboard the vessel that was only extinguished after extensive, complicated, and dangerous fire fighting by the ships crew, supporting vessels, and a contracted professional salvage team from the United States. The Transportation Safety Board of Canada is currently conducting a Class 3 investigation of the incident.<sup>1</sup>

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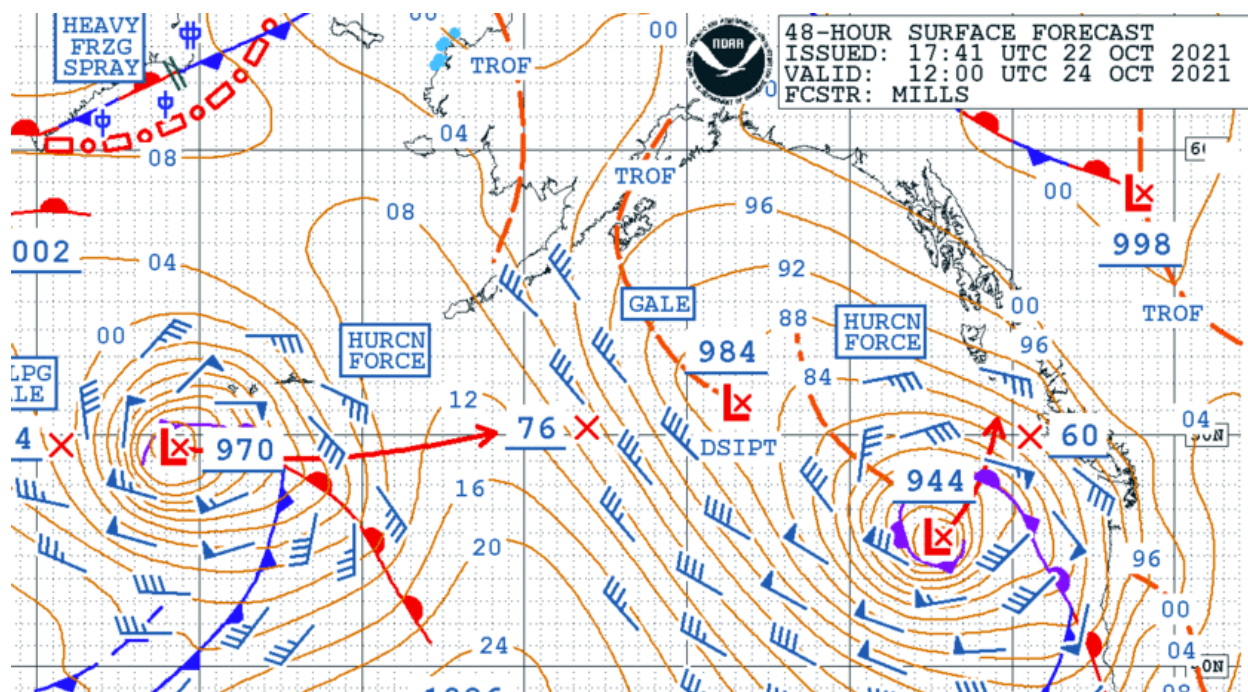
<sup>1</sup> These investigations analyze a small number of safety issues, and may result in recommendations. Class 3 investigations are generally completed within 450 days.

## VESSEL OPERATIONS

Ships, both large and small, operate in diverse and frequently demanding environments. Their capacity to operate safely is influenced by a number of both external and onboard factors that include but are not limited to weather, hydrography, cargo loading, and human elements such as fatigue. Container ships are designed to withstand adverse weather with construction and loading standards defined by international conventions and enforced through an inspection regime known as Port State Control.

In the Fall of 2021, the Port of Vancouver and Western Canada were experiencing significant supply chain congestion resulting from disruption caused by the pandemic and the wildfires in British Columbia. While container ships had historically proceeded directly to a terminal for cargo operations upon arrival to Canadian waters, the congestion forced and continues to demand container ships either proceed to anchor or loiter off the coast of Canada.

Ships and shore-based staff are normally monitoring weather continuously and adjusting routing of ships. Avoiding foul weather is integral to safe operations, respecting insurer and charterer requirements, and efficient vessel operations. On a typical trans-Pacific voyage, a ship would amend its routing multiple times to maximize the safety and efficiency of the voyage. Much of this planning is supported by corporate headquarters and third-party routing advisers. Many ocean carriers have noted that climate change is resulting in an increased frequency of adverse weather. Notwithstanding this advanced planning, a ship is more constrained in its ability to divert and avoid adverse weather towards the end of its voyage as it lacks ample sea room that the open ocean affords during the trans-ocean transit.



(Surface forecast indicating the high probability of hurricane force winds - issued the day before the ZIM KINGSTON lost 109 containers)

## AREAS OF CONCERN

**Supply chain congestion:** The incident exposed several areas of weakness. First and foremost, supply chain disruptions and congestion are creating an abnormal number of container ships arriving to Canadian waters before they can conduct cargo operations at terminals in the Port of Vancouver and certain other ports. While some ships proceed to anchor at and near ports, many have been forced to wait offshore until space is available. This leaves a vessel more vulnerable than if it were at anchor in sheltered waters. Other ports such as Long Beach, California have requested that ships delay their arrival and wait 100 miles offshore, but such an approach for British Columbia would increase risk to vessels during much of the year, as the Pacific Northwest is subject to more frequent and adverse weather conditions.

**Assessing vessel risk:** As the captain of a vessel is ultimately responsible for its safe operation, Canadian Federal authorities responsible for marine safety have not traditionally exercised vessel-specific risk assessments. Even within waters where the Canadian Coast Guard is responsible for marine traffic services, it is not commonplace for the Canadian Coast Guard or Transport Canada to evaluate vessel routing and operations in relation to the prevailing or forecasted weather conditions.<sup>2</sup>

Another aspect of evaluating risk is awareness of the types of cargo being carried on a specific vessel. While this information is available, it is not readily shared between Federal Departments and authorities, nor Indigenous communities that may have a response capability. The Chamber of Shipping, Transport Canada, and five Central Coast First Nations are planning to launch a pilot project this year aimed at sharing cargo manifest information in a timely manner in order to inform spill response resource management.

**Ministerial Authorities:** Canada has a complex marine safety framework that includes multiple Federal departments and authorities with responsibilities emerging from multiple pieces of legislation. Regardless of this potentially confusing framework, it is the Canadian Coast Guard that has the greatest operational awareness of the marine environment through its Marine Communications and Traffic Services and Regional Operations Centres. Notwithstanding, it is the Minister of Transport that has the authority under the *Canada Shipping Act* to make an interim order if he or she believes that immediate action is required to deal with “a direct or indirect risk to marine safety or to the marine environment.”

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<sup>2</sup> In November 2017, the articulated tug JAKE SHEARER became disconnected from its barge and the barge would have run aground had two members of the crew not successfully anchored the barge. The JAKE SHEARER had been transiting Hecate Strait in unfavourable weather, carrying approximately 12.4 million litres of gas and diesel fuel.

**Hazardous and Noxious Substances Convention:** The 2010 HNS Protocol will enter into force 18 months after the date on which it is ratified by at least twelve States, including four States each with not less than 2 million units of gross tonnage, and having received during the preceding calendar year a total quantity of at least 40 million tonnes of cargo that would be contributing to the general account. The Convention sets out a shared liability regime to compensate claimants for damages arising from the international or domestic carriage of HNS by seagoing vessels. It is a regime, which combines the shipowners' liability (tier 1) and the HNS Fund made up of contributions from the receivers or importers of HNS cargo (tier 2).

**Incident review and lessons learned:** Unfortunately, many marine occurrences are not investigated and/or lessons learned not disseminated to regulators and marine experts and stakeholders. This has been noted as a weakness by certain First Nations during recent initiatives under the Oceans Protection Plan. For example, two highly publicized ship incidents off the coast of British Columbia were not investigated by the Transportation Safety Board nor were after action reports published by either the Canadian Coast Guard or Transport Canada.<sup>3</sup> The lack of formal reporting and sharing of lessons learned does lead to misinformation and misunderstandings regarding Canada's marine safety framework.

**Firefighting and salvage capability:** Canada does not have a consistent standard for at-sea firefighting and salvage capability. The response to the initial fire onboard the ZIM KINGSTON was provided by two Offshore Support Vessels that were coincidentally berthed in Victoria temporarily. They were able to bring significant capabilities to a complex fire while professional salvagers were contracted by the ship owner/operator.

## RECOMMENDATIONS

The following short-term and long-term recommendations are provided to support the Committee's study:

1. The Government of Canada should amend the *Canada Shipping Act*, specifically section 10.1(1) to provide the Minister of Oceans, Fisheries, and the Canadian Coast Guard the authority to make an interim order "if he or she believes that immediate action is required to deal with a direct or indirect risk to marine safety or to the marine environment." While the Minister of Transport has this authority, he/she may not have as much awareness of a developing situation as the Minister of Oceans, fisheries, and the Canadian Coast Guard.

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<sup>3</sup> In October 2014, the M/V SIMUSHIR was disabled in adverse weather and drifted precariously close to Haida Gwaii. There was a substantial effort by the Canadian Coast Guard and a commercial towing ship to secure and tow the vessel to safety.

2. The Government of Canada should rapidly progress the design and implementation of a Single-Window framework for the sharing of key cargo manifest information between authorities responsible for the prevention and reaction to marine cargo spills. This is critical to both assessing risk and managing an incident.
3. The Government of Canada should support proactive vessel monitoring and guidance to vessels when safety may be compromised by adverse weather conditions. This should include consideration of extending the jurisdiction and services of the Canadian Coast Guard's Marine Communication and Traffic Services to include offshore risk management.
4. The Government of Canada should review its emergency towing, at-sea firefighting, and salvage capability to ensure it aligns with the complexities of current and expected commercial vessel traffic.
5. The Government of Canada should review its marine incident investigation and reporting framework with a goal of disseminating actionable information more quickly to Indigenous communities and marine stakeholders.
6. The Government of Canada should encourage the early adoption of container tracking devices to assist in locating containers above and underwater.