



CILTNA luncheon with Capt. Gordon Houston, Chair, Tanker Safety Expert Panel

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On June 25, 2015, under the able guidance of Marion Robson, its Chair, the Pacific Chapter of the Chartered Institute of Logistics and Transport North America (CILTNA) held a lecture which featured Capt. Gordon Houston, Chair of the *Tanker Safety Expert Panel (Panel)* at Vancouver's Terminal City Club. The Panel had been struck by the federal government in March 2013 to examine Canada's oil spill response capability in its southern waters (Phase 1), as well as in the Arctic, along with examining HNS (hazardous and noxious substances) cargoes (Phase 2).

The objective of the Panel was to provide an independent expert analysis to inform the Harper government on opportunities to enhance Canada's oil spill response capability, and plan actions to implement a world-class tanker safety system for all regions of the country, balancing business interests with public interest and environmental considerations.

The Panel's first report, entitled *Setting the Course for the Future: A review of Canada's ship source oil spill preparedness and response regime* was released on November 13, 2013. The second report entitled *Setting the Course for the Future, Phase II Requirements for the Arctic and for Hazardous and Noxious Substances Nationally* was delivered to the Government November 2014 and released to the public on April 8, 2015. Both reports can be found at: <https://www.tc.gc.ca/eng/tankersafetyexpertpanel/menu.htm>.

The luncheon audience, a full house consisting of various transportation professionals, local politicians and students, was eager to learn firsthand the insights that Captain Houston would provide about this important review process, along with the next steps of this review process, implementation. They were not disappointed.

Capt. Houston, who had been deputy Harbourmaster, Vice-President of Operations and President of Vancouver Fraser Port Authority prior to taking up his position as Panel Chair, was candid and open in his comments concerning the work of the Panel. The luncheon was timely because a recent spill in



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English Bay by the brand new bulk carrier *MV Marathassa* on her maiden voyage generated a great deal of political, public and media attention on the subject, and highlighted gaps in the oil spill response system.

Capt. Houston made it clear in his comments that there wasn't always agreement among Panel members on the best approach in all circumstances. His comments were insightful and highlight the complexity of these issues and the differences of opinion in the approaches that can be taken to marine response. There is no one single cookbook on marine response. The subject of the lecture was timely appropriate as the attendees were well aware from the *Marathassa* incident of how seemingly minor marine incidents have the potential to evolve into major business and environmental disasters.

From the Panel's reports, it is clear that strength of the Panel was its depth of experience and knowledge of the subject matter. Panel members consisted of Capt. Houston, a mariner, Dr. Michael Sinclair an oceanographer and senior federal bureaucrat, and Richard Gaudreau, a noted maritime lawyer, who collectively had over 100 years of practical experience. The Panel was assisted by a Secretariat at Transport Canada that has now morphed into a group that will help implement the Panel's recommendations. The last

time marine pollution response was examined from a policy point of view was 20 years ago, with the release of the *Public Review Panel on Tanker Safety and Marine Spills Response Capability (Brander-Smith report)*.

Panel's Assumptions

Phase 1 of the Panel considered response readiness south of 60° North latitude, except for Hudson Bay, and Phase 2 examined Hudson Bay and the Canadian Arctic. During the course of the panel's work it consulted with 130 groups and received 103 submissions. It made 88 detailed recommendations in the 2 reports.

The reports are well laid out and informative, and well worth reading. They provide marine professionals with useful information and reference documents along with the recommendations to give a snapshot of Canada's existing oil spill preparedness and response regime and the issues in the Arctic and in the HNS response.

Among the cornerstones of the Panel review were four key assumptions that underpin all the recommendations:

1. Spill planning and response resources should be based on risks specific to a geographical area.
2. Through the appropriate response organizations, potential polluters should be prepared to launch a response to a worst-case scenario through cascading resources and mutual aid agreements that supplement the response organizations' response capacity.
3. Response planning should be focused on the strategies that have been identified for a specific geographical area that are expected to limit the environmental social and economic impacts of the spill in the most effective manner.
4. Canadian taxpayer shall not bear any liability for spills in Canadian waters.

Marine Casualty Management

One of the Panel's important accomplishments set out in phase 2 was its expansion to examine marine casualty management which addresses how one deals with actual marine incidents. On this subject, the Panel had only one recommendation, namely "The government of Canada should



improve the timeliness of decision-making by establishing a centralized marine casualty decision-making authority acting in the public interest, similar to those authorities established in the United Kingdom and Australia". In these two jurisdictions, with extensive maritime activities, a single individual is appointed to address the incident, because rapid decision-making is the key to protecting people and the environment, and decisions by a committee of multiple agencies will create unwanted delays. To use the words of the United Kingdom's Secretary of State's representative, there is a clear decision-maker that the Minister "must either back or sack". The key is to have a single decision-maker that can make prompt decisions in real time.

Arctic

In the case of the Arctic, which has its own particular challenges, Capt. Houston made no bones about the requirement for the federal government the show leadership because it is not possible to have a privately funded response regime given present levels of commercial marine traffic. The Panel stressed the federal government should develop a strategy to regularly monitor development such as vessel traffic levels as they occur, as well as undertake and review risk assessments for Arctic shipping as it develops.

HNS Response

Capt. Houston also highlighted the challenge of dealing with HNS cargoes which is often overlooked in the marine response rubric. The listed chemicals are very harmful to human health and are cause for concern while present on board, and while stored, loaded or unloaded at port terminals, often near populated centers. The March 2015 container fire at Vancouver's Centerm container terminal that engulfed the eastern part of Vancouver in toxic smoke demonstrated these are very real issues that impact port communities. The Tianjin blast earlier this month highlights the serious nature of HNS response and getting it right. HNS incidents raise very real public safety and environmental issues in and around our port communities. Thankfully, the historical frequency of HNS incidents is low. However, typically these incidents are potentially high consequence events which, if they occur on land, are often near populated centres, as we witnessed in the case of Tianjin.

There are over 6,000 items on the HNS list covering a broad spectrum and carried in either packaged or bulk form. The stowage, volume and individual characteristics of so many different chemicals make it impossible to develop a uniform marine response.

Response to an HNS incident differs from oil in that responders need to make a rapid assessment of what they are dealing with, which involves the tracking down a lots of information. Often this is a messy process. Often all one can do is simply monitor the situation. Response strategies set out in the panel's report for HNS include: limiting entry into the environment, forecasting spill trajectories and monitoring.

Container ships with multiple cargoes of packaged HNS goods create special challenges, especially with respect to damaged containers or those lost overboard. The challenge of determining the contents of containers based on shipping documents and stowage of the containers aboard the ship was highlighted in the report. This is an issue that needs to be addressed both in Canada and globally. It is often a real puzzle to determine the actual stowage of HNS cargoes on container vessels to plan an HNS response.

Complex chemical reactions and explosions can develop under elevated temperatures or when there is mixing of chemicals. The panel stated on page 61: "Given that interactions between certain substances can result in a highly volatile and/or toxic reaction, the presence of hundreds of different HNS may present a severe hazard not only to potential respondents but also to surrounding populations." The Tianjin incident

has proved this to be the case. The Panel's words were timely.

HNS cargo spilled on water could float, mix or sink or evaporate and/or explode, or all of the above. There is often no means to recover and secure the HNS cargo. In Canada, there is presently no existing HNS response regime for vessels. Transport Canada administers the Dangerous Goods program, but it is not integrated into the marine response domain. The Panel found that it was important over time to build preparedness and capacity for HNS response which will require new skill sets, funding, expertise and capacity which would be led by the Canadian Coast Guard. HNS response is seen as a partnership between the public and private sector which requires an ongoing review of the adequacy of preparedness and response capacity.

The panel made a series of 17 recommendations with respect to HNS cargoes. One of the major issues was obtaining timely cargo information from the vessel and the development of an HNS response plan for both the vessel and facility, to be shared with first responders and other interested parties. One of the most important issues was the sharing of cargo manifest and stowage plans in the event of an HNS incident. This information sharing is a critical issue.

The International Maritime Organization sought to develop a formalized and coherent approach for HNS and developed the *Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol)*. The key elements include developing emergency plans for vessels and facilities, a National contingency plan and exercise program along with a minimum level of pre-positioned equipment and arrangements on coordination of HNS response. Canada has not yet ratified this agreement but it has been signed by 33 countries. The panel recommended Canada ratify this agreement. Development of an HNS marine response regime will be a major challenge for the marine shipping community, and will involve many partners and first responders.

Next Steps

Attendees of the luncheon left with a sense that the Panel performed a solid in-depth analysis of the issues and wrestled with the recommendations on how to improve the present regime. It was a tall order required to be accomplished in a short period of time, and is an example of the federal government showing leadership in securing the best possible advice to work on these challenging issues in a creative and inclusive fashion.

The panel did some heavy lifting and provides the government with a solid policy foundation to move forward with respect to oil spill response in all Canadian waters, including the Arctic and dealing with the challenges presented by HNS cargoes. The recent incident in Tianjin highlights the need to develop a comprehensive HNS response. In a time of shrinking public funds, the challenge is how to develop and buttress our marine response regime. The panel was mindful of this in its recommendations. CILTNA's Pacific Chapter is to be commended for hosting this seminar and bringing together the commercial and academic sectors to reflect on these challenging issues. Tianjin has provided new urgency for the Panel's recommendations on HNS.

Joe Spears is the Principal of the Horseshoe Bay Marine Group and has been involved in Arctic, Marine oil spill response and developing an HNS regime for Canada in the early 1990s under contract to Transport Canada. He has assisted Capt. Houston when he was deputy harbourmaster involving oil spill incidents in Vancouver Harbour in the 1990s.