

Office of the Chief Medical Health Officer

#800 - 601 West Broadway Vancouver, BC V5Z 4C2

April 22, 2014

Tanker Safety Panel Secretariat
330 Sparks Street, Place de Ville Tower C (AAM)
Ottawa. ON K1A 0N5

By e-mail: tsep-cesnc@tc.gc.ca

Dear Tanker Safety Review Panel Members:

We are responding to the panel's call for comment with respect to the marine transportation of Hazardous or Noxious Substances (HNS). We are aware our response is late. However, given the absence of prior notification to local health agencies from the review process, we hope the panel will still consider our comments.

Vancouver Coastal Health Authority (VCH) is a provincially mandated health agency that delivers provincially funded hospital and community based services, including public health. Our service area covers Vancouver, Richmond, the City and the District of North Vancouver, West Vancouver, Squamish, other communities in Howe Sound and the Sunshine Coast, as well as the coastal communities of Bella Coola and Bella Bella. Tanker safety is therefore an important topic for us, specifically the safe transportation of hazardous and noxious substances. Our comments are organized along the **Lines of Enquiry** published by the Panel.

#### Coverage

- The Canadian HNS list should at least include the substances identified as HNS by the International Marine Organization. In particular – oil derivatives, such as diluents/condensates used in transporting crude oil and bitumen should be included.
- The criteria for HNS should include flammability, and the degree of human health hazard from inhalation, contact, and ingestion. HNS should include cargo in any transport / package format

### Prevention

 The industry currently lacks a systematic approach across all the players for reporting and analyzing near-misses (accident precursor events). Since actual incidents are hopefully rare events, near-misses are important for system wide learning and safety improvement. Invariably, multiple organizations will be involved with any event. The willingness
to report actual incidents and near- misses will also be variable. Therefore a fully
functioning comprehensive incident and near-miss reporting and analysis
system will require the support of a legislated framework. Near-miss reporting
and analysis are significant contributors to air transport safety.

### Preparedness and Response

- Preparedness and response must be tailored to the both the specific HNS substances transported through a particular geographic area as well as the local capacity, and the physical setting (e.g. geographic terrain, current, expected weather conditions).
- Past experiences with chemical releases highlight the importance of timely access to the identity of the substance(s) released. Response can be significantly hampered by this lack of knowledge, as well as creating unnecessary risks to responders and the public, or alternately cause unnecessary anxiety and fear.
- A system should be set up so that responder agencies in each location have a current, regularly updated list of HNS transported through the area. This system should also be able to immediately identify the HNS involved in a spill at any given time and be able to convey the information in real-time to responder agencies.
- A regularly updated list of HNS will also allow local responders to tailor exercises, response plans and equipment specific to the substances being transported through that locale.
- While MSDS is a very useful source of information for responders, it is not as useful for assessing potential impacts to nearby populations.
- Although public health concerns regarding an incident is the responsibility of the local public health agency, Health Canada and Public Health Agency can play a role in developing and maintaining a database of guidelines and recommendations for public health response specific to the HNS transported in Canadian waters. Such Canada wide information bank can then be used to tailor local response.
- The need and availability of monitoring equipment for example for ambient air quality, will depend on the type of HNS under consideration. While some provincial / regional agencies have mobile air quality monitoring units that can be quickly deployed, such capacity is not uniform across Canada. In particular rural and remote coastal communities will unlikely to have such resource readily at hand. It is unknown whether Environment Canada has mobile AQ monitoring units that can be quickly deployed by air or sea to assist response

# Roles, Responsibilities and Legal Framework

- The local public health authority should be included in the spill / incident notification protocols.
- Local public health must participate in the risk assessment and risk mitigation decisions with respect to the general population that may be affected by the incident.

- Public health decisions as response to an incident may include but are not limited to evacuation orders, shelter in place advisories, air quality advisories, beach and recreational water use advisories, and general public health messaging regarding the incident.
- HNS incident preparedness, training, and response should be funded by the industry

## **Research and Development**

- Research and development must be linked to the projected trends in tanker traffic – both in terms of volume, tonnage as well as type of HNS. This will vary between the east and west coast of Canada.
- Key knowledge gaps for the west coast relate to the safe transportation of LNG and bitumen mixed with volatile diluents.
- Moreover, research and development should pay equal attention to engineering / technological improvements as well as human factor and organizational culture influences to incident occurrence and prevention.

Yours sincerely,

Patricia Daly MD, FRCPC

Vice-President, Public Health and Chief Medical Health Officer

Vancouver Coastal Health

- Public health decisions as response to an incident may include but are not limited to evacuation orders, shalter in place advisones, air quality advisories, bench and recreational water use advisories, and general public health messaging regarding the incident.
- HNS incident preparedness, training, and response should be funded by the industry

### Research and Development

- Research and development must be linked to the projected trends in tanker traffic both in terms of volume, tonnage as well as type of HNS. This will vary between the east and west coast of Canada.
- Key knowledge gaps for the west coast relate to the safe transportation of LNG and bitumen mixed with volatile diluents.
- Moreover, research and development should pay equal attention to engineering / dechnological improvements as well as human factor and organizational culture influences to incident occurrence and prevention.

Yours sincerely

Patricia Daily MD, FRCPC

Vice-President, Public Health and Chief Medical Health Officen

Parcouver Coastal Health