Oil Spills from Ships

Main Points

What we examined

Under federal legislation and international agreements, the federal government is responsible for implementing measures to prevent, detect, prepare for, and respond to spills from ships in Canada's marine environment. Transport Canada sets guidelines and establishes the regulatory framework for preparedness and response to ship-source spills. Transport Canada also certifies private sector response organizations. The Canadian Coast Guard is the lead federal agency for responding to spills and is responsible for ensuring an appropriate response takes place. Environment Canada is the federal authority for providing environmental advice when a spill happens.

Between 2007 and 2009, a total of about 4,160 pollution incidents involving spills of oil, chemicals, or other pollutants into Canadian waters were reported to the Canadian Coast Guard. About 2,000 of these incidents involved vessels ranging from pleasure craft and fishing boats to barges, cargo vessels, and tankers.

We examined how the federal government has managed spills of oil and chemicals from ships in Canada's Arctic, Pacific, and Atlantic Ocean waters and the Gulf of the St. Lawrence. Specifically, we looked at whether Transport Canada, the Canadian Coast Guard, and Environment Canada are prepared to respond to such spills. We also looked at how the three organizations monitor and assess responses to these spills. We focused on oil and chemical spills from ships and did not address other land-based and marine-based sources of pollutants.

Audit work for this chapter was substantially completed on 30 June 2010.

Why it's important

Bordered by three major oceans and home to the world's longest coastline, Canada is the steward of ocean regions that cover more than 7.1 million km^2, an area equivalent to about 78 percent of its landmass. Canada's ocean regions are a vital part of the country's economy, providing employment and a way of life for about seven million people. Oceans support activities such as aquaculture

and fisheries, tourism and recreation, shipping and transportation, offshore oil and gas development, and offshore mining.

Oceans also provide habitat for a variety of wildlife, including numerous species of fish, shellfish, seabirds, and mammals, all of which contribute to the economic, social, and environmental well-being of Canadians. Ship-source spills of pollutants such as oil and other hazardous substances are one of several sources of marine pollution.

What we found

- While Transport Canada and the Canadian Coast Guard have carried out risk assessments related to oil spills from ships, they have not used a consistent or systematic approach, nor are there formal processes for ensuring that risks are reassessed on an ongoing basis. As a result, knowledge of risks in Canada to spills from ships, which is important for effective emergency planning, is not complete or up to date. Furthermore, the emergency management plans of the Canadian Coast Guard and Environment Canada—both important players in the federal oil spill response system—are not all up to date.
- Transport Canada reviews private sector certified response organizations to verify that they remain ready to respond to spills. This includes ensuring that these organizations have up-to-date emergency management plans, conduct adequate training and exercises, and have the equipment necessary to respond to ship-source oil spills up to 10,000 tonnes. Similar procedures are not in place to verify the Canadian Coast Guard's readiness. In other words, there is currently no process for providing assurance that the federal component of the oil spill response system is ready to respond effectively.
- The Coast Guard has not conducted a comprehensive assessment of its response capacity since 2000. Given the lack of any recent capacity analysis and current information on risks, the Coast Guard is unable to determine how much oil spill response equipment it should have and whether it has appropriate capacity to address the risks.
- The results of the Coast Guard's response efforts—which range from identifying the source of pollution to full cleanup—are poorly documented. There are also limitations with the Coast Guard's system for tracking oil spills and other marine pollution incidents. These gaps affect its ability to conduct reliable analysis of trends in spills and know how well it is achieving its objectives of minimizing the environmental, economic, and public safety impacts of marine pollution incidents.

- A public review panel recommended 20 years ago that the federal government establish a national regime to deal with ship-source chemical spills. Such a regime is not yet in place, and none is expected before 2013. In the meantime, Canada lacks a formal framework with clearly defined roles and responsibilities for responding to chemical spills.

The entities have responded. The entities agree with all of our recommendations. Their detailed responses follow the recommendations throughout the chapter.