

## **Churchill Marine Observatory – Environmental Observing (CMO-EO) System Spill Contingency Plan**

**Location:** The CMO-EO System project will occur within the Hudson Bay complex, including Hudson Bay, Foxe Basin, and Hudson Strait. The *MV William Kennedy* will operate throughout the aforementioned regions every year over the next 7 years and beyond, with specific regional foci for different years based on secured research funding.

### **Persons in Charge and Responsible for Activating Spill Plan:**

Captain, *MV William Kennedy*

Chief Scientist of active project

**Spill Plan Effective Period:** July 2018 to August 2025

### **Description of Spill Equipment Onboard Vessel:**

The vessel has three spill kits onboard – a caustic spill kit, an acid spill kit, and a solvent spill kit. The kits are kept in a visible and known location to all personnel. Appropriate MSDS sheets will accompany all chemicals onboard and will be kept in a visible and known location to all personnel.

### **Description of Refuelling the Vessel:**

Vessel will typically be refuelled at the Port of Churchill via a fuel truck on the wharf. If an extended period is required away from port, the vessel may need to access fuel from a fuel barge or a Nunavut community (or elsewhere). In the case of a barge, the vessel will be tied to the barge and fuel will be pumped to the vessel using standard procedures set forth by Transport Canada. The last choice for refuelling will be accessing fuel from a community. In this case, the ship will safely anchor offshore in a protected area. A fuel truck will fill barrels on our 25 ft zodiac launch (and additional hired tender from community if required). The fuel barrels will then be boated to the vessel and craned onboard where fuel will be directly transferred onboard. To minimize the risk of explosion or pollution during refuelling, we will follow the standard Transport Canada procedures:

- 1 Check that the dispensing point is equipped with appropriate firefighting appliances.
- 2 Put all passengers ashore and clear any refuelling equipment.
- 3 Turn off pilot lights to gas refrigerators.
- 4 Cut off electric power at main switch.
- 5 Close all hatches and openings to prevent fumes from getting into the hull and the bilge.
- 6 Turn off all mobile phones. Do note smoke.
- 7 Place a discharge bucket under air/overflow pipe and close scuppers in case of overflow.

- 8 Have a cloth at hand to catch any spills. Use one for the filler hose and one to monitor airflow from the fuel tank vent. Have sawdust/oil spill equipment ready.
- 9 When refuelling, do not start the dispenser until the outlet nozzle is inserted in the tank. Hold the nozzle open by hand only – do not lock or jam the trigger of the dispenser in the open position.
- 10 Keep the hose touching the filler neck at all times during refuelling to prevent static sparks.
- 11 Carefully monitor the filling rate to avoid overfilling.  
Use your hand where possible to check for air escaping from the vent. When the tank is nearly full, you will feel a distinct increase in airflow which is the signal to stop filling.
- 12 Do not remove the filter hose until the fuel flow has stopped.
- 13 Lift the hose to drain all remaining fuel into the tank
- 14 Thoroughly clean up all surface spills with an absorbent cloth
- 15 If fuel has spilled into the bilges, pump the bilges manually into sealed containers or pump ashore and leave boat wide open for at least 30 minutes to vent.
- 16 When completely satisfied that the boat is free of fumes, start the blower and let it run for [four minutes – more if that's the manufacturer's recommendation].
- 17 Start the engine before allowing passengers to board.
- 18 Dispose of absorbent cloths, sawdust or other fuel soaked items properly.

**General Actions:**

In the event of an accidental emergency spill on the vessel (i.e. on deck), the following response plan will be followed:

- Notify Captain and Chief Scientist of the spill and its location so that they can activate the spill plan
- Do not flush materials into water courses
- Spills will be inherently small because little is stored on the vessel, so use absorbent materials in spill kit to soak up
- Transport contaminants back to Churchill for proper disposal

In the event of an accidental emergency spill in the water, the following response plan will be followed:

- Respond to pollutant spillage immediately and isolate overflow to prevent further spillage
- Notify Captain and Chief Scientist of the spill and its location
- Notify the 24-hour Nunavut Spill Line
- Notify additional authorities of spill, see Contacts list
- Fill out the attached NT-NU Spill Report Form (available at: <http://www.gov.nu.ca/environment/documents/nt-nu-spill-report-form-pdf>)

**Contacts:**

In the event of a spill in the water, the following agencies **must** be contacted:

24-hour Nunavut Spill Line	Ph: 867-920-8130 Fax: 867-873-6924
Marine Communications and Traffic Services Centre	Iqaluit MCTS Centre Ph: 867-979-5269
Regional Wildlife Officers	Arviat: 867-857-2976 Baker Lake: 867-793-2944 Chesterfield Inlet: 867-898-9130 Coral Harbour: 867-925-8823 Rankin Inlet: 867-645-8083 Naujaat: 867-462-4002 Whale Cove: 867-896-9187 Sanikiluaq: 867-266-8098 Iqaluit: 867-975-7780 Igloodik: 867-934-8999 Cape Dorset: 867-897-8932 Kimmirut: 867-939-2004
Department of Fisheries and Oceans, Central and Arctic Regional Office	Ph: 519-383-1813 Toll-Free: 1-866-290-3731
Environment Canada in Iqaluit	Ph: 867-975-4644