

# INTERNATIONAL DIALOGUE ON UNDERWATER MUNITIONS (IDUM)

OceanAction#21356

Establishment of the International Marine Training Centre for Innovative Science and Technology for Sea Dumped Weapons to Support the Eradication of Underwater Munitions (UWM)



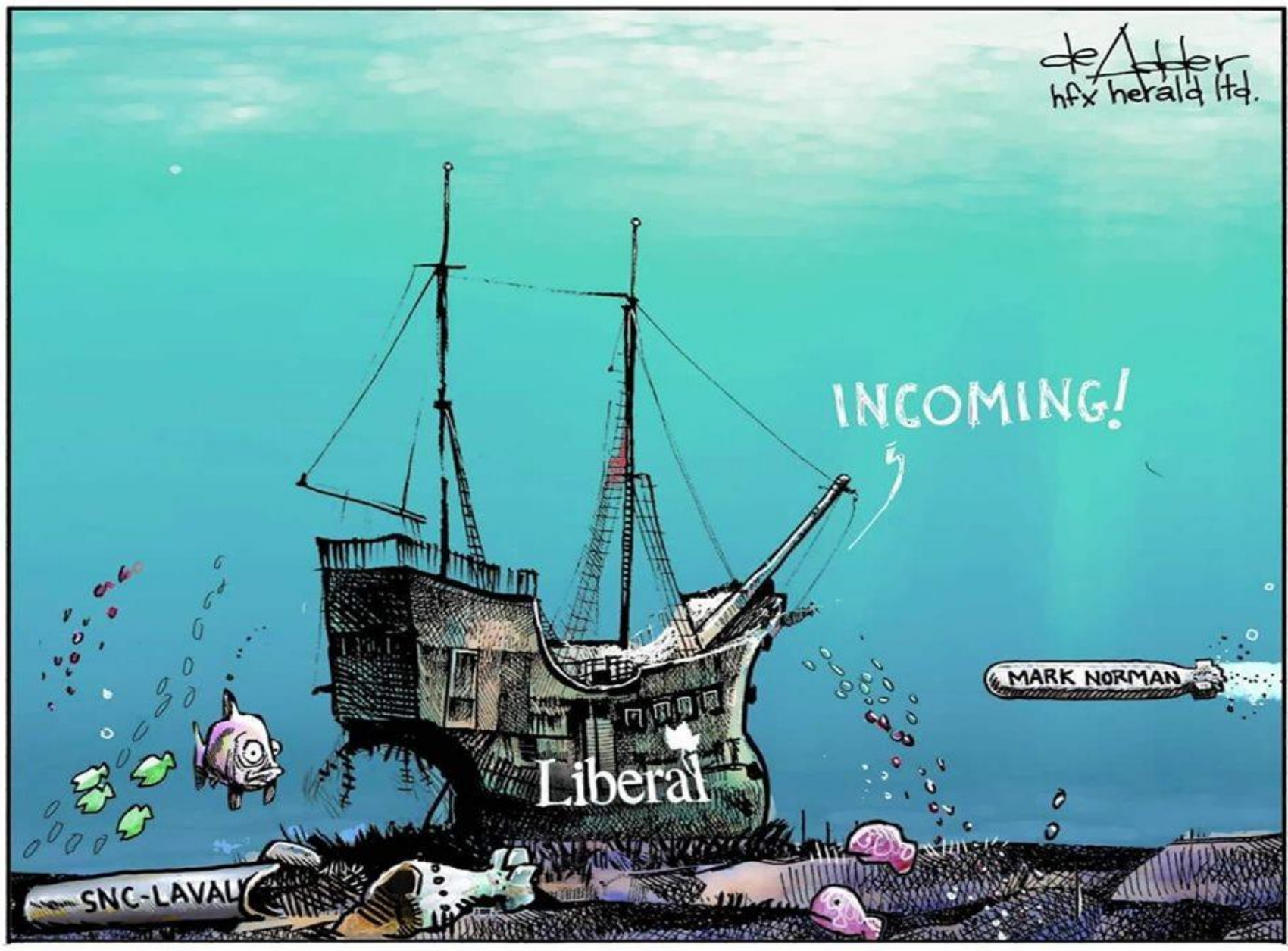
deAffer  
hfx herald ltd.

INCOMING!

MARK NORMAN

Liberal

SNC-LAVALIN





THE SENATE OF CANADA

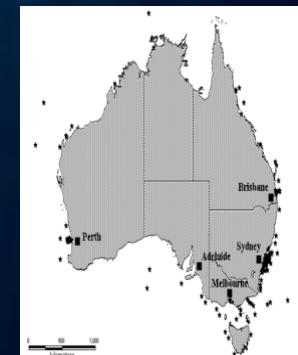
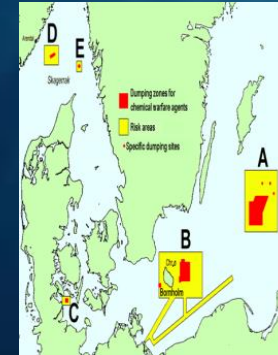
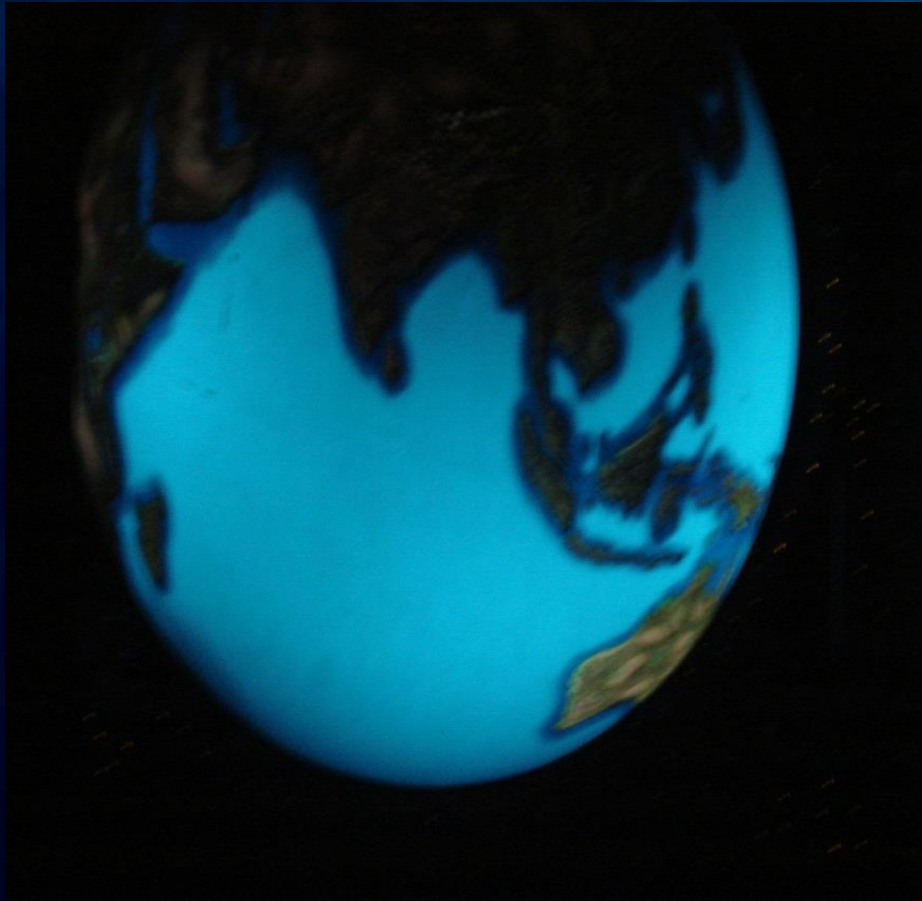
LE SÉNAT DU CANADA



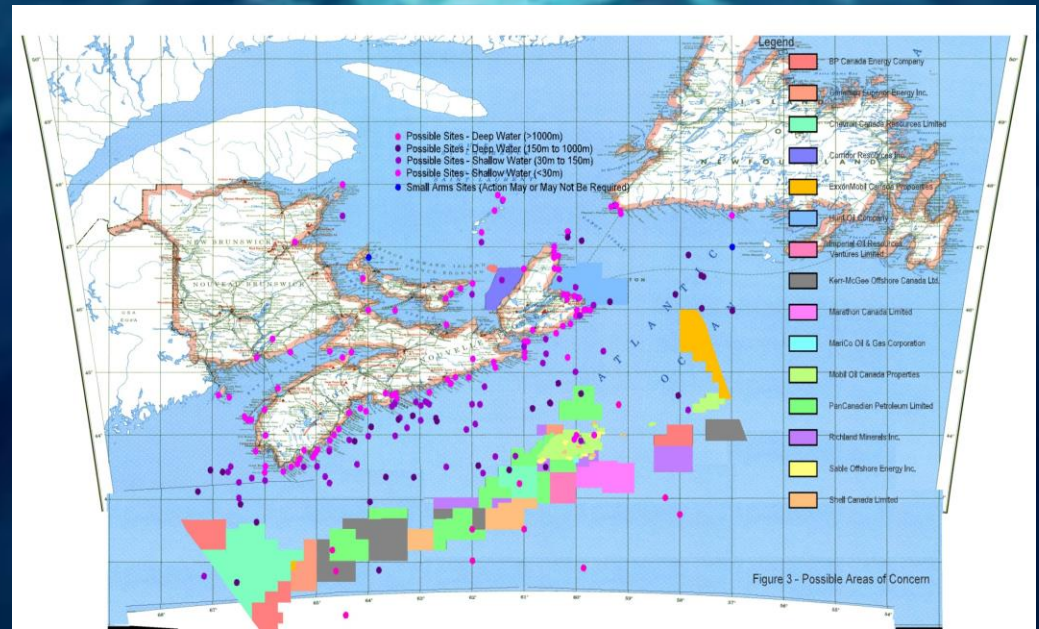
**Fisheries and Oceans Committee**

# Report Recommendations

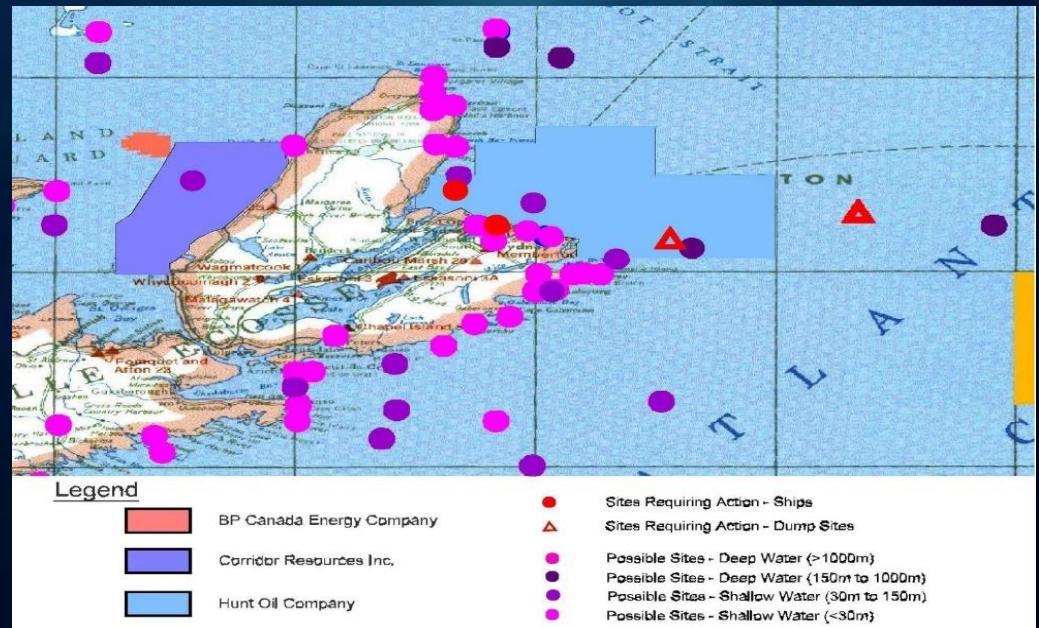
- **Must be greater federal government involvement by departments and agencies other than DND**
- **Must be a substantial, long-term, financial and scientific commitment by federal government**
- **Government of Canada should call on the United Nations to organize a conference with several other coastal countries on this serious issue.**

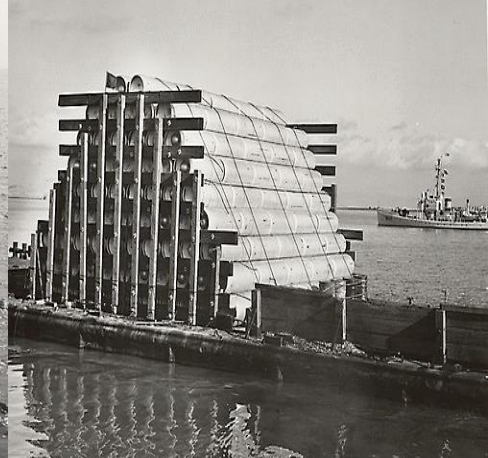


In the years immediately following the end of the war, ships carrying mustard gas left regularly from Sydney and Halifax for local dumpsites; in some instances the entire vessel were scuttled.



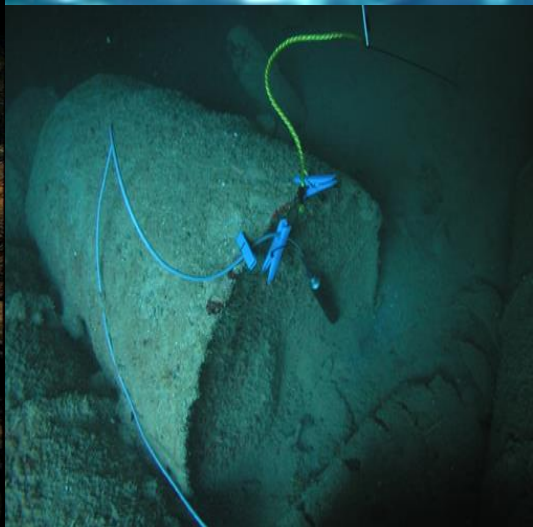
The closure of US military installations in Newfoundland and Labrador, was a source of widespread munitions dumping. It is reported that off Argentia, large boats left every two days to dump munitions in the Cabot Strait, for a five month period





EXPLOSION OF MUNITIONS AT MAGAZINE, 11MP DARTMOUTH, HALIFAX N.S. 20/10/45  
Photo copyright © HOWARD GALLAGHER  
Improve





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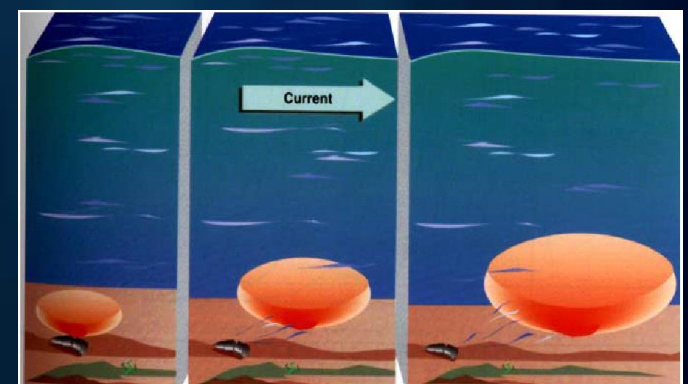
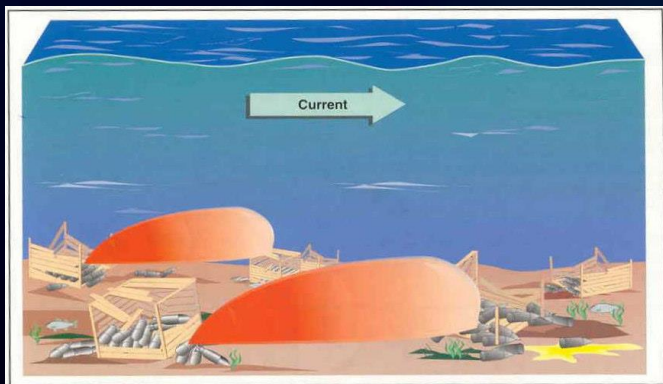
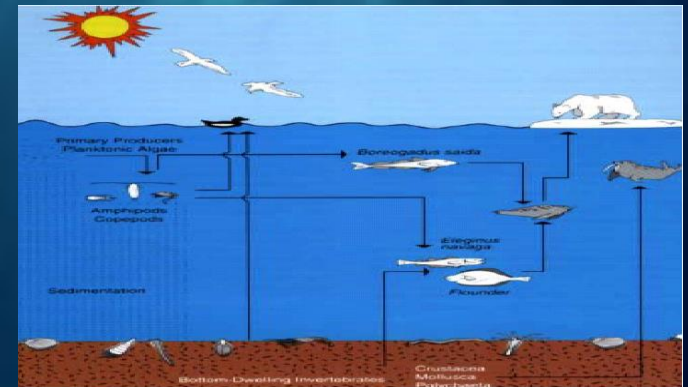
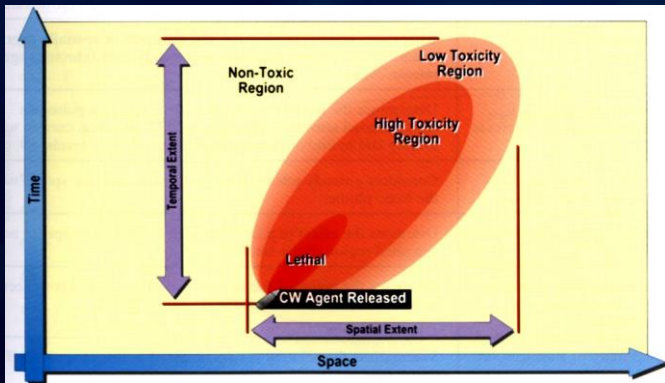


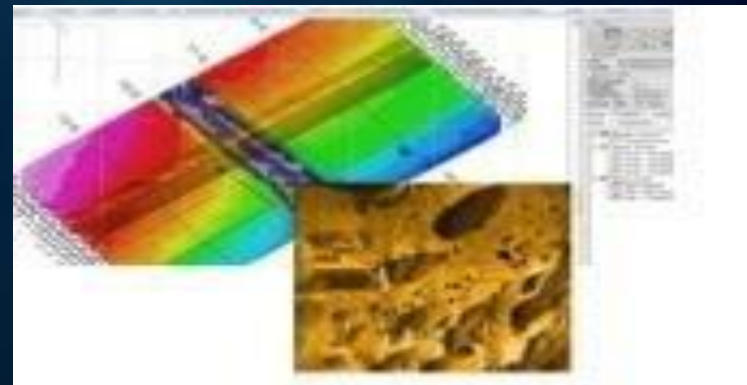
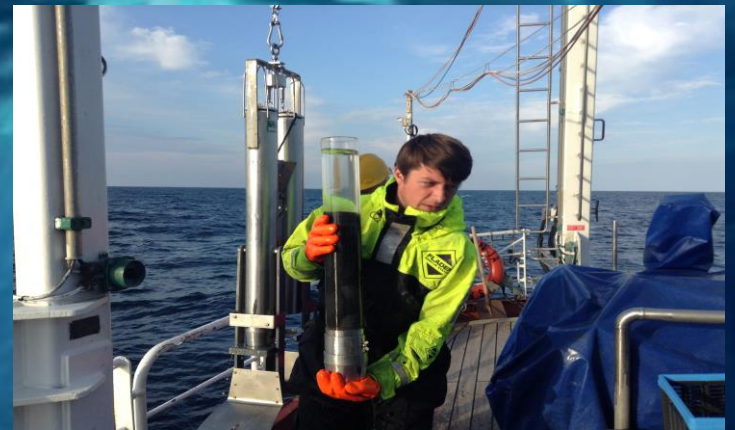


# High Explosives

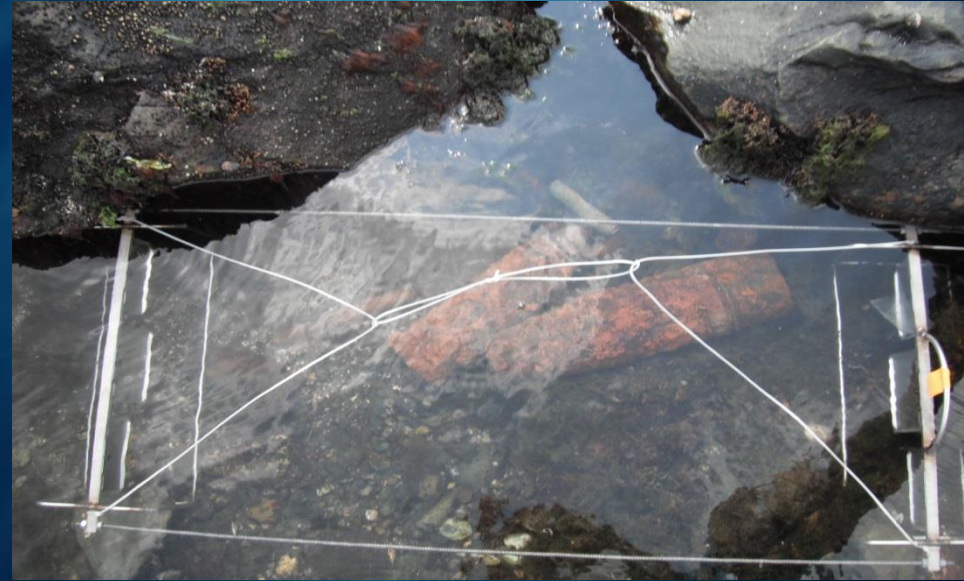
- **Primary Explosives**
  - Lead azide
  - Lead styphnate
  - Mercury fulminate
  - Tetrazene
  - Diazodinitrophenol
- **Booster Explosives**
  - RDX
  - Tetryl
  - PETN
- **Bursting Explosives**
  - TNT
  - RDX compositions
  - HMX
  - Explosive D

- Understanding the human health and environmental risks of munition constituents and byproducts requires information about the inherent toxicity of these chemicals and the manner in which they may migrate through soil, water and food chain toward potential human and environmental receptors.





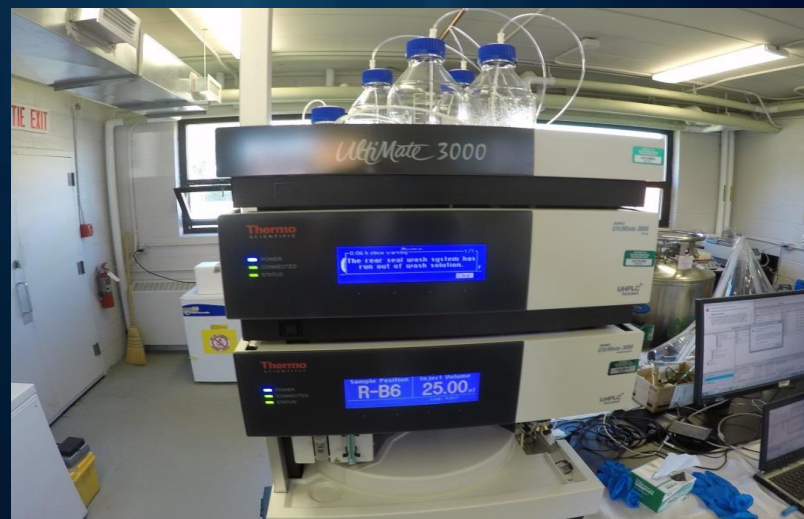
# Passive Samplers in Bedford



# HPLC-Diode Array Detector



This state-of-the-art analytical equipment is readily available and in operation in the laboratories of the Environmental Sciences Group at the Royal Military College of Canada.



# Pentarius Deep Sub Project



The Deep Sub submersible is engineered to go to 36,000' of depth – 16,000 PSI or 1100 Atmospheres. The pressure hull is built of carbon fiber with an aluminum dome at the back end and a fused quartz dome at the front. The fused quartz is a manmade ingot that has taken over three years to machine from a 2800 lb ingot to a 550 lb hemisphere. The dome offers an unprecedented view – no one on the seafloor has ever had a view like this.



**Completed March-April 2019  
Hawaii**

**1 July to 31 December  
Johnston Atoll, The Marshalls, Solomons,  
PNG, Truk, Guam, Okinawa, Naha, Japan,  
Shang Hai, Nagasaki, Xiamen, Hong Kong  
and Subic Bay**





# UNITED NATIONS RESOLUTION ON SEA DUMPED CHEMICAL MUNITIONS

Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea

United Nations

A/C.2/65/L.32/Rev.1



**General Assembly**

Distr.: Limited  
24 November 2010

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**Sixty-fifth session**

**Second Committee**

Agenda item 20

**Sustainable development**

**Austria, Azerbaijan, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Somalia, Spain, Sweden, Ukraine and United Kingdom of Great Britain and Northern Ireland: revised draft resolution**

**Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea**

*The General Assembly,*