



## **Arctic Oil Spill Response Research**

The Bureau of Safety and Environmental Enforcement (BSEE) has successfully developed and conducted over 30 projects directly related to improving equipment and processes for the prompt identification and removal of oil from harsh Arctic environments. Rather than working independently, the Oil Spill Response Research (OSRR) program has partnered with state and federal government agencies, academia, private industry and other countries who share similar interests in Arctic oil spill response research. As a product of these partnerships, over 40 percent of these projects were jointly funded.

The OSRR projects are examples of how BSEE has and continues to address the ongoing operational and environmental concerns associated with energy exploration and exploitation in the Arctic. Research projects, many of which were conducted at Ohmsett - The National Oil Spill Response Research and Renewable Energy Test Facility - ranging from mechanical containment and recovery in ice conditions, to dispersant use in cold water, reflect an expanding body of work that has advanced knowledge of oil spill response capabilities in cold water environments. Quoted liberally in scientific literature, OSRR projects are helping drive cold water research both nationally and internationally. BSEE as well as U.S. and foreign government agencies and organizations worldwide utilize the results from the OSRR program and Ohmsett in making planning, regulatory and emergency response decisions.

BSEE has been the principal U.S. federal agency funding oil spill response research for over 25 years and is the leader in Arctic response research. The successes of the OSRR program are a result of appropriated funding from the Oil Spill Liability Trust Fund and continued support by BSEE management.

Maintaining this momentum is critical to ensuring that the best available technologies for response are ready to support future oil exploration and exploitation in the Arctic. Significant accomplishments of the BSEE Arctic Oil Spill Response Research Program include:

- Detection of Oil in and Under Ice
- Oil Spill Thickness Sensor
- Mechanical Containment and Recovery in Ice Environments
- In Situ Burn Research
- Dispersants in Cold Water/Broken Ice Environments
- Chemical Herders
- Operation of Ohmsett – The National Oil Spill Response Research and Renewable Energy Test Facility