AOGA
Educational Seminar
January 6, 2011

North Slope Oil Spill Response

Ron Morris, General Manager
Alaska Clean Seas
Alaska Clean Seas Area of Interest
Alaska Clean Seas
Prudhoe Bay, AK

Ship Escort Response Vessel System
Valdez, AK

Cook Inlet Spill Prevention & Response Inc.
Kenai, Alaska

Alaska Chadux Corp.
Anchorage, AK

US Navy Supervisor of Salvage
Fort Richardson, AK

Southeast Alaska Petroleum Resource Organization
Ketchikan, AK

Alaska Oil Spill Removal Organizations
Originally Established in 1979 as ABSORB

Not for Profit Co-Op

Responds like a fire brigade to emergencies with equipment and trained personnel

MISSION:

To provide personnel, equipment, and spill response training for its members in preparing for and cleaning up an oil spill within our area of interest.
Manpower

- ACS maintains approximately 82 full-time staff.

- 115 trained responders are available through the North Slope Spill Response Team (NSSRT).

- Additionally, personnel are available from Auxiliary Contract Response Teams (ACRT) and North Slope Village Response Teams (VRT).
Activities

- Spill Response Support
- Spill Response and Incident Management Training
  - 28,000+ Man Hours of Training Annually
- Day to Day Field Environmental Support
  - Field Audits
  - Storm Water Runoff Management
  - Maintenance of Hazardous Waste Generation
  - Manifesting of Hazardous Waste Shipments
  - Maintenance of the Environmental Management System
  - Wildlife Hazing and Reporting
- Research and Development
ACS R & D Program

- Acts as facilitator for much of R & D related to spill response in arctic conditions.

- Contributing Organization to recent SINTEF JIP for Arctic.

- The R&D program focuses on areas such as:
  - oil spill recovery techniques in, on, and under ice, during various broken ice conditions,
  - detection and tracking of oil under ice
  - in-situ burning techniques

- ACS has maintained an active oil spill R&D program since the early 1980s
Equipment

- $50,000,000
- 304,000 Feet of Boom
  - 21,000 Feet of Fire Boom
- 185 Skimmers
- 8 Heli-Torch Systems
- 104 Vessels
- Two 128 BBL and Twelve 249 BBL Mini-Barges
- Various Sizes of Bladders and Storage Tanks
- Wildlife Hazing and Stabilization Equipment
Alaska Clean Seas Technical Manuals

- Developed by the Industry/Agency North Slope Spill Response Project Team.
- Applicable to all operators on the North Slope
- Manuals developed into three volumes:
  - Tactics Descriptions
  - Map Atlas
  - Incident Management System
Volume 1 - Tactics Descriptions

- Safety
- Containment
- Recovery and Storage
- Tracking and Surveillance
- Burning
- Shoreline Clean up
- Wildlife and Sensitive Areas
- Disposal
- Logistics and Equipment
- Administration
Volume 1 - Tactics Descriptions
Volume 2 - Map Atlas

**Sensitivity Information**

### PRIORITY PROTECTION SITES

<table>
<thead>
<tr>
<th>SITE NO.</th>
<th>DESCRIPTION</th>
<th>SENSITIVITY</th>
<th>TACTIC</th>
<th>EST. DOE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-18</td>
<td>Creek mounted 2 miles SE of Milne Point</td>
<td>Most sensitive during open water season; keep off.</td>
<td>C-13 or C-14</td>
<td>807</td>
</tr>
<tr>
<td>PS-18A</td>
<td>Salt marsh 1.5 miles SE of Milne Point</td>
<td>Most sensitive during open water season; keep off.</td>
<td>C-13 or C-14</td>
<td>807</td>
</tr>
<tr>
<td>PS-19</td>
<td>Salt marsh 2 miles NW of Milne Point</td>
<td>Most sensitive during open water season; inundated low-lying tundra shorelines.</td>
<td>C-13 or C-14</td>
<td>507</td>
</tr>
</tbody>
</table>

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the summer.
- Simpson Lagoon has large fields of molting male Oldsquaw in July and early August, especially in the lee of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing sites. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-rearing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the North Slope Archaeological Data document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-0721), ACS in Deadhorse (907-269-3499), North Slope Borough Land Division (907-882-0522), North Slope Borough Land Management (907-882-0374), and the ANCSA Incidental Command Center in Anchorage (907-269-1000). The following cultural site(s) are located in the area depicted on this sheet:
- XBP-010 on the coast west of Milne Point.

### AIR ACCESS

- **Kuparuk Airstrip**: 6,000 ft. gravel runway, advanced continuously. VFR: 1 mile vs. clear of clouds (IFR: 0.75 ms vs).
- **Fuel Services**: Jet A. 24-hour advance notification required (907-659-7213).
- **VESSEL ACCESS**
- **Tide Flows**:
  - Simpson Lagoon water depths range from 3 to 7 ft.
  - Aircraft wreckages are present in 4 ft of water 0.5-mile offshore of Milne Point, 19-1.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

### VESSEL ACCESS AND HYDROGRAPHIC CONDITIONS

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### COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-cast washed over the vegetated shorelines is mixed with large pebbles, making mechanized travel difficult.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas at MPU D Red and at MPU U Red.
- Boom is typically predeployed seasonally on Central Milne Creek north of MPU 2 and northeast of Milne Point Road.

<table>
<thead>
<tr>
<th>PRESTAGED EQUIPMENT AREA</th>
<th>LOCATION</th>
<th>ITEM</th>
<th>QUANTITY</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPU-2</td>
<td>At near east of MPU A Pad</td>
<td>Boom</td>
<td>1,000</td>
<td>8' x 6' radar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boom</td>
<td>2000</td>
<td>3600-gal. Fastank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pump</td>
<td>1</td>
<td>3' diaphragm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skimmer</td>
<td>1</td>
<td>Repl mop, Z14-E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skimmer</td>
<td>1</td>
<td>Disc-30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage</td>
<td>1</td>
<td>2,400-gal. Fastank</td>
</tr>
<tr>
<td>MPU-3</td>
<td>On south side of inlet, northeast of MPU D Pad</td>
<td>Boom</td>
<td>1,000</td>
<td>8' x 6' radar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boom</td>
<td>1000</td>
<td>3600-gal. Fastank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pump</td>
<td>1</td>
<td>3' diaphragm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skimmer</td>
<td>1</td>
<td>Repl mop, Z14-E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skimmer</td>
<td>1</td>
<td>30-gal. slurry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage</td>
<td>1</td>
<td>2,400-gal. Fastank</td>
</tr>
<tr>
<td>MPU-4</td>
<td>West of mouth of Central Milne Creek on south side of inlet</td>
<td>Boom</td>
<td>1,000</td>
<td>8' x 6' radar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boom</td>
<td>2000</td>
<td>3600-gal. Fastank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pump</td>
<td>1</td>
<td>3' diaphragm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skimmer</td>
<td>1</td>
<td>Disc-30</td>
</tr>
</tbody>
</table>

*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.*
North Slope Offshore and Nearshore Water Conditions

Open water July-September
Very short broken ice seasons- 2 to 4 weeks
Relatively Shallow Water
Safety First
Tracking and Delineation

GPS Tracking Buoys
Ice Strengthened Satellite Tracking Buoys
Aerial Reconnaissance
Airborne Infra Red Detection System (FLIR)
Underwater Light
Ground Penetrating Radar
Boats In Ice
Use of Boom Systems in Broken Ice
Skimming Systems
Recovery Using Free Skimming
Recovery Using Diamond Boom for a Subsea Source
Alaska Clean Seas - Gulf Spill Response

82,000 Feet of Boom
Over 5,000 Feet of Fire Boom
Two Skimming Systems
44 ACS Personnel Responded to Gulf

- Aerial Observation
- Initial call for experienced responders
- Fishing Vessels of Opportunity for Response Hopedale
- Logistical Support Houma