# PHMSA Workshop

Challenges Affecting Oil Spill Response Responders Perspective

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### Mark Ploen - QualiTech

- Began career in oil spill response with a contractor in Prudhoe Bay, Alaska in 1982.
- 8 years Alaska/Arctic Experience
- Response experience in 30 countries
- Every continent except Antarctica
- Member of ASTM
- Member of SCAA



#### Major Spill Response Experience

- 2014 Galveston "Y" Incident, Galveston, Texas
- 2013 Tioga Pipeline Incident, Tioga, North Dakota
- 2013 Lac Megantic Incident, Quebec, Canada
- 2011 Yellowstone River Incident, Montana
- 2010 Enbridge Pipeline Incident, Marshall, Michigan
- 2010 Deepwater Horizon Incident, Gulf of Mexico
- 2009 MV Kawewa, Majuro, Marshall Islands
- 2009 TV Krymsk, Galveston, Texas
- 2009 MT Chemical Supplier, Houston, Texas
- 2008 TVA Fly Ash Incident, Kingston, Tennessee
- 2008 Degussa Carbons, Submerged oil, Belpre, Ohio
- 2007 Coffeyville Resources Incident, Coffeyville, Kansas
- 2006 Citgo Flash Flood Incident, Lake Charles, Louisiana
- 2006 Burmuda Islander Incident, Delaware
- 2005 DBL 152 Barge, Port Arthur, Texas
- 2005 Hurricane Katrina Response, New Orleans, LA
- 2005 Lake Wabamun, Alberta, Canada
- 2004 TV Athos I, Delaware River, PA, NJ & Delaware
- 2004 TV Torm Mary, Port Arthur, Texas
- 2002 Rouge River Spill, Detroit, Michigan

- 2001 TV Shaundar, Antillia, Cuba
- 2001 Houston Ship Channel, Houston, Texas
- 2000 TV Weschester, Mississippi River, New Orleans, LA
- 2000 Pepco Pipeline spill, Chalk Point, Maryland
- 2000 Transredes Pipeline spill, Oruro, Bolivia
- 1999 Genesis Pipeline spill, Collins, Mississippi
- 1998 Tesoro SPM spill, Kauai, Hawaii
- 1997 Kuroshima Reefer Vessel, Dutch Harbor, Alaska
- 1997 TV Nakhodka, Mikuni, Japan
- 1996 TV Julie N, Portland, Maine
- 1996 Coastal Barge 2525, Galveston, Texas
- 1996 Buffalo Barge 292, Galveston, Texas
- 1995 Kolva River Basin Spill, Komi Republic, Russia
- 1995 TV Berge Banker, Corpus Christi, Texas
- 1994 TB Morris J. Berman, San Juan, Puerto Rico
- 1991 Spill resulting from the Persian Gulf war
- 1990 TV Mega Borg, Gulf of Mexico
- 1990 TV American Trader, Huntington Beach, California
- 1989 TV Exxon Valdez, Valdez, Alaska
- 1987 TV Glacier Bay, Cook Inlet, Alaska



## Sunken Oil

#### Sunken Oil Detection and Recovery

API TECHNICAL REPORT 1154-1 FIRST EDITION, FEBRUARY 2016

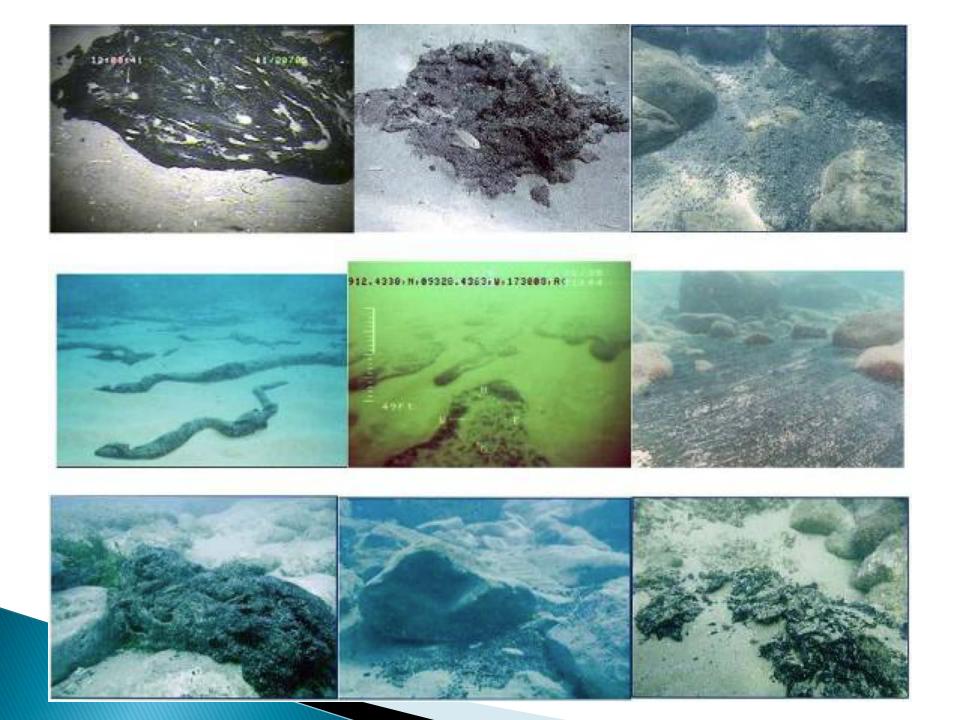


#### Sunken Oil Detection and Recovery Operational Guide

API TECHNICAL REPORT 1154-2 FIRST EDITION, FEBRUARY 2016







# Sunken Oil Technical Report

- 38 Case studies
- Detection, Delineation and Characterization
- Containment
- Recovery
- Diving in Contaminated Water
- Waste Stream Management
- Government Agency Regulations to be Considered
- Considerations for fast current and ice conditions



#### Recent OSRO Guidelines

- Non Floating Oils
  - Must identify equipment
  - Must demonstrate/illustrate methodology
- Reviewed and verified



## Oil In, On, Under Ice

- ▶ 2000 Oil and Ice Workshop, Anchorage, AK
- ▶ 2007 ADEC Oil Recovery in Ice Infested Waters
- Ongoing Research at US Army Engineer Research and Engineering Laboratory (ERDC-CRREL)
- SINTEF Largest Independent Research Organization in Scandinavia
- 2013 BSEE Sponsored Skimmer Tests at OHMSETT
- 2015 Arctic Oil Spill Response Joint Industry Program (JIP)
- IMO Guide To Oil Spill Response In Snow And Ice Conditions – Owens/Dickens



# Oil In, On, Under Ice

- Ice is very dynamic
- No "smoking gun" for recovery
- All tools should be available to responders
- Location, Location, Location
  - Need to know where the oil is in order to recover
- Encounter Rate
  - Skimmer/pump cannot recover oil if it cannot come in contact with it.



# **Mechanical Recovery**





