Non-Floating Oil: Detection and Recovery

2018 Prevention First Symposium

Jim Elliott
President, American Salvage Association
Vice President / COO, Teichman Group
“...the technological complexities of attempting lengthy, industrial style work underwater will require a vastly different collection of experts, equipment, and operational plans than those commonly used for oil spill response.”

U.S. Coast Guard and National Oceanic and Atmospheric Administration
The Coast Guard “created the Nonfloating Oil application and procedures to **meticulously** and **qualitatively** assess Nonfloating Oil classifications.

“Effective on **November 30, 2016 (extended to July 1, 2017)**, all previous Group V OSRO ‘listings’ will be removed from the Response Resource Inventory. Furthermore, all Facility and Vessel response plan holders who may handle, store, or transport Group V oils **shall only list Nonfloating Oil classified OSROs** or provide the required information in accordance with the regulatory Group V Response Plan Development and Evaluation Criteria.”

U.S. Coast Guard (MSIB 07-16)
Guidelines for the U.S. Coast Guard Oil Spill Removal Organization Classification Program

Nonfloating Oil Classification

- OSRO: Complete application outlined in Chapter 6. Send application and all related documentation to the NSFCC.
- NSFCC/CG-MER: Evaluate application and related documentation.

Max: 60 days

Temporary Classification Approved

- NSFCC: OSRO satisfies requirements and process listed in the guidelines.
- OSRO: Input resources into RRI and notify the NSFCC upon completion.
- NSFCC: Send OSRO temporary classification letter. Schedule initial PAV within six months.

Max: 6 months

Classification Approved

- OSRO: Satisfactorily pass initial PAV.
T & T Marine Salvage, Inc.
Attn: Jim Elliott
9723 Teichman Rd.
Galveston, TX 77554

Dear Mr. Elliott,

Your application for your Nonfloating Oil (NFO) classification letter has been reviewed and approved as outlined in the Coast Guard Oil Spill Removal Organization (OSRO) Classification Guidelines dated March 2016. Your OSRO classification number is 115; please use this number in all future correspondence to this office. If there are changes in the core equipment described in your application that would diminish NFO response capability in any port for which T & T Marine Salvage, Inc. holds this classification, you shall report it to the NSFCC. Your company maintains several classifications which are listed in enclosure (1).

If you have any questions or would like more information regarding your classifications, please contact the NSFCC using the contact information found in enclosure (2).

Thank you for your participation in the OSRO Classification program.

Sincerely,

W. Carter
Captain, US Coast Guard
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*Red = not likely effective; yellow = may be effective; green = most likely effective*
Detection Capabilities

- Sonar Systems
- Cameras / Video
- Diver Observation
- Towed and Stationary Sorbents
- Laser Fluorosensors
- Visual Observations
- Bottom Sampling
- Water Sampling
Sonar Systems

Marine Sonic SeaScan HDS

PocketMax3

Sea Scan Survey
Sonar Systems
Sonar Systems
Sonar Systems
Sonar Systems
Marine Induced Polarization

A Detection Technology for Non-Floating Oil

Patented technology for wide-area, cost effective detection & mapping of hydrocarbons
Underwater Visualization
Underwater Visualization
Diver Observations
Towed or Stationary Sorbents
Visual Observations
Recovery Capabilities

- Suction Dredge
- Diver-Directed Pumping and Vacuuming
- Mechanical Removal
- Sorbent / V-SORS
- Trawls and Nets
- Mechanical Removal
- Agitation / Refloat
Suction Dredge
Diver Directed Pumping System

Note: Contents of storage tanks can be decanted, skimmed, or transferred to each other in order to consolidate oil and/or maintain vessel stability.

Multiple storage tanks for oil/water recovery, settling and decanting.

Clean water discharged into boomed area.

Diver manipulates wand/nozzle to recover oil.

Submersible Pump

Discharge Hose

Work Platform

Crane

Storage/Decanting

Storage/Decanting

Submerged Oil
2018 Conference and Exhibition
Positive Pressure DESCOT Helmet and HAZMAT Viking Dry Suit
Mechanical Removal
Sorbents / V-SORs
Containment

Gabion Baskets

Sediment Curtains

X-Tex Curtains
Storage and Treatment
Logistics
Environmental Conditions
All Ocean Depths
ROLS II

ORT 300
T/V PRESTIGE
~12,000 fsw
20,000 wrecks identified in US waters

573 met screening criteria:
- Built after 1891
- Steel, iron or concrete hull construction
- Tanker/tank barge or at least 200’ or 1,000GT

107 may pose substantial pollution threat based on casualty information

10 are leaking
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