Surface Collecting Agent Operations

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How Can Surface Collecting Agents Help with Oil Spill Response?

- Can assist with skimming oil
  - Oil spreads quickly
  - Can move oil to areas where it can be collected
- Nearshore/Inland
  - Move oil out of pier structures & riprap
- Offshore
  - Enhance skimming
  - Insitu-burning
Current Insitu-burn Requirements

- 12-24 hour prep/pre-deployment time
- Transit time to spill
- (2-3) Towing vessels (Utility or fishing vessels)
- Spotter Aircraft/sUAS (ID slicks, survey area, document actions)
Current Insitu-burn Requirements

- Fire Boom (may require water pumps)
- Igniter
- Fresh oil w/ thickness of >2-3mm
Current ISB Operations

- Spotter Aircraft - designates target oil
- Two Towing vessels pull fire boom into place
- (1) Vessel ignites from small boat or “floats” igniter to oil
- Burn is controlled by the thickness of the contained oil
Limiting factors

- Slick thickness 2-3 mm
- Weather

Fire control techniques

- Fire boom - open the boom
- Herding agents -
  - Fire monitor can be used to break the SCA boundary
  - Use containment boom to move/breakup the slick
Nearshore Response

46’ Fast Response Vessel

- VHF-FM
- Cell voice/data
- Satellite voice/data
- AIS (COP)

- Drone Capable
- Speed 20+ kts
- Brush Skimmer – 98% efficient
- Igniter
- 100 GPM fire monitor
Offshore Response

95’ Fast Response Vessel

VHF-FM
Cell voice/data
Satellite voice/data
AIS (COP)

Drone
Gyro-Stabilizer

Integrated X-Band Radar
and Infrared Camera

Speed 20+ kts

Brush Skimmer

100 GPM fire pump
95’ Fast Response Vessel
24-Hour Oil Detection

95’ FRV X-band Radar

Oil

Oil sheen

Thick oil

Infrared Camera

Oil
Offshore Operations
• Assessment
• Twin Commander
• Speed: 200+ knots
• Digital Camera
• Houma Based

Nearshore & Offshore Tactical Operations
• UAS - DJI Inspire II
• Launched from 46’ or 95’
• Digital camera up to 4K resolution
SCA Operations

wind
Future Equipment?

- Deployable booms on vessels
- Air deployable system
- Autonomous Jet Ski
  - Tank for herder
  - Igniter
  - Air monitoring
  - Potential drone launch platform?
SCA Approval

- SCA Approval
  - NCP Subpart J
  - Federal OSC has to get approval from RRT
- Offshore insitu burning Federal OSC is preauthorized
- Nearshore insitu burning would require RRT approval
- Use of burning agents require RRT approval
- Can be approved by RRT concurrently
• Resources/tools in place (limited)
• SOO
  • Time - fresh oil
  • Sea State - calm seas
  • Proximity to people, infrastructure & sensitive wildlife
• Operation can be safely done (burn or mechanical removal)
• Rapid approval is necessary
Contact Information

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