

Strategies for Mechanical Recovery

Equipment	Use for:
1. Fast Response System	1) Skimming oil offshore with a readily available seaworthy workboat. 2) Skimming in 3 to 4 ft. seas (throughout Sea State 2 into early Sea State 3); heavier seas permissible under ideal situations. 3) Chasing oil slicks to assist the HOSS Barge in recovery. 4) The most immediate mechanical skimming means to respond offshore (draft of workboat determines the water depth for use in bays, 6 to 8 ft. of water the minimum.) 5) Flammable B and C, Combustible D and E, petroleum hydrocarbon spills.
2. Identified Boats (Same equipment as Fast Response System)	1) Rapid response skimming offshore as skimmers are already mounted on vessels working offshore.
3. High-Volume, Open Sea, Skimmer System - "HOSS" Barge	1) Long-duration, more extensive spills, where chasing after oil slicks is not required; for instance, down-wind and down-current from a well that is blowing-out of control; towing to skim is limited to about a one knot advance. 2) Operational support for spills far offshore, in conjunction with Fast Response Systems which are collecting the scattered slicks.

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Equipment	Use for:
4. Portable Offshore Skimmers (Self-Contained) G.T.-185 - Desmi 250	1) Very similar in design and operation as Fast Response Systems. 2) Must have available vessel. 3) Owned by M.I.R.G., permission through Representative or DCO that maintains units is needed.
5. Skimming Vessels - Self Propelled	1) Skimming oil slicks while steering the vessel forward. 2) Recovering oil slicks herded or advancing to the skimmer while the vessel is nearly stationary or at anchor.
6. Barge or Vessel Mounted Mop Skimmers	1) Calmer waters. 2) Removes oil contained in boom or in pockets. 3) Excellent oil to water pick-up ratio. 4) Portable.
7. Hand Skimming System	1) Collecting confined oil on calm surfaces.
8. Floating Suction Oil Skimmer - (Swiss) Ocla III	1) Calm water conditions, such as: a) Removing confined oil from within booms. b) Cleaning oil from pits, tanks, ponds, slips, docks, rivers, canals and ditches.

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Equipment	Use for:
9. 36 inch Boom - Nearshore Containment	1) Calmer waters. 2) Containing spilled oil so that it can be collected by skimmers. 3) Preventing spread of spilled oil. 4) Precautionary measures should oil be spilled. 5) Diverting spilled oil and/or trash to another area. 6) Concentrating spilled oil for more efficient collection. 7) Barricading traffic or trash.
10. 43-inch Expandi-Boom	1) Can be operated in up to 6' seas and 20 knot winds. 2) Self-inflating. 3) Stocked in 750' sections, but can be separated into 50' sections. 4) Can be deployed by 1 to 3 men, from a dock, boat, using a crane, or by helicopter.
11. 72-inch Offshore Oil Boom	1) Replacement for existing Model III HOSS Barge Boom Sections.

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Equipment	Use for:
12. Helicopter Underslung Sprayer System - "HUSS"	1) Applying Shell Oil Herder, a surface collecting agent or collectant, to the water's surface around the perimeter of an oil slick to prevent or help control spreading.
13. Surface Collecting Agents (Collectants)	1) Preventing spread of fresh unemulsified, oil spills. 2) Facilitating use of recovery equipment and techniques. 3) Aiding in the destruction of the oil on the water's surface.
14. Oil Sorbents (Melt Blown Polypropylene)	1) Absorption of thin oil slicks or rainbows of oil from the surface of calm water. 2) Wiping oil off structures, rock shorelines, vegetation, vessels, other oil spill equipment, etc. 3) Can be wrung out and reused. 4) Avoiding the use of straw and other particulates difficult to retrieve and dispose. 5) Can be recycled thus reducing disposal. 6) A floating barrier to aid other containment and recovery devices. 7) Congested or restricted areas.

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Equipment	Use for:
15. Boat Sprayer System for Dispersants	1) Spraying "Low-mixing energy" dispersants, from the bow of the workboats, onto oil slicks. 2) Fresher, not very weathered, less viscous, crude-oils (usually not mousse).
16. Exxon Corexit 9527 - Oil Dispersant Inventory and Logistics	1) Aid to break up oil spills on water.
17. Viscous Type Absorbents	1) Absorption of heavier oils. 2) Wiping off rocks or structures, etc. 3) Floating barrier.
18. Aircraft Spraying of Dispersants Offshore	1) Rapid application of dispersant and/or coverage of large areas. 2) Sea conditions that are unacceptable for other equipment and methods. 3) Very distant or remote job sites. 4) More beneficial spray patterns. 5) Spill treatment in non-navigable waters. 6) Spills of a size sufficient to keep equipment in use (to avoid expensive standby costs).

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Equipment	Use for:
19. 50 Barrel Oil Storage Barge	1) Offloading Shallow Water Skimmers (temporary storage, especially for CGA-51) Transport recovered oil. Grade D or E Combustible Liquids. Lakes, Bays, and Sounds, Service (River Service also), U.S.C.G. Certified.
20. Communications System (Primary On-Scene, VHF)	1) Communications around the spill site between workboat, helicopters, skimmers, contract labor supervisors, and Member Company supervisors and dispatchers. 2) Communications from the spill site(s) to onshore offices or dispatchers.
21. Communications System (Secondary - Single Sideband)	1) Long-range radio system to onshore telephone line interconnect through a Marine Operator Station. 2) Backup for Primary VHF communications difficulties. 3) Calls not oil spill related. 4) Emergencies and special situations.

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Equipment	Use for:
22. Portable Biological and Chemical Field Sampling	1) Continuous flow oil-in-water monitoring. 2) Detecting oil in the sea water column. 3) Determining an oil concentration gradient in the water column. 4) Mapping the oil spill on the water's surface. 5) Detecting leaks or following seeps.
23. Hoses, Assorted, Suction and Discharge	1) Pumping recovered oil.
24. Bird Scare-A-Way Guns	1) Encouraging birds to avoid spilled oil.
25. Movable Waterfowl Rehabilitation Station	1) Centralized bird cleaning station and model confine for rehabilitation and protection. 2) Complementary facility to a more permanent larger installation.
26. Pump - 3-inch portable centrifugal, 200 gal/min	1) Offloading barges and tanks. 2) Oil recovery from Suction Skimmers.
27. Air Operated Double Diaphragm Pumps	1) Oil recovery from floating Swiss Oela III Suction Skimmer. 2) Oil recovery from Hand Skimmer System.