Dispersant Application

About

Dispersants are chemical agents used to break up oil into smaller droplets throughout the water column. Dispersants are applied to surface oil floating on water, or below the surface closer to an uncontrolled release of crude oil from a well blowout source. This series of fact sheets details monitoring requirements and how to apply the collected data to inform the use of dispersants under **Subpart J of the National Contingency Plan (NCP)**.

Description of the Requirement

The responsible party must provide the dispersant application methods and procedures, including a description of the equipment to be used, hourly application rates, capacities, and total amount of dispersant. Refer to the regulatory requirement in the Code of Federal Regulations (CFR): **40 CFR 300.913(a)(4)**.

Dispersant Application Methods

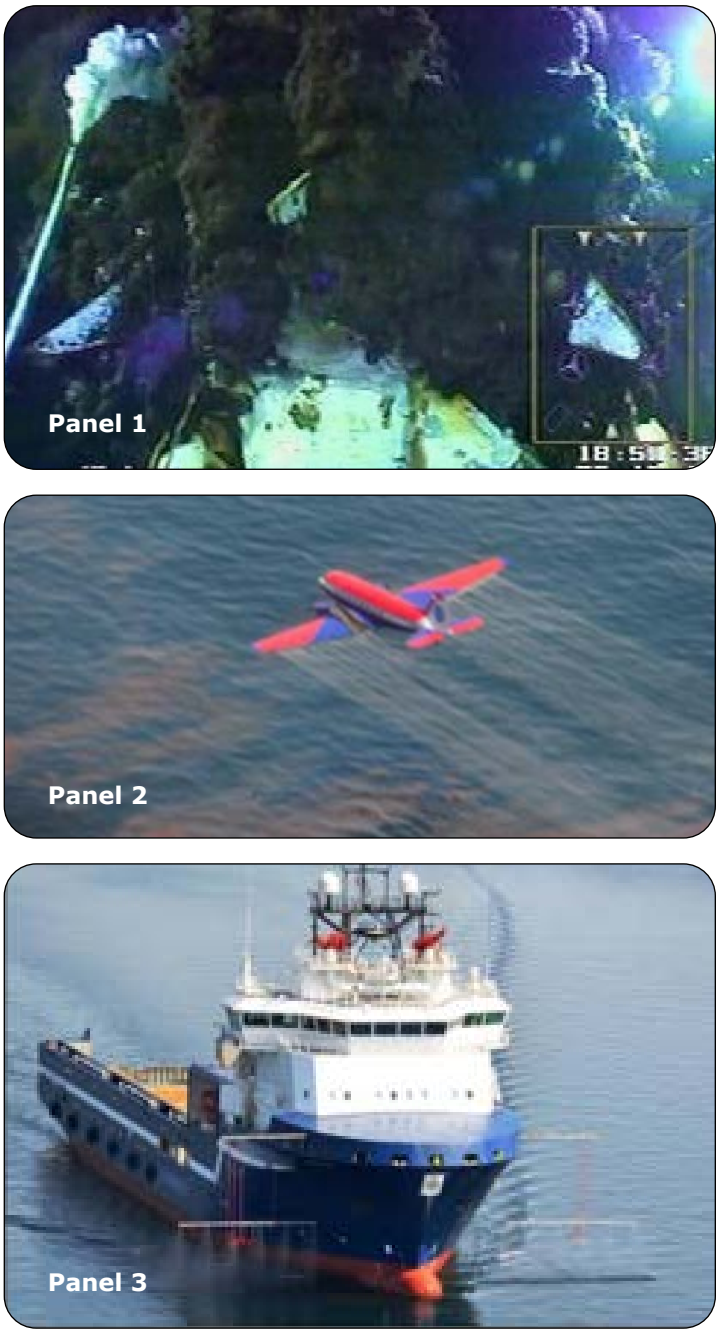
Dispersants are most commonly sprayed on the surface of an oil slick using special equipment on an aircraft or a vessel. In some situations, dispersants are applied to the subsurface at the source of an oil discharge by using tridents, wands, or other application methods (Figure 1). The equipment, hourly application rates, equipment capacities, and total amount of dispersant used are specific to the oil spill incident.

Reporting Dispersant Application

The responsible party provides information for several key components of dispersant application:

- Where the dispersant application occurs (e.g., surface, subsurface)
- The application equipment (e.g., aircraft or vessel spray, subsea wand)
- The application rate (e.g., gallons per hour)
- The equipment capacity (e.g., total volume)
- The total amount of dispersant used

Figure 1: Dispersant application methods: subsurface wand (panel 1), aircraft (panel 2), watercraft (panel 3).



Credit: Government Accountability Office and Department of Interior

Using Dispersant Application Information

- Manufacturer recommendations for concentrations, dispersant-to-oil ratio, and use conditions are listed on the National Contingency Plan (NCP) Product Schedule (linked under Additional Resources).
- The On-Scene Coordinator can use information reported on application rates, equipment capacities, and total amounts to verify that the dispersant is being applied at a consistent rate and within the parameters of the manufacturer's recommendations. Fluctuations in application rates could indicate, for example, problems with the equipment.
- It is important to use dispersants in a manner that maximizes their effectiveness while minimizing unintended environmental effects.

Decision Points for Responders

The On-Scene Coordinator should consider all available data and information relevant to the response and consult with subject matter experts. If the application information reported by the responsible party deviates from relevant manufacturer recommendations, or from the planned rates or projected totals, the On-Scene Coordinator should follow up on the discrepancies and determine if changes to the response are warranted.

Additional Resources

NCP Product Schedule

Lists dispersant products and data submitted to EPA as required by Subpart J of the NCP.

NCP Product Schedule Technical Notebook

A compilation of product bulletins summarizing data requirements and test results for dispersant products listed in EPA's NCP Product Schedule. The Technical Notebook includes information on dispersant application methods, toxicity and effectiveness data, and physical properties.

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