

## 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)**.

## Dispersant Monitoring Quality Assurance Project Plan (DMQAPP)

A DMQAPP establishes a process for collecting and maintaining high quality environmental data. The plan should include sample collection methodologies, handling, chain of custody, and decontamination procedures, as appropriate.

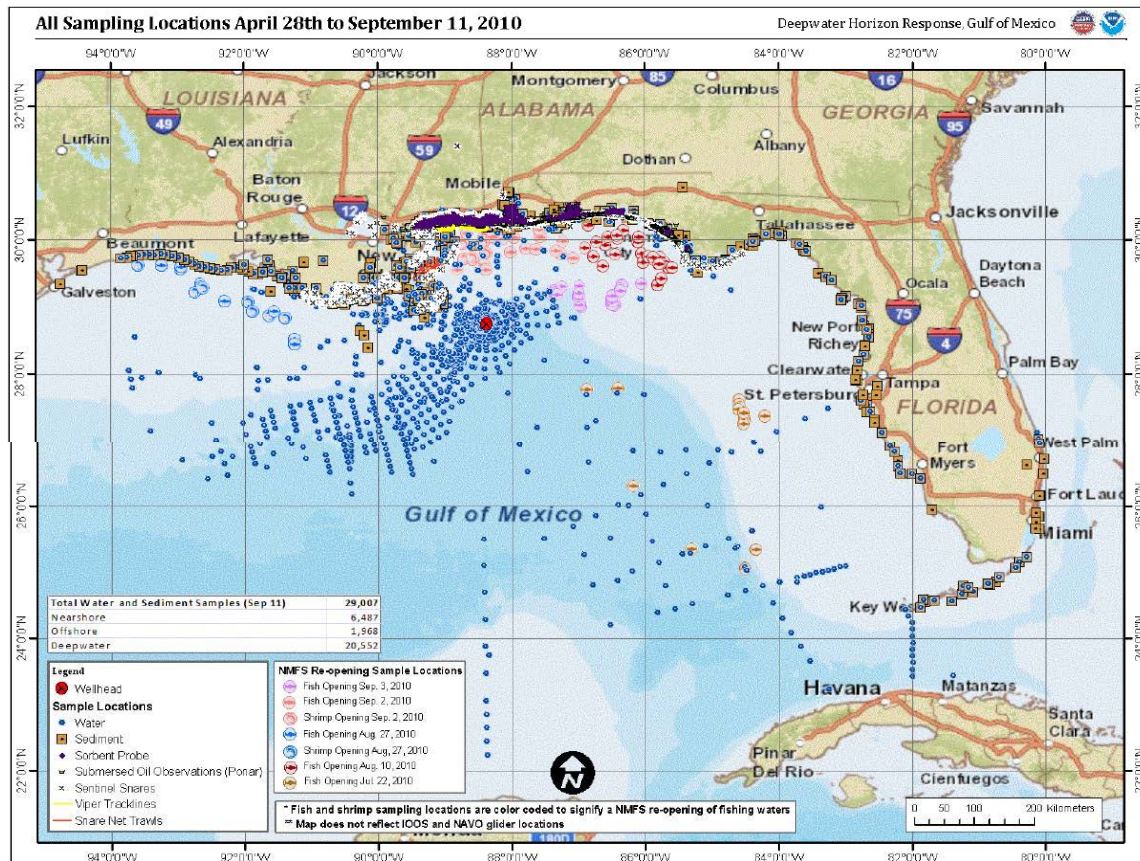
## Description of the Requirement

The responsible party must submit a DMQAPP covering the collection of environmental data to the On-Scene Coordinator. Refer to the regulatory requirement in the Code of Federal Regulations (CFR): **40 CFR 300.913**.

## Using DMQAPPs

A DMQAPP characterizes the quality, integrity, and limitations of the data; in doing so, it provides context and a meaningful analysis of the monitoring data. The DMQAPP provides structure to all data collection activities. This helps ensure samples are taken from the right place at the right time and are properly handled and analyzed. Ultimately, a DMQAPP is intended to ensure actionable, reliable data is available to inform the response (Figures 1 and 2).

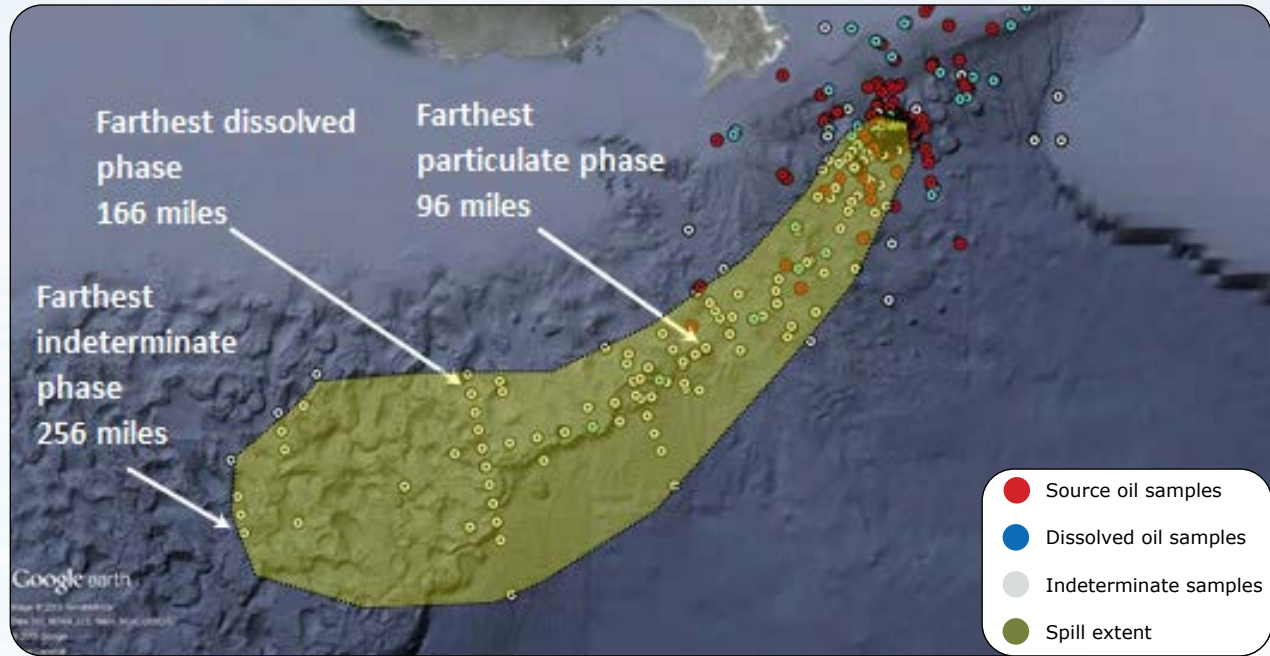
**Figure 1:** Example map of sampling locations during 2010 *Deepwater Horizon* oil spill.



Credit: U.S. Coast Guard



**Figure 2:** Plume modeling predicts the transport of oil in spill incidents.



Credit: [Deepwater Horizon Natural Resource Damage Assessment Trustees](#)

## DMQAPP Basic Elements

### Site description and background

- Bathymetry, subsea currents (including temporal variations), and other relevant geological features.
- Relevant oil seeps or other potential sources of contamination (e.g., recent oil discharges), and relevant oil and/or natural gas infrastructure (e.g., oil platforms, subsea pipelines).

### Description of the sampling and monitoring objectives

- Sampling strategy design, including activities and data quality objectives (reference the Design of *Water Sampling Strategy* box).
- Sampling and monitoring approach to ensure data integrity and consistent procedures.
- Sampling, monitoring, and field quality control procedures; spill or waste disposal procedures; and sample/data handling issues.
- Management procedures documenting how samples are procured, handled, and delivered, including the prompt and timely transport of samples to laboratories where necessary to minimize operational delays (e.g., weather delays).
- Instructions to address sample preservation (including acidification issues), containers, and hold times.

### Analytical approaches

- Appropriate laboratory tests, any special instructions, and approaches to verifying and reporting the data.

### Quality assurance

- Chain of custody procedures, field records including logs, and qualitative data handling (e.g., photographs).

### Design of Water Sampling Strategy

A sampling strategy is important to ensure the collection of representative and useful data sufficient for incident specific decisions. In general, a good strategy will:

- Sample representative areas for ambient, baseline, and dispersed water column conditions.
- Include locations throughout the expected trajectory of dispersed oil (and surrounding areas not impacted by the oil discharge), which could be informed by trajectory modeling.
- Sample water at a variety of depths.
- Be in place when dispersant use conditions are met, as applicable, and for the duration of dispersant operations.
- Remain flexible, with locations or depths shifting based on trajectory modeling and/or data results.

### ► **Decision Points for Responders**

The On-Scene Coordinator may request that response support agencies provide feedback on the submitted DMQAPP, including feedback of the designated Scientific Support Coordinator or of other pertinent Regional Response Team representatives. The On-Scene Coordinator has the discretionary authority to require the responsible party to address any concerns associated with the plan. The DMQAPP is to be in place for any monitoring activity to occur under these requirements.

### **Additional Resources**

#### **Environmental Monitoring for Atypical Dispersant Operations**

Section 4.0: Quality Assurance Project Plan (National Response Team)

#### **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, and physical properties.

#### **Oil Spill Emergency Response – Monitoring the Use of Dispersants Fact Sheets**

- Water Column Sampling

### **Legal Disclaimer**

This guidance does not create any rights—substantive or procedural—enforceable by any party in litigation with the United States of America. It does not substitute for the Clean Water Act, Oil Pollution Act of 1990, or EPA's regulations; nor is it a regulation itself. Mention or depiction of products or devices does not imply EPA endorsement