

MC252 Incident

Procedure for Obtaining NRDA Submerged Oil Samples from the Nearshore Environment

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AMENDMENT RECORD

Amendment Date	Revision Number	Amender Initials	Amendment
8/16/2010		T.Moore	Added LA Approval Line

MC252 Incident Response

Procedure for Obtaining Submerged Oil Samples

This procedure outlines the steps that will be employed to collect submerged oil samples from the nearshore environment and prepare the samples for shipment. Representatives from NOAA (Trustee Representative) and BP (represented by ENTRIX) will conduct the sample collection.

1. Objective

The purpose of the document is to direct the collection of samples of weathered, submerged oil from the nearshore environment (from the shoreline to the 20m isobath). The sampling locations are to be determined in the field, and the total volume to be collected is approximately 250 gallons. The samples will be collected using trawl nets towed by typical shrimp trawlers or other appropriate vessels. To the extent possible, the samples of submerged oil will be collected from discrete geographic areas over a limited period of time (any single sample will be collected during a period of no more than one day).

Materials List

Appropriate PPE (Personal Protective Equipment)

- Chemical resistant gloves and protective clothing such as chemical apron
- Heavy-duty gloves for drum handling
- Safety goggles and face shield
- Fire retardant clothing
- Hard hat
- Steel-toed boots
- Overnight personal items
- Any additional PPE required by trawling vessels

Sample Materials

- One 150-gallon stainless steel tote
- Three 55-gallon stainless steel drums
- Five 30-gallon stainless steel drums
- Thirty 5-gallon stainless steel buckets
- Sample container labels
- 10 trawl nets and fine mesh or cheesecloth liners
- Waterproof Sharpie pen
- Chain-of-Custody documents for each laboratory for each container
- Dry cloth or towel for cleaning
- Logbook and pen
- Evidence tape or custody seals
- Non-sparking bung wrench

2. Sample Collection Procedure

- 2.1. Properly trained sampling personnel will perform the sample collection in accordance with Section 3. A Trustee representative shall document the sampling, fill out the sample labels, log book, and Chain-of-Custody forms, and photo-document the sampling.
- 2.2. Throughout this procedure, sample collectors must keep personal safety paramount. Before sampling begins, a JSA (Job Safety Analysis) or equivalent will be completed jointly by the sampling crew and vessel personnel. Additional safety requirements by the vessel will also need to be met.
- 2.3. Sample collectors will wear appropriate PPE (Personal Protective Equipment), including disposable gloves, safety goggles and face shield, fire-retardant coveralls, and apron (see Section 2).
- 2.4. The samples will be taken by trawling for a maximum of 15 minutes over transects determined in the field based on observed submerged oil or on shoreline or surface oiling that suggests submerged oil may be present. The trawl net will incorporate both a turtle excluder device and a bycatch reduction device. Upon retrieval of the trawl net, the cod end will be opened into the port of the collection container tote over the rear deck of the vessel. The sample will be sieved as it flows out of the cod end of the net to remove incidental catch, and funneled into the container. The container selected for collection of the material will be determined by the amount of material collected in the net. Once the net has been emptied, it will be decontaminated with detergent and pressure washing, and wash water and oil removed during washing will be collected for disposal at a designated contaminated waste disposal facility.
- 2.5. A trustee representative will take a series of photographs of the oil recovery process from the start of the trawling, to the transfer of oil into sample containers, to the final custody sealing of each container (i.e., the entire process). Number each sample container containing oil in a single sequence and take a photograph of each container. Photographs will be taken of at least collection of oil into one tote from the net.
- 2.6. Submerged oil will be collected directly into the sample containers from the trawl net. The oil will be sieved to remove incidental catch and funneled into the sample containers to avoid contaminating the lid. Care should be taken not to overfill the containers. Collection efforts will continue until the field team is able to collect up to 250 gallons of submerged oil (excess volume to allow for sediment entrainment in the oil during trawling). Any single sample should be collected from within a discrete geographic range (i.e., 10 km²) and over a discrete time period (not more than a single 8-hour day of sampling effort). Sampling effort will be discontinued after a maximum of fourteen days.
- 2.7. Place the lid firmly and securely on each container. Wipe any excess oil from outside of tote using dry cloth or towel. Properly dispose of dry cloths or towels. Wrap Teflon® tape tightly around edge and top of lid to seal the lid onto the tote. Close the

bung with a non-sparking bung wrench. Place evidence tape or custody seals on each tote bung and container cover.

- 2.8. Place a chain-of-custody seal on each lid. Completely fill out with a Sharpie the sample labels. Samples should be labeled following this convention:

GOM001-A0710-O9901; GOM001-A0710-O9902, etc. (first six characters are location code, 2nd 5 characters are date code (A-2010), "O" is for matrix (oil), 99 is sampling team, 01, 02, 03 is sample number.

- 2.9. Samples are to be transported by boat at ambient temperature until arrival back to the designated embarkation point, at which time they must be transferred to refrigerated storage boxes or transport cargo boxes arranged by NOAA to reduce temperature to 4 degrees C. The NOAA representative will accompany the sample containers back to dock and oversee proper storage and shipment from that point. Samples may be transferred into smaller containers once at the dock as long as chain-of-custody is maintained. If material is transferred to smaller containers, safety precautions (PPE, fire prevention, spill containment, etc.) should be similar those used on board.
- 2.10. Document sample date(s), time(s) conditions, volumes, quantities, etc. on Chain of Custody forms.
- 2.11. All samples will be sent to TDI Brooks Lab.

3. Logistics

- 3.1. NOAA NRDA logistics support will arrange transportation for the sampling personnel and sample containers, ENTRIX & NOAA representatives, if available, and will coordinate with the appropriate vessel(s) for the sampling activities.
- 3.2. The ENTRIX- and Trustee-approved sampling personnel will travel from Houma to the appropriate sampling vessel and will execute the sampling event, then return to Houma.
- 3.3. The ENTRIX and Trustee-approved sampling personnel will transfer the samples and documentation to Dade Moeller sample intake teams.
- 3.4. Dade Moeller sample intake teams will prepare the final shipping packages and associated paperwork, and arrange shipment to the sample recipients.

4. Cost Estimate

PPE		\$1,000
Vessel Day Rate =	██████████ ■ ██████████	\$42,000

Sample Containers	\$10,000
Trawl Nets	\$10,000
Decontamination materials	\$2,000
Labeling Materials/Hardware/Tools	\$1000
Total Estimated Cost	\$66,000