

Case Study



Site Description – Crude Oil Contamination from Oil Fields

Site Location: Offshore oilrig in Gulf of Mexico

Site Description: The sludge produced from an offshore oil well drilling operation was temporarily stored on a barge. The sludge was then transferred onshore for disposal at Class #1 landfill. The waste material was composed of approximately 60% oil, 20% solids and 20% water.



Contaminant: Crude oil and refinery waste.



Starting Contamination Levels: The average Total Petroleum Hydrocarbons (TPH) starting level was Start - 400,000 parts per million (PPM).

Testing standards: All tests were performed by an independent 3rd party laboratory.

Recommended Treatment Method (in-situ) : In-Situ. A bioreactor was designed by OBI to process the sludge in the barge as it was generated. This system was designed to use seawater and Oppenheimer products. The bioreactor was constructed and built on the site on the rig.

Goal: The goal of the program is to reduce the amount of waste oil sludge.

Final Total Petroleum Hydrocarbon (TPH) Levels: The final TPH level was 85 parts per million (ppm)

Outcome: The sludge was treated directly in the barge and completely eliminated within a 24 hour period. There was no disposal required, because the microbes completely converted the oil sludge into non-toxic by-products.