NOAA Abandoned and Derelict Vessel Case Study

Tug Respect

Contributor: Todd Thalhamer, California Dept. of Resources Recycling and Recovery



Vessel Overview

Name: The Respect

Incident: The tug sank after copper thieves removed the plug from the sea chest.

Date reported: Unknown, the vessel sank in 2006.

Vessel type: Tug boat Hull material: Steel Length: 150 ft.

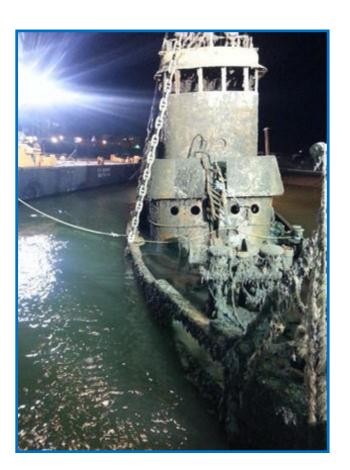
Vessel Location

Location: Alameda County, CA Site Name(s): Oakland Estuary

General description of location: The Oakland Estuary is a tidal waterway situated between the cities of Oakland and Alameda that connects the San Francisco Bay with the San Leandro Bay.

Average Site Depth: 35 ft.

Habitat/Substrate Type Impacted: Mud Jurisdictions: The State of California had complete jurisdiction over the vessel after the U.S. Coast Guard remove passed responsibility to California Department of Resources Recycling and Recovery (CalRecyle).



Incident Narrative

History: California Department of Resource Recycling and Recovery planned the removal of 40 abandoned and sunken vessels in the Alameda/Oakland Estuary using funds awarded to them from the US Fish and Wildlife 2012 Cosco Busan Recreational Use Grant Program. This initial funding for the Oakland Estuary Enhancement Project was not sufficient to remove the vessels identified in the grant proposal (which did not include this vessel) so CalRecycle requested assistance from the U.S. Coast Guard and the U.S. Environmental Protection Agency for help in removing the Tug Respect from the estuary; which sank in 2006 after copper thieves stole the plug from the sea chest. After an assessment of the vessel it was determined that it contained oil and hazardous materials (including asbestos) and both the USCG and US EPA agreed to help fund the removal of the vessel through the Oil Spill Liability Trust Fund (OSTLF) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The USCG delegated authority to EPA for the assessment and removal of hazardous materials under CERCLA, while retaining their authority with regards to oil spill response. They both agreed to turn the vessel over the CalRecycle for demolition and disposal after the pollution and hazardous material threats were abated.

Lead agency or organization: California Department of Resources Recycling and Recovery.

Other collaborators/stakeholders involved: U.S. Environmental Protection Agency (US EPA), U.S. Coast Guard (USCG) and Army Corps of Engineers (USACE).

NOAA Abandoned and Derelict Vessel Case Study



Tug Respect

Funding source(s): Funding was provided by the US EPA to remove hazardous materials (CERCLA) and by the USCG to address oil pollution (OSTLF). The State of California covered the costs of the disposal.

Threats from ADV

Environmental: The vessel posed a threat of releasing hazardous substances to the Oakland Estuary and surrounding sensitive ecosystems; however, the true potential for hazardous substance releases was not known.

Public safety and health: There was a likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of future releases and migration of those substances, which posed an imminent and substantial endangerment to public health.

Navigation: Although this vessel sank in 35 feet of water it was still a potential threat to navigation.

Vessel Removal Actions

Start date: December, 2013

End date: July, 2014

Environmental Considerations: The vessel contained hazardous materials and oil so preventing any environmental contamination was the main priority during its removal and disposal.

Removal Methods: After taking possession of the vessel from the US EPA, CalRecycle's contractor removed the vessel's superstructure at the pier in the estuary then moved the vessel to a USACE facility where both the first and second decks were removed and the vessel was demolished and disposed of. Before any removal activities began, a site health and safety meeting was conducted to assess any known chemical hazards, physical hazards, loading issues, water rescue procedures, spill response, and other safety protocols. The removal and disposal of the Tug respect was consistent with standard waste management, engineering, spill response, and construction practices. All wastes were transported by licensed waste hauler and properly disposed.

Authorities used to take Possession of Vessels: The tug Respect was taken into possession initially by the USCG under OSTLF, then transferred to the State of California for removal and disposal.

Permits Required: CalRecycle worked with local, state and federal agencies concerning the permitting and mitigation of the waste found in the vessel.

Salvage Contractor(s): Global Diving and Salvage, Inc. was contracted by the USCG to raise the vessel to facilitate the removal of oil. Pacific States Environmental was contracted by CalRecycle to remove and dispose of the vessel.

Approximate removal costs: \$2,600,000 for raising the vessel and pollution abatement (does not include disposal costs that were paid by CalRecycle).

Additional types of debris removed: 31,000 gallons of oil laden sediment and 40 cubic yards of asbestos was removed from the vessel.

Vessel Disposal Process/Issues: While removing sediment from the vessel, the EPA found bags of asbestos (from a prior cleanup attempt) and traces of tar balls and heavy fuel oil, which had to be addressed (again) by the USCG.

Vessel removal summary: On December 2, 2013, the USCG mobilized two barge cranes to par buckle and raise the Tug Respect. Once the vessel was stabilized, the vessel was taken to Bay Ship and Yacht where USCG and US EPA removed the oil laden sediments, asbestos, and hazardous substances. After

NOAA Abandoned and Derelict Vessel Case Study



Tug Respect



US EPA removed the known asbestos and contaminated mud, the vessel was transferred to CalRecycle's salvage contractor on December 13th, who removed the superstructure of the vessel at Bay Ship and Yacht before transferring it to the USACE dock in Sausalito, CA for final decommissioning.

Project Challenges

Environmental: The vessel had be underwater for some time and was filled with sediment that had become contaminated.

Funding: Initially the State of California did not have the money to remove this sunken tug; however, after receiving funding to remove other derelict vessels in Oakland estuary and leveraging additional funds and support, the EPA agreed to collaborate and pay for raising the vessel and pollution abatement through the federal Oil Spill Liability Trust Fund.

Additional challenges: Synchronizing actions with local, state, and federal partners, and organizing the salvage operation to insure the proper equipment and expertise was available when needed.

Lessons Learned

The importance of synchronizing actions with all local, state, and federal partners and speaking with a unified voice.

New tools, techniques or developments

CalRecycle further developed a framework for future joint operations for derelict/abandoned vessels.

Contact Information

Todd Thalhamer
Project Engineer
California Department of Resources Recycling and Recovery
Phone: 916-341-6356

Images:



