U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Oakland Estuary Marine Debris Removal Site - Removal Polrep
Initial Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: **POLREP #1**
INITIAL POLREP
Oakland Estuary Marine Debris Removal Site
A944
Alameda, CA
Latitude: 37.7723010 Longitude: -122.2412250

To:
From: Will Duncan, Federal OnScene Coordinator
Date: 10/28/2013
Reporting Period: September 9, 2013 thru October 26, 2013

1. Introduction

1.1 Background

Site Number:	A944	**Contract Number:**	EP-S9-12-01
D.O. Number:	0932	**Action Memo Date:**	7/23/2013
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	Not Applicable
Mobilization Date:	9/9/2013	**Start Date:**	9/9/2013
Demob Date:		**Completion Date:**	
CERCLIS ID:	CAN000909550	**RCRIS ID:**	Not Applicable
ERNS No.:	Not Applicable	**State Notification:**	Not Applicable
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

The Oakland Estuary Marine Debris Removal Site is a time-critical removal action

1.1.2 Site Description

The Oakland Estuary Marine Debris Removal Site is located in the Oakland Estuary, Alameda County, California. The Oakland Estuary is a tidal waterway situated between the cities of Oakland and Alameda, which connects the San Francisco Bay with the San Leandro Bay. The water of the estuary is essentially similar to the waters of the San Francisco Bay.

Latitude: 37°46'22.47" N
Longitude: 122°14'24.09"W

An estuary is a body of water formed where freshwater from rivers and streams flows into the ocean, mixing with the seawater. Estuaries and the lands surrounding them are places of transition from land to sea, and from freshwater to saltwater. Although influenced by the tides, estuaries are protected from the full force of ocean waves, winds, and storms by the reefs, barrier Island, or fingers of land, mud, or sand that surround them making them unique habitat for marine mammals, fish, and birds. San Leandro Bay, which lies to the east of the estuary, is fed by San Leandro Creek and home to Damon Marsh. Damon Marsh is a tidal wetland as well as one of several wildlife sanctuaries found in San Leandro Bay. A 1989 biological study of Damon Marsh found that this habitat supports the California Clapper Rail, a California and federally listed endangered avian species.

On August 24, 2012, CalRecycle sent a letter to Army Corps, Coast Guard, and EPA requesting their participation in a joint venture raising, evaluating, assessing, and removing abandoned wrecks and other marine debris from the Oakland Estuary. The abandoned wrecks and marine debris are located throughout the Oakland Estuary, including the shoreline along Coast Guard Island and the San Leandro Bay. The EPA offered to be the lead federal agency with the Army Corps and Coast Guard offering resources and support to the field effort. The Coast Guard gave EPA authority to be the FOSC in the Coastal Zone for the assessment and removal of hazardous material, but retain FOSC authority for all oil. The Site consists of four sunken abandoned wrecks and other clusters of marine debris containing hazardous substances situated in the Oakland Estuary. Specifically, the areas that will be targeted during the removal action are located between the inlets of the Oakland Middle and Inner Harbors and south to the San Leandro Bay. The

abandoned wrecks have been completely under water for years, and if allowed to remain will continue to deteriorate and likely break apart and/or drift creating a substantial threat of a release of a hazardous substance into the environment as well as potentially impeding navigation and creating public safety hazards. These abandoned wrecks and marine debris containing hazardous substances may also pose a direct threat to plant and wildlife species.

Included in the four abandoned wrecks is a 160 foot tug boat "the Respect," a 102 foot long commercial vessel "the Captain," and two commercial fishing vessel. The Respect poses a navigational hazard so the Army Corps has marked its location with a hazard buoy. All of the identified wrecks will be removed unless they pose no threat of releasing a hazardous substance.

In addition to the abandoned wrecks, there are several other areas within the Oakland Estuary that contain hazardous substances including an estimated 35 illegally moored vessels dilapidated docks, piers, pilings and other like marine debris. The removal of hazardous substances from these areas will be included in this removal action although CalRecycle will take the lead removing, dismantling and disposing the solid waste; EPA will handle the disposal of any hazardous substances obtained from these vessels and marine debris.

1.1.2.1 Description of Threat

Current Site conditions pose ongoing releases and the threat of future releases of hazardous substances to the Oakland Estuary and surrounding sensitive ecosystem. The likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of future releases and migration of those substances, pose an imminent and substantial endangerment to public health or welfare or the environment based on the factors set forth in the NCP, 40 CFR § 300.415(b)(2).

The potential exists for contaminates like asbestos, PCBs, lead, and arsenic to impact humans, animals, and marine life either by direct contact or ingestion at the source or through tidal event migration and particulate migration/inhalation. Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties tremolite, actinolite, and anthophyllite). Asbestos fibers may be released into the air by the disturbances of asbestos-containing material. Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos for a long time may result in scar-like tissue in the lungs and in pleural membrane (lining) that surrounds the lung. This is a serious disease called asbestosis that can eventually lead to disability and death. PCBs are chlorinated oils that are extremely persistent in the environment and are resistant to chemical and biological degradation. PCBs bioaccumulate in fatty tissues and are known to increase in concentration up the food chain. Acute exposure of large amounts of PCBs can cause harmful effects to the eyes, liver, and reproductive system. Chronic exposure can cause harmful effects to the skin, eyes, liver, and reproductive system; PCBs are carcinogens and have been shown to cause tumors of the pituitary gland and liver as well as leukemia. Lead is a heavy metal that bio-accumulates in human tissues. Short-term exposure to large amounts of lead can cause harmful effects on the nervous system, gastrointestinal system, kidneys, and circulatory system. Long-term exposure to low levels, such as those that occur in the work place, can cause damage to the central nervous system, kidneys, blood, gastrointestinal tract, and gingival tissues. Arsenic is toxic and commonly used as a poison to control pests. Arsenic affects the skin, the respiratory system, the kidneys, the liver, the central nervous system, the gastro-intestinal tract, and the reproductive system and is a possible teratogen.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In April 2013 EPA, in partnership with CalRecycle and Coast Guard, conducted a removal assessment of four abandoned wrecks. The assessment was conducted during a minis tide allowing access to portions of the abandoned wrecks that are normally under water. The abandoned wrecks were suspected of containing multiple sources of contaminants including engine fluids, peeling paints, insulation, marine batteries and miscellaneous orphan containers. EPA collected samples from each abandoned wreck biasing these potential sources. The samples were analyzed for Polychlorinated Biphenyls ("PCBs"), metals, asbestos, and total petroleum hydrocarbons as diesel/motor oil (TPHd/mo) and gasoline (TPHg). Elevated levels of the following hazardous substances were identified:

- PCBs: Levels above Industrial Regional Screening Levels ("RSLs") were found in peeling paint taken from the exterior of wrecks.
- Arsenic: Levels above Industrial RSLs were found in paint taken from exterior of wrecks
- Cobalt: Levels above Industrial RSLs were found in paint taken from exterior of wrecks
- Lead: Levels above Industrial RSLs were found in paint taken from exterior of wrecks
- Asbestos: Was found in samples collected from the hull of the wrecks
- TPHd/mo: Levels above San Francisco Regional Water Quality Control (SFRWCB) Environmental Screening Levels (ESL) for shallow soils and surface water bodies were found on wrecks

These results represent a small sample of the estimated volume of marine debris that will be raised, recovered and disposed by CalRecycle and EPA during the removal action. During the removal assessment, marine debris was observed above and below the water line but was inaccessible for sampling. It is suspected that this marine debris will also contain multiple sources of contaminants including engine fluids, peeling paints, compressed gas cylinders, insulation, marine batteries, miscellaneous orphan containers, and miscellaneous E-waste.

Based on EPA's April 2013 assessment, actual and threatened releases of hazardous substances into the environment pose a risk to human health and the environment at this Site. Analytical results show that there is a potential for hazardous substances (asbestos, PCBs, lead, and arsenic) to be released into the environment from these abandoned wrecks. These hazardous substances can potentially kill marine life and enter into the food chain, ultimately being consumed by humans. Additionally, the potential is great that other hazardous materials are present on these wrecks, namely varnish, paint, and batteries. Releases

of these substances into the aquatic environment are subject to dispersion and translocation via tidal action and ecosystem processes and therefore may be lethal to marine life.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The Removal action at the Oakland Estuary Marine Debris Removal Site involves The removal of four vessels from the estuary. The first abandoned vessel that the EPA will address will be the tug "Captain Al". The removal strategy for this vessel is a combination of lift bags and overhead lift. The captain is approximately 75% full of sediment. The first phase of the operation will be to have divers dredge the sediment from inside the barge. After the dredging is completed, divers will rig the vessel with approximately 20 lift bags, each with an open water lifting capacity of 9 tons. The lift bags will be connected to the ship via chains that will be jetted under the hull of the vessel. The lift bags will be complimented by overhead lift provided by a derrick crane. The ship will be raised to the surface at which point high capacity pumps will be used to dewater the vessel. It is anticipated that the vessel will be made able to float on its own, enough so that it can be towed to Bay Ship for drydocking. If the vessel cannot be made water tight enough for her to be towed to the shipyard, the ship will be towed very slowly to the shipyard with the liftbags still in place. When the vessel is drydocked, it will become the responsibility of CalRecycle to manage disposal.

The second abandoned vessel that the EPA will address is the tug "Respect". The removal strategy for this vessel is parbuckling and dewatering. Based on photos taken at the time of sinking, it is believed that when the vessel is parbuckled (rolled on its keel), the decks will be out of the water, allowing for immediate dewatering. The vessel is anticipated to be approximately 20% full of sediment. The first phase of the operation will be to have divers dredge the sediment from inside the barge. The sediment is anticipated to be loaded into a hopper barge for sampling, and then either dumped in a USACE/EPA approved site, or off-loaded as Hazmat. After the sediment has been removed, Global will move into the parbuckling phase. This will be accomplished through application of forces in specific locations on the vessel. The primary righting force will be generated by D-9 bulldozers pulling high on the vessel from the shore. This force will be counteracted by the placement of 2 large anchors on the opposite side of the channel from the wreck, which will be connected near the keel of the ship. These two opposing forces will create a rotational moment which will tend to stand the vessel back up on its keel. These forces alone will likely not be sufficient enough to overcome the mass and friction of the 700+ ton vessel sitting on soft mud. Additional force will be applied as necessary from a derrick crane and/or a series of 9 ton lift bags on the low side of the vessel. One option that is still being evaluated is digging a trench parallel and close to the keel of the ship on the near shore side. This trench will give the ship a “hole” to “fall” into (reducing the friction caused by mud). Once the appropriate combinations of force have been applied, and the vessel is standing nearly vertical on her keel, high capacity dewatering pumps will be used to dewater the interior of the vessel. It is anticipated that the vessel will be made able to float on its own, enough so that it can be towed to Bay Ship for drydocking. If the vessel cannot be made water tight enough for her to be towed to the shipyard, the ship will be towed very slowly to the shipyard with dewatering pumps continuously running to prevent sinking. Should the ship require continuous dewatering to remain afloat, another option is to bring the drydock to the salvage site (or nearby). This will eliminate the need to tow a vessel, in danger of sinking, through navigable channels, whose closure due to a sunken vessel would be detrimental to shipping and commerce in the Oakland/Whelmed Estuary. When the vessel is drydocked, it will become the responsibility of CalRecycle to manage disposal.

The third abandoned vessel the EPA will address is the the wooden boat by USCG causeway. The removal strategy for this vessel is overhead lift. Divers will deploy heavy lift straps under the hull of the vessel in two locations. The following day, a derrick crane and deck barge will move into position alongside the wreck. The first phase of the operation will be to rig and remove a fiberglass boat that is partially submerged on top of the wood boat. This will be necessary to obtain access to the wood vessel. The crane will then lower spreader bars to the water line, where crews will shackle the lifting straps to the spreader bars. The crane will lift the vessel slowly to the surface, allowing water to drain out of compartments. Once the deck of the boat is out of the water, crews will deploy dewatering pumps to remove the water from inside the hull. It is anticipated that the vessel will have enough structural integrity to withstand the forces applied during lifting, and that the boat will be able to float again with minor patching. If, during the dewatering phase, it becomes apparent that the vessel is flooding uncontrollably, dewatering attempts will be abandoned, and the vessel will be lifted completely from the water and set on the deck barge. If the vessel floats on her own, she will be towed to a haul-out facility in coordination with CalRecycle. If the vessel is loaded onto the barge, the barge and derrick will be shifted to a pier, in coordination with CalRecycle, and off-loaded for demolition. The fiberglass vessel will be off-loaded by a crane at a pier, as the vessel will not float again.

The fourth and final abandoned vessel that the EPA will address will be the San Leandro Bay Flotilla. The removal strategy for this vessel and surrounding debris, is in situ demolition. The water depth in San Leandro Bay is very shallow and transiting to and from the site, even in a small boat, is limited to high tides. A modular barge will be assembled in Whelmed, and will be loaded with an excavator with shears, and a series of 20 yard waste/recycling bins. The barge will be pushed into position at high tide and will be spudded down. The excavator with shear will demolish the steel hull vessel, loading the scrap steel into recycle bins. After the steel vessel has been demolished, the barge will be transported back to a pier in Whelmed where the shear will be removed and a different excavator, this time with a thumb, will be loaded. The barge will go back into position and the excavator will be used to demolish and remove the remaining debris. The full waste bins will then be off-loaded in Whelmed for disposal in coordination with CalRecycle.

In support of all water based removal activities, an 80 foot x 40 foot working barge will be constructed out of “flexi-floats”. The barge will hold all the supplies necessary to run an extended dive operation as well as the pump used to dredge/ vacuum sediments. The sediment will be collected and managed until representative samples can be collected and analyzed. Disposal options will be based on analytical results. The following daily summaries cover the operating period from September 9, 2013 thru October 26, 2013.

2.1.2 Response Actions to Date

Weekly Operations (September 9 – 13, 2013)

On-site Personnel: (1) EQM Representative, (11) Global Representatives

Mobilization of resources to the Oakland Estuary Abandoned Vessel and Marine Debris removal site began on September 9, 2013. Activities during the week included the assembly of the working barge, mobilization of containment boom, a boom trailer, dive safety gear, two work boats, a dive boat and heavy lift salvage gear. Mooring lines for the hopper barge were installed and crane was placed on to the working barge to assist with picking equipment from the dock to the barge and raising/lowering the spuds which are used to anchor the barge. Marker buoys were installed on the submerged vessels to identify their location from the surface. The water filtration system and flocculent was also placed on the working barge in preparation for sediment pumping activities next week.

Weekly Operations (September 16 – 21, 2013)

On-site Personnel: (2) EPA OSCs (3) EQM Representatives, (11) Global Representatives

Access to 2229 Clement Street was secured and EQM and Global moved all non-essential material from Dutra's Yard to the new staging area. This location will serve as the main staging area for all EPA and State activities. A hopper barge measuring 242 foot in length was mobilized and moored to the working barge. Dredging discharge hoses were plumbed to the barge as well as dewatering pumps. Sea Water pumped from the hopper barge will travel through a filtration system prior to being released back into the estuary. Sediments will be sampled to determine where they will be taken for disposal. Divers began assessment dredging on the inside and outside of the Captain Al in an attempt to get a better idea of where the sediment is and the amount located inside vessel. Containment Boom was extended around barge and dive operations. It was decided that the sediment management system would work better on land. The hopper barge was de-mobed prior to any sediment being pumped into it and a land based system was put into place. Eight 18,000 gallon storage tanks were mobilized and staged on the north side of the property. The dredging discharge hoses were plumbed into the tanks and the filtration system was installed so that the seawater, after settling could be filtered prior to discharging back into estuary. As dredge materials are pumped from the abandoned vessel a flocculant is added to speed up the settling process. Materials are discharged into one of two initial settling tanks where most of the sediments settle out of the water column. Water is then transferred into a series of seven settling tanks and pumped through a filtration system on its way back to the estuary. This land based system will be a great deal less than the hopper barge settling system, saving the project over 200,000 dollars. The Dive crew worked on rigging and assessment on the Captain Al during the period of time between when the hopper barge was demobed and the land based system was installed and plumbed.

Weekly Operations (September 23 – 28, 2013)

On-site Personnel: (2) EPA OSCs (3) EQM Representatives, (12) Global Representatives

During the first part of the week, the dive crew focused on rigging activities on the Captain Al. They also continued to remove marine growth off the main deck. The tank farm crew finished getting system put together and ran discharge material through so that water samples could be collected from the last tank prior to filtration and discharge back to the estuary. Background water samples were collected from the estuary for comparison purposes. Samples were sent for analytical testing and results indicated that the settling system was successful in allowing sediments to settle out of water column and that effluent was comparable to background. The pumping of sediments from inside the abandoned vessels re-started on Saturday, September 28. Water operations (Divers) continued to work on rigging and were able to get the first messenger line around the stern. The messenger line will be used to bring the chain underneath and around the boat. At the end of the week a total of 105, 600 gallons of sea water was discharged back into the estuary after traveling through the land based settling system.

The state's contractor mobilized to the site and began demolition activities of the old, collapsed wharf along the shoreline.

Weekly Operations (September 30 – October 5, 2013)

On-site Personnel: (1) EPA OSC (2) EQM Representatives, (13) Global Representatives

On September 30, an incident involving the crane which is based on the barge prevented the divers from doing any work in the water. On October 1 the divers were back to pumping mud and rigging activities. A paint locker was discovered on the tug "Captain AL". Attempts were made to collect the paint from inside the locker but the containers were too corroded to withstand being picked up. It was decided that the paint containers would be dredged with the surrounding sediments and collection steps would be taken at the settling tanks to remove any gross contamination. By the end of the week sediment removal on the tug "Captain Al" was completed. Once rigging activities are completed, the tug will be ready to lift, par buckle and dewater. At the end of the week a total of 216,900 gallons of sea water was discharged back into the estuary after traveling through the land based settling system.

Due to the Government shut-down, only one OSC was onsite from October 1 thru the end of the week. This site has been deemed "excepted" and will continue operating throughout the shutdown/furlough period.

The State contractor continued demolition activities and began constructing a demolition pad for for debris and boats.

Weekly Operations (October 7- 11, 2013)

On-site Personnel: (1) EPA OSC (2) EQM Representatives, (12) Global Representatives

Site activities this week included completing the rigging of the tug “Captain Al”. With the help of a crane barge two shots of 2.5 inch anchor chain were rigged around the bow and two shots of 3.5 inch anchor chain were rigged around the stern. The tug is now ready to be lifted out of water as soon as the cranes are available. The Dive crew moved their dive boat and work barge over to the tug “Respect” and began dredging activities from inside the boat. Unlike the tug “Captain Al”, this boat has more debris or flotsam in it. The dive crew is encountering clothing, garbage bags and other items that cannot be pumped. The dive crew has also discovered bags marked with “asbestos” that must have been part of a remedial effort on the ship. These bags are being loaded into cubic yard boxes and staged in the hazardous waste segregation area. At the end of the week a total of 148, 700 gallons of sea water was discharged back into the estuary after traveling through the land based settling system.

The Government shutdown is still in effect and Saturday site operations have been temporarily suspended. The state has begun pulling sunken boats out of the estuary. They removed a fishing vessel from inside a round public fishing pier. CalRecycle continues to work with the state lands representative to address the illegal mooring of recreational/live-aboard boats. In late August the State lands and Oakland Police department posted 28 of these boats with a notification that they were illegally moored and that they had 30 days to move their boats out of the estuary. CalRecycle, State Lands and Oakland Police Department enforced the deadline this week towing several of the boats over to the Alameda Marina for temporary storage.

Weekly Operations (October 14 – 18, 2013)

On-site Personnel: (1) EPA OSC (2) EQM Representatives, (12) Global Representatives

Activities this week include continuing to dredge sediment out of respect and send it through the settling system. On Thursday, November 17, a press event was hosted by State at the site. The EPA Regional Administrator, USCG Captain of the Port, Oakland Police Department, CalRecycle, and the Regional Quality Control Board Director were present to make statements about the activities at the site. A tour was also provided. Also of note, the sediment being pumped to the settling system contains what appears to be a waxy, black oil that is surfacing in the tanks. Divers are on the search for tanks that may contain oil. Divers also discovered a small tank that contained a oil-type substance that most are calling “lube oil”. The Coast Guard has been notified that oil and sediments contaminated with oil have been identified in the tug “Respect” . They will be consulting with National Pollution Fund Center (NPFC) to determine their role in raising the tug and removing the oil and fuel. We also discussed the pre-deployment of oil spill equipment in the event that oil or fuel is released from the tug during the lift and stabilization efforts. Discussions with the Coast Guard Water Ways Management group about closing the Estuary to all traffic during the lift of the tug “Captain Al”. At the end of the week a total of 346,700 gallons of sea water was discharged back into the estuary after traveling through the land based settling system. The START collected sediment samples from the settling system today. The government shutdown ended on Wednesday.

Weekly Operations (October 21 – 26, 2013)

On-site Personnel: (2) EPA OSCs (2) EQM Representatives, (12) Global Representatives

Activities this week include continuing to dredge sediment out of tug “respect” and send it through the settling system. Tar balls that have been transported with sediments into the settling system are impacting the performance of the sand filter, clogging it and preventing the operators from back washing the system. The system was shut down completely on Thursday afternoon so that sediments could be bulked into several tanks and new tanks could be plumbed into the system. There are now 13 tanks on site, five are full of sediments. The State continues to remove debris and sunken vessels from the estuary. At the end of the week a total of 348,500 gallons of sea water was discharged back into the estuary after traveling through the land based settling system. A total of 1,165,700 gallons of seawater has been discharge from the system. The tug “Captain Al” will be lifted using two cranes on November 4, 2013. The lift is expected to last two days.

Special Note: The project has used approximately 800 feet of sorbent boom and 100 square feet of sorbent pads to remove oil that is floating on top of the material (seawater and sediment) that is being dredged out of the tug "Respect".

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

This is an EPA fund lead action. The Civil Investigator and Office of Regional Counsel have identified a potential responsible party (PRP) for one of the abandoned vessels. However, initial investigations have found that the PRP has no viable means to mitigate the threats in a time critical manner.

2.1.4 Progress Metrics

As of the date of this pollution report, no waste has been transported off the site by EPA.

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

During the operational period the ERRS contractor will continue dredging sediment from inside the tug "Respect" and managing the sediment settling system. If additional capacity for sediments is needed, the ERRS contractor will begin removing sediments from settling tanks and solidifying them for disposal. Based on the current analytical, the sediments can be disposed of in a Class II or Subtitle D Landfill. If sediment pumping is completed, the ERRS contractor will begin activities to move the wrecked barge that lies adjacent to the tug "Captain Al". EPA will continue to work with the Coast Guard to determine their potential role in raising the tug "Respect", since we have found oil inside of it.

2.2.1.2 Next Steps

The next operational steps are to move abandoned barge that is adjacent to the tug "Captain Al", raise the tug "Captain Al" and dismantle and clean the sediment settling system.

2.2.2 Issues

2.3 Logistics Section

The biggest logistical issue for this removal action is scheduling heavy lift cranes. It is currently dredging season in the bay area and most cranes are being used for dredging activities. Although the ERRS contractor has contracted a crane company, scheduling their services continues to be challenging. On a positive note we have scheduled two cranes to lift the tug "Captain Al" on November 4, 2013. We have not been able to schedule two cranes to assist in the lifting and parbuckling of the tug "Respect". It is a distinct possibility that we will have to postpone the lift until after the dredge season has ended (November 30).

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

A consolidated site safety plan (EPA, START, ERRS, and Global Divers) has been completed for this site.

2.5.2 Liaison Officer

A Liaison Officer is not need for this site at this time.

2.5.3 Information Officer

OSC Duncan has been working with Public Affairs specialist David Yogi. Mr. Yogi has been working with the PIO from CalRecycle, Oakland Police Department, USCG, and Army Corps of Engineers. A press briefing was distributed to interested media outlets and a press event was hosted on October 17, 2013 at the Site staging area. Another Media event will probably take place when the tug "Captain Al" is raised and parbuckled.

3. Participating Entities

3. Cooperating Agencies

The removal action is in support of the CalRecycle's effort to address abandoned vessels and marine debris throughout the oakland estuary. Cooperating agencies include Regional Water Quality Control Board, BCDC, Army Corps. of Engineers, US Coast Guard, Oakland Police Department, City of Alameda, Alameda Police Department, Alameda County Sheriffs, and State Historical Preservation Office.

4. Personnel On Site

Personnel on site during this operational period included 2 EPA OSCs, 1-2 START contractors, 2-3 ERRS contractors, and 12-13 Global contractors. CalRecycle and their contractor, Pacific States, have also been on site.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6. Additional Sources of Information

7. Situational Reference Materials

No information available at this time.