

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
ASIG Sand Island - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: POLREP #4
ASIG Sand Island
Z9EA
Honolulu, HI
Latitude: 21.3168235 Longitude: -157.8900084

To: Harry Allen, EPA Region 9
Enrique Manzanilla, EPA Region 9
Daniel Meer, EPA Region 9

From: Donn Zuroski, osc

Date: 2/5/2015

Reporting Period: 2/2-2/5/2015

1. Introduction

1.1 Background

Site Number:	Z9EA	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:		Operable Unit:	
Mobilization Date:	1/25/2015	Start Date:	1/25/2015
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E15901	Reimbursable Account #:	

1.1.1 Incident Category
OPA Response

1.1.2 Site Description

The site includes the area in and adjacent to the tank farm that supplies fuel to the Honolulu International Airport. This tank farm facility includes 16 above ground storage tanks (used to store Jet a fuel) and pipelines to receive product form the Kapolei Refinery (located in Campbell Industrial Park) or product directly from oil tankers in Honolulu Harbor, as well as pipelines running form the tank farm directly to the airport. The tank farm sits on land owned by the State of Hawaii Department of Transportation Airports Division. The tanks, piping, structures and associated equipment are owned by Hawaii Fueling Facilities Corporation a consortium of (22?) airlines. The facility is operated by aircraft Service International group (ASIG).

1.1.2.1 Location

The tank farm is situated on the main road between Honolulu and Sand Island. Honolulu Harbor and Ke'ehi Lagoon are both in near proximity. A smaller tank farm operated by Hawaiian Independent Energy Co. is located adjacent to the South.

1.1.2.2 Description of Threat

On December 22, 2014, the staff at the ASIG tank farm noted a substantial shortage in the inventory of Tank #2. The storage capacity of tank #2 is approximately 2.8 million gallons. Over the course of the next month, ASIG conducted a series of tests and an internal investigation of the tank. This included transfer of the jet fuel to the airport tank farm, venting and cleaning the tank in question, locating the area of concern on the tank bottom, and cut out of a coupon on the floor. Once the coupon was removed ASIG found that the area below the tank was saturated with fuel. They then notified the NRC and the HI DOH HEER office that they had a release of 1000 bbls of Jet fuel (42,000 gallons) at their facility.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Upon notification from ASIG (January 22, 2015) the HI DOH Hazard Evaluation and Emergency Response Office (HEER) deployed one of the State On-Scene Coordinators (SOSC) to the facility. The SOSC evaluated the situation on site and immediately notified the EPA Region 9 duty officer.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

This facility is adjacent to both Honolulu Harbor and Ke'ehi Lagoon, and has a history of tank releases. The tank farm contains 16 ASTs with a combined capacity to hold 44 million gallons of fuel. Although the facility is surrounded along the perimeter by a concrete wall, the area around the tanks is not paved or sealed from downward migration of fuel should it get out of the tanks. The soil underlying the tanks is sand with layers of crushed coral and fill material. The water table beneath the facility is tidally influenced. In 1996, there was a sizable tank release inside the facility. In 2008, there was (another) release from piping/appurtenances related to a tank or tank, again inside the facility. As a result of the 2008, event the facility owners installed a bentonite slurry barrier wall along 3,000 linear feet of the perimeter.

According to the engineering firm that installed the barrier wall, "this barrier system will last for centuries". However, a substantial amount of jet fuel has escaped the slurry wall and has been found (on the water table) outside the tank farm, within 50 yards of Ke'ehi Marina.

At present, the Jet fuel is being pumped from three extraction trenches and a few small open pits inside the tank farm, and two locations outside the tank farm, directly into vac trucks. The vac truck loads are taken offsite for processing at the Honolulu Airport fuel storage farm. An average of 1,500 gallons of pure jet fuel per day have been recovered.

2.1.2 Response Actions to Date

The EPA ERT rep, the EPA OSC, and the SOSC have a collaborative working relationship with the RP and the RP's environmental contractors. At the end of each day they hold a debrief and have a "brainstorming" session to develop the path forward for the next day's effort. Careful attention is being paid to ensure that the emergency response actions are consistent with the long-term remedy. The RP has installed boom along the water's edge in the area of concern and is monitoring it closely for evidence of any jet fuel in the water.

Numerous exploratory trenches and bore holes, as well as three extraction trenches and several monitoring wells have been installed inside the tank farm. More than fifty exploratory bore holes, six monitoring wells and two extraction wells have been installed outside the tank farm.

Development of a strategy to capture the fuel, and the design of an interceptor trench to insure that the jet fuel plume does not reach the water's edge, are completed.

2/2/15

ERT, FOSC, four START, the SOSC and the DOH RPM are on site. The FOSC conducts the morning safety briefing along with the RP response contractor. START continues the DLNR air monitoring program, and completes the collection of fuel samples. A Geoprobe arrives on site and commences additional boring activities outside the tank farm. Extraction trench #3 is completed inside the tank farm. Capture and removal of jet fuel inside the tank farm continues.

2/3/15

ERT, 2 EPA FOSCs, four START, the SOSC are on site. The FOSC conducts the morning safety briefing along with the RP response contractor. START continues the DLNR air monitoring program, and completes the collection of fuel samples. The Geoprobe continues boring activities outside the tank farm. Extraction trench #4 (inside the tank farm) begins. Capture and removal of jet fuel inside the tank farm continues. The USCG COTP and his staff visit the site and are briefed on the response action by the EPA OSC and ERT.

2/4/15

ERT, the FOSC, five START, the SOSC are on site. The FOSC conducts the morning safety briefing along with the RP response contractor. START continues the DLNR air monitoring program. Geoprobe well installation commences outside the tank farm. The FOSC directs the RP to have a surveyor set up a reference line outside the tank farm to monitor the effect of hydraulic control of the jet fuel plume. Capture and removal of jet fuel inside the tank farm continues.

2/5/15

ERT, the FOSC, five START, and the SOSC are on site. The FOSC conducts the morning safety briefing along with the RP response contractor. The EPA FOSC gives the HEER Office chief a site briefing and tour. The FOSC and the RP meet with DLNR to discuss placement of the interceptor trench as well as the short and long term plans for capture of the jet fuel plume and for monitoring for future releases.

START continues the DLNR air monitoring program. Geoprobe well installation continues outside the tank farm. The FOSC visits the holding tanks system at Honolulu airport that receive and processes the recovered jet fuel. The surveyor completes the reference line outside the tank farm. Pumping from the first (two) extraction wells outside the tank farm commences. The surveyed reference line is used to confirm drawdown in nearby borings. Capture and removal of jet fuel inside the tank farm continues. The OSC asks for and receives a ceiling increase from NPFC. The RP submits the workplan as required in the CWA order.

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

Verbal Notice of Federal Interest was given by the OSC on his arrival at the site. The hard copy of the NOFI was hand delivered on 1/27/15. A CWA 311(c) order was issued and hand delivered by the OSC on 1/30/15. Further Federal enforcement actions are TBD.

2.1.4 Progress Metrics

Estimates of recovered jet fuel have been revised downward due the continued dewatering of the extracted liquid.

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
jet fuel	pure	approx.22,000g		oi/water sep	re-use

2.2 Planning Section

2.2.1 Anticipated Activities

The initial approach has been to aggressively extract the jet fuel, to define the extent of the subsurface release, and to design and install engineered capture and monitoring systems to be operated over the long term.

ASIG has installed three extraction trenches inside the tank farm and has continued aggressive removal of the jet fuel from these extraction trenches, as well as pits along the wall adjacent to tank #2 (the source of the released the fuel)..

The extent of the subsurface plume is still under study but enough information has been collected to initiate recovery from wells installed outside the tank farm.

Once the extraction trenches inside the tank farm are able to maintain hydraulic control of the release (demonstrate containment) the design of the system to extract the fuel outside the tank farm will be finalized. This system may include pumping from bore holes and/or an extraction trench or trenches. In order to ensure containment of the off-site plume, an interceptor trench will be installed the full length of the area of concern between the extraction trenches and the water front.

2.2.1.1 Planned Response Activities

Contain the release. Complete installation of systems both inside and outside the tank farm to capture and remove the jet fuel. Construct a permanent interceptor trench to ensure that the fuel is kept from reaching the marina. Develop and implement a long term monitoring plan.

2.2.1.2 Next Steps

Further develop the long-term strategy.

2.2.2 Issues

TBD

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

The FPN is funded at \$150k.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

EPA
HI DOH
ASIG

3.2 Cooperating Agencies

USCG Sector Honolulu
HI HEER Office
HI DOH
HI DLNR
HFD

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

