

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IX

**Subject:** POLREP #8  
ASIG Sand Island

Honolulu, HI  
Latitude: 21.3168235 Longitude: -157.8900084

**To:**  
**From:** Donn Zuroske, OSC  
**Date:** 3/4/2015  
**Reporting Period:** 2/21/2015 - 3/4/2015

## 1. Introduction

### 1.1 Background

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

#### 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/appurtanances 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 four extraction trenches and a few wells inside the tank farm, and several locations outside the tank farm, directly into storage tanks. The recovered liquids are taken offsite for processing at the Honolulu Airport fuel storage farm.

### **2.1.2 Response Actions to Date**

ERT, the (EPA) FOSC, the SOSC, and the RP have established a nimble and effective Unified Command approach at this response. As a result of the (Unified Command) collaborative method of solving technical problems, the fuel capture/extraction system and the efficacy monitoring effort are refined daily. Furthermore, there are few surprises or unavoidable delays.

Numerous exploratory trenches and bore holes, as well as four extraction trenches and several extraction and monitoring wells have been installed inside the tank farm. More than fifty exploratory bore holes, multiple monitoring wells and several extraction sump/wells have been installed outside the tank farm. Extraction both on and off the tank farm has evolved from being pumped directly into vac trucks to a more efficient system of skimming pumps and storage tanks. In order to ensure that no possible path for the jet fuel to reach the water is unattended, the RP has installed boom along the water's edge in the area of concern and is monitoring it closely for evidence of any releases.

At the end of each day the Unified Command holds a debrief and has 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 (short-term) actions are consistent with the long-term remedy. .

Development of the long range strategy to optimize capture of 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.

2/23/15

ERT and one START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into vac trucks from the area around Tank #2 and recovery wells outside the tank farm continues. The automated pumping system installation continues. Visual monitoring of the boom continues.

2/24/15

ERT and two START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into vac trucks from the area around Tank #2 and recovery wells outside the tank farm continues. The automated pumping system becomes operation. Visual monitoring of the boom continues.

2/25/15

ERT and one START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into a vac truck from the area around Tank #2 and recovery wells outside the tank farm continues. The automated pumping system operation continues. Visual monitoring of the boom continues.

2/26/15

ERT and one START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into vac trucks from the area around Tank #2 and recovery wells outside the tank farm continues. The automated pumping system operation continues. Visual monitoring of the boom continues.

2/27/15

ERT and two START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into vac trucks from the area around Tank #2 and recovery wells outside the tank farm continues. The automated pumping system operation continues. Visual monitoring of the boom continues.

2/28/15

ERT and two START personnel are on site. ERT and RP response contractor conduct safety briefing. Fuel recovery into vac trucks from the area around Tank #2 and recovery wells outside the tank farm continues. Continue installation of the automated recovery system. The automated pumping system operation continues. Visual monitoring of the boom continues.

3/2/15

One START person on site. ERT and RP response contractor conduct safety briefing. Automated recovery system installation continues. The automated pumping system operation continues. Visual monitoring of the boom continues.

3/3/15

EPA OSC, SOSC, DOH RPM and two START personnel are on site. ERT and RP response contractor conduct safety briefing. Automated recovery system installation continues. The automated pumping system operation continues. Visual monitoring of the boom continues.

#### **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.

Fuel being recovered by the automated system is pumped directly into hold tanks. The amount of fuel in these tanks is yet to be determined.

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
jet fuel	pure	approx.23 (?) ,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 four extraction trenches, and multiple extraction wells and sumps inside the tank farm, several extraction sump/wells outside the tank farm, and has continued removal of the jet fuel from these engineered systems.

The extraction wells and trenches inside the tank farm are completed. The infrastructure to utilize an automatic pumping system in the trenches is completed. the majority of the automatic recovery system is dysfunctional and is being "fine tuned". A strategy to capture the remaining free product throughout the tank farm is under development.

An interceptor trench is under design and 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 and optimizationof 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 recovery and monitoring plan.

#### **2.2.1.2 Next Steps**

Further refine the long-term strategy.

#### **2.2.2 Issues**

TBD

### **2.3 Logistics Section**

No information available at this time.

### **2.4 Finance Section**

No information available at this time.

### **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.