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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: **POLREP #11**
ASIG Sand Island

Honolulu, HI
Latitude: 21.3168235 Longitude: -157.8900084

To:
From: Donn Zuroski, OSC
Date: 12/29/2015
Reporting Period:

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/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 several 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 and disposal.

2.1.2 Response Actions to Date

ERT, the (EPA) FOSC, the SOSC, and the RP have established an effective Unified Command (UC) at this response. Development of the long range strategy to optimize capture of the fuel (both on and off the tank farm), and the design of an interceptor trench to insure that the jet fuel plume does not reach the water's edge, are completed. The UC frequently holds "brainstorming" sessions to refine the path forward. Careful attention is being paid to ensure that the emergency response actions are consistent with the long-term remedy. As a result of the (UC) collaborative method of solving technical problems, the fuel capture/extraction system and monitoring efforts are under constant evaluation and revision. Furthermore, there are few surprises or unavoidable delays.

Extraction both on and off the tank farm has evolved from being pumped directly into vacuum trucks to a more efficient (automated) system of skimming pumps and storage tanks.

Inside the tank farm: The extraction trenches, extraction wells and monitoring wells installed along the perimeter are functioning as planned. Construction of a series of extraction trenches around tank #2 is complete and extraction is ongoing. The plan to capture and remove fuel from the older portion of the tank farm is in draft..

Outside the tank farm: Many of the exploratory bore holes have been converted to monitoring wells. Several extraction sump/wells have been installed in the areas determined to be best for product removal. Although pumping from the sump/wells has removed quite a bit of fuel, careful monitoring of product thickness (in monitoring wells outside the tank farm) has shown that extraction efficiency has declined. The tidal study data collection has been completed. ERT is in the process of interpreting the data. Installation of the interceptor trench construction is projected to commence in October.

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.

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. EPA and PHMSA are engaged in an effort to determine if other tanks in the facility have been properly maintained and whether or not those tanks present a substantial risk of a release(s). Future Federal enforcement actions (PHMSA and EPA) are TBD.

2.1.4 Progress Metrics

Initial estimates of recovered jet fuel were revised downward due the continued dewatering of the extracted liquid.
Fuel being recovered by the automated system is pumped directly into hold tanks and will be process off-site at the Honolulu airport tank farm.

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
jet fuel	pure	approx.34,750g		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 worked to optimize 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 fully operational. A strategy to capture the remaining free product throughout the tank farm is partially complete with implementation of some sections underway.

An interceptor trench is in final design and will be installed the full length of the area of concern between the extraction trenches and the water front. Installation of the trench is projected to begin in February 2016.

2.2.1.1 Planned Response Activities
Contain the release. Complete installation and "fine tuning" 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 recovery and monitoring plan. Evaluate all tanks at the facility to determine if they present a risk of further release, and if so, implement a corrective action plan.

2.2.1.2 Next Steps
Further refine the long-term strategy.

2.2.2 Issues
The RP is in negotiation with multiple HI State government agencies in order to secure access for installation of the interceptor trench.

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
PHMSA
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.