

**REPORT TO THE TWENTY- NINTH LEGISLATURE
STATE OF HAWAII
2016**

**PURSUANT TO SENATE CONCURRENT RESOLUTION 57
REQUESTING THE DEPARTMENT OF HEALTH
TO CONTINUE THE TASK FORCE
TO STUDY THE EFFECTS OF THE JANUARY 2014 FUEL TANK LEAK AT
THE RED HILL FUEL STORAGE FACILITY AND TO INCLUDE
AN ADDITIONAL TWENTY-SIX UNDERGROUND FUEL STORAGE TANKS IN HAWAII**

**PREPARED BY:
STATE OF HAWAII
RED HILL FUEL STORAGE FACILITY TASK FORCE
DECEMBER 2015**

Introduction

On January 13, 2014, a 27,000-gallon fuel leak was confirmed at the Red Hill Fuel Storage Facility. In response, the Hawaii State Legislature adopted Senate Concurrent Resolution (SCR) 73 which requested the Director of Health to convene a Task Force to study the findings and recommendations regarding this fuel tank release and to submit a report to satisfy this requirement. In this final report, twenty-six (26) additional field constructed tanks (FCTs) were identified by the Department of Health (DOH). Due to time constraints, details about the status of each facility were not able to be confirmed by the Navy prior to the 2014 Task Force report submission.

SCR 57 was then adopted in 2015 in order to reconvene the Task Force to, “be expanded to include an additional twenty-six underground fuel storage tanks,” and “continue to monitor the United States Navy’s plans for remediation of the Red Hill facility fuel tank leaks.” The final version of this resolution also included “members of Hawaii’s Congressional delegation.... to be added to the membership of the task force,” for the first time. Many of the 2014 Task Force members continued to participate in the 2015 Task Force, while some agencies changed their representatives. The SCR, the agenda, a complete list of members, a letter from the Navy describing the FCTs in Hawaii, and the minutes from this meeting are available for download at the Solid & Hazardous Waste Branch’s (SHWB) Red Hill website, <http://health.hawaii.gov/shwb/ust-red-hill-project-main/>.

26 Additional FCTs

Besides the twenty (20) FCTs at the Red Hill Facility, another twenty-six (26) were identified in the 2014 report to the Hawaii Legislature. The original list is provided at the end of this report as Appendix A, labeled DOH List of FCTs.

In preparation for the October 30, 2015 Task Force meeting to address SCR 57, the Navy provided a letter of explanation and status of FCTs, which is available at SHWB UST website. Also, they updated the original inventory of FCTs. The updated table is called Appendix B, also labeled as Updated Navy List of FCTs.

In general both inventories were virtually identical with minor changes. The updated list, Appendix B, included an additional facility not previously identified, *Hickam POL Annex/Waikakalaua*. From the original list from 2014, Appendix A, the 550-gallon *Schofield Barracks* tank was removed because upon further investigation, it had been mislabeled and was not a field constructed tank. This changes the updated total to fifty-five (55) FCTs in Appendix B, Updated Navy List of FCTs. Discrepancies from DOH's Underground Storage Tank (UST) Program information and Navy information can be attributed to the lack of reporting requirements for FCTs in Hawaii. Also, while DOH's SHWB is the lead on oversight of the Red Hill Facility, all of the remediation and long-term monitoring at these other FCT facilities are tracked with DOH's Hazard Evaluation and Emergency Response (HEER) Branch, pursuant to Defense Environmental Restoration Program (DERA).

Active FCTs

In summary, only two facilities still actively operate FCTs, Red Hill and *Pacific Missile Range Facility (PMRF)*.

Pacific Missile Range Facility – The nine (9) tanks are 50,000-gallons in capacity and were installed in April 1942. They are made of bare steel, which is cathodically protected from corrosion and are not located over a drinking water resource area. No historical or current releases are associated with this facility.

Red Hill Bulk Fuel Storage Facility - Red Hill tanks include, eighteen (18) in service and two (2) temporarily out of use (TOU) tanks that hold approximately 12.5 to 12.7 million gallons each. Also, the facility uses four (4) FCTs which were previously identified as *Kuahuna Peninsula/Red Hill Surge Tanks*. These tanks are around 400,000-gallons each and are still in use. This makes up a total of 22 active tanks at Red Hill. There are three (3) releases associated with the Red Hill Tanks including the January 2014 leak.

An extensive number of reports on the Red Hill facility have been submitted by the Navy to DOH. These reports can be obtained through the SHWB's UST Program in an official Request for Public Record (RPR). There is also some limited information on the "surge tanks".

Permanently Out of Use FCTs

Throughout Hawaii's history, over 150 FCTs have been decommissioned and put permanently out of use (POU). Most of these were installed in the 40s and removed in the 90s. Because the regulatory department did not come into effect until 1986 and because FCTs were deferred from many of the requirements, including closure requirements, much of the limited information submitted is anecdotal and incomplete.

Two of these facilities have been put into POU status and appear in the Navy's summary. These were both acquired during the Joint Base consolidation in 2010 from the Air Force and have fuel releases

associated with them. Clean-up activities by the Navy for these facilities are overseen by the HEER Office. The public may obtain reports pertaining to these facilities through an official RPR through the HEER Office.

Kipapa Gulch Fuel Storage Annex – These four (4) 2,650,000-gallon steel tanks were decommissioned in 2002 after they were removed from service in 1993. Active remediation in the form of bioventing is currently being done to address a release at the site.

Hickam POL Annex/Waikakalau - These nine (9) 1,765,000-gallon steel tanks, encased in concrete, were also last used in 1993 and closed in 2002. There are two releases associated with this facility and active remediation continues to date.

Temporarily Out of Use FCTs

Appendix B also identifies ten (10) temporarily out of use (TOU) tanks. TOU tanks are emptied and cleaned, but may be used again at a later date.

Red Hill Bulk Fuel Storage Facility –Two tanks, Tank 1 and Tank 19 were emptied in 1997 and 1986 respectively. There are currently no future plans for these tanks.

Kuahuna Peninsula Facility/Former Diesel Purification Plant – The three (3) 20,000-gallon and five (5) 94,000-gallon concrete tanks have been empty for twenty-five (25) years. Active remediation began in 1996 for a fuel release and discontinued in 2006. Long-term management, including groundwater monitoring continues to date. DOH's HEER office oversees these activities. According to the Navy's letter report, the facility will eventually be demolished.

Releases, Active Remediation and Long-Term Monitoring Sites

Red Hill Bulk Fuel Storage Facility - Releases from the Red Hill Facility, including the January 2014 leak, are overseen by the SHWB's UST Program. On September 28, 2015, the AOC/SOW, enforceable agreement to address clean-up and prevent future releases at the site (details below), went into effect.

The three other FCT facilities with releases associated with them in the past are in various stages of remediation. Additional information on these facilities can be obtained through the Navy's environmental department and DOH's HEER Office.

Kuahuna Peninsula/Former Diesel Purification Plant – Tanks were emptied and put into temporarily out of use status in 1990. Active remediation commenced in 1996 and discontinued in 2006. Long-term management at this facility include, quarterly groundwater monitoring and implementation of an Environmental Hazard Management Plan (EHMP) to prevent unmitigated exposure to site users and ecological receptors. The Navy eventually plans to demolish this facility.

Kipapa Gulch/Hickam AF Base/Wheeler AF Base – A release is still being remediated using bioventing with regulatory oversight through the HEER office.

Hickam POL Annex/Waiakalalau – Tanks were last used in 1993 and permanently closed in 2002. Active remediation continues at the property to address historical releases.

Administrative Order on Consent (AOC) and Scope of Work (SOW) Update

In addition to a status account for the other 26 FCTs, DOH also gave a verbal update on the AOC. An outline of this talk follows.

- January 2014 – 27,000-gallon fuel release confirmed
- Regulatory agencies work with the Navy and Defense Logistical Agency (DLA) to finalize the AOC and details of the SOW.
- June 18, 2015 - a draft of the AOC/SOW is presented at a public meeting at Moanalua Middle School. During this meeting, 29 people submitted oral comments.
- June 1 – July 20, 2015 (extended comment period) - during this period, an additional 140 comments were submitted in written form.
- EPA and DOH worked to make changes to the AOC/SOW in order to incorporate comments from the public. The Navy/DLA signed this revised draft.
- September 28, 2015- effective date of the AOC/SOW
- October 26-27, 2015 – initial scoping meetings were held as specified in the SOW
- November 30 – December 4, 2015 – scoping meetings continued

At a minimum, updates to activities defined within the AOC/SOW will be done on EPA and DOH UST Red Hill websites (<http://health.hawaii.gov/shwb/ust-red-hill-project-main/>) and at an annual public meeting (to be determined at a later date). Additional public outreach will be scheduled if deemed appropriate.

Comments from Task Force Members

Task Force Members were asked to submit any comments they would like incorporated in the report to the Legislature by December 1, 2015. DOH did not receive any comments to incorporate into this report.

2015 Task Force Documents Available on the SHBW UST Website

(<http://health.hawaii.gov/shwb/ust-red-hill-project-main/>)

- SCR 57
- Meeting Agenda & List of Participants
- Meeting Minutes
- Letter From Navy Describing FCTs

Appendices

Appendix A DOH List of FCTs – original list of field constructed tanks in Hawaii that was provided in the 2014 Task Force Report to the Legislature

Appendix B Updated Navy List of FCTs – corrected list made by the Navy to update status of FCTs

APPENDIX A

DOH List of FCTs (2014)

Location	Status	Qty	Capacity of each tank (gallons)	Composition	Installation Date	Over Drinking Water Resource	NOTES
Kipapa Gulch Fuel Storage Annex	POU* In 2002	4	2,650,000	Bare Steel	May 1941	Yes	DOH Office of Hazard Evaluation & Emergency Response is overseeing remediation (bioventing) for a release
Red Hill Facility	TOU* Tank 19 in 1986 Tank 1 in 1997	2	12,700,000	Bare Steel, encased in concrete	May 1941	Yes	
Red Hill Facility	In use	18	12,700,000	Bare Steel, encased in concrete	May 1941-1943	Yes	DOH Office of Solid & Hazardous Waste Branch is responding to a release from Tank 5
Kuahua Peninsula – Submarine Base Pearl Harbor	TOU* In 1990	3	20,000	Concrete	May 1943	No	
Kuahua Peninsula – Submarine Base Pearl Harbor	TOU* In 1990	5	94,000	Concrete	May 1943	No	
Kuahua Peninsula – Submarine Base Pearl Harbor	In use	4	425,000	Bare Steel	May 1941	No	Surge tanks used at Red Hill Facility
Pacific Missile Range	In use	9	50,000	Cathodically Protected Steel	April 1942	No	
Schofield Barracks	POU* In 1996	1	550	Concrete	Unk	Yes	
TOTAL	In use	31					
	TOU/POU*	15					
		46					

*TOU – temporarily out of use, subject to additional information from the tank owners

*POU – permanently out of use/closed

APPENDIX B

Updated Navy List of FCTs (2015)
List of Field Constructed Tanks in Hawaii

Location	Status	Qty	Capacity of each tank (gallons)	Composition	Installation Date	Over Drinking Water Resource	NOTES
Kipapa Gulch Fuel Storage Annex - Hickam Air Force Base - Wheeler Air Force Base	POU*	4	2,650,000	Bare Steel	May 1941	Yes	DOH Office of Hazard Evaluation & Emergency Response is overseeing remediation (bioventing) for a release
Red Hill Facility	TOU*	2	12,700,000	Bare Steel, encased in concrete	May 1941	Yes	
Red Hill Facility	In use	18	12,700,000	Bare Steel, encased in concrete	May 1941-1943	Yes	DOH Office of Solid & Hazardous Waste Branch is responding to a release from Tank 5
Kuabua Peninsula – Submarine Base Pearl Harbor	TOU*	3	20,000	Concrete	May 1943 1941	No	DOH HEER Office is overseeing efforts
Kuabua Peninsula – Submarine Base Pearl Harbor	TOU*	5	94,000	Concrete	May 1943 1941	No	DOH HEER Office is overseeing efforts
Kuabua Peninsula – Submarine Base Pearl Harbor	In use	4	425,000	Bare Steel	May 1941 June 1942	No	Surge tanks used at Red Hill Facility
Pacific Missile Range	In use	9	50,000	Cathodically Protected Steel	April 1942	No	
Schofield Barracks	POU*	1	660	Concrete	Unknown	Yes	
Hickam POL Annex Waikakaloa - Hickam Air Force Base - Wheeler Air Force Base	POU	9	1,765,000	Field Constructed Concrete Encased Steel	May 1941	Yes	DOH HEER Office is overseeing remediation (bioventing) for a release
TOTAL	In use	31					
	TOU/POU*	24					
		55					