

From: Navy Region Hawaii

To: Office of Legislative Affairs

Via: (1) CNIC N45

(2) CNIC

(3) OPNAV N4

SUBJ: Congresswoman Gabbard Request for Information follow-up

1. Background. (August) In addition to a general status update on Red Hill Bulk Fuel Storage, Congresswoman Gabbard requested:
 - a. Records regarding Red Hill and the facility's history of leak events. To include date of the leak, the material that was leaked, and the quantity that was leaked, what caused the leak, what tank the material leaked from, what was done to mitigate future leaks as a result of the cause of the leak and what was done to remediate the leaked material.
 - b. Summarized data for the testing of constituents of concern in the monitoring wells around the Red Hill facility for 2016. Congressman Gabbard's staff believes no sample data from 2016 has been publically released yet.
 - c. A copy of the Bechtel Corporation published a report for the Navy titled "Engineering Survey of U.S. Navy Petroleum Facilities at Pearl Harbor For U.S. Navy Bureau of Yards and Docks, May 1949".

The above questions were previously answered. However, the following additional comment is provided:

The greatest total volume released to the environment from Red Hill (based on unverified notes and records) is 85,000 gallons. Of that volume some was likely water that was used for tank testing. The tell-tale system captured 52,300 gallons that was not released to the environment.

2. Current Inquiry. Following up to August request, Congresswoman Gabbard requested on 26 Sep: Inquiry. Regarding section 3.1.1 of the Groundwater Protection Plan, the detail surrounding leaks should include the confirmed date of the leak, the material leaked, the quantity of material leaked, what caused the leak, and what was done to remediate leaked material and to mitigate future leaks. If unable to provide the information, then a detailed explanation behind why the information is missing should be included.
 - a. Tank 1 fuel drop from Aug 1970 through Apr 1972
 - b. Tank 7 fuel drop in May 1978 and Feb 1980
 - c. Tank 9 fuel drops from Apr 1958 through May 1958 and Jul 1978 through Feb 1981
 - d. Tank 10 suspected leak in Jan 1973 and Jan 1981
 - e. Tank 11 leak from Aug 1980 through Sep 1980

- f. Tank 12 reported leaks in Jan 1964, Mar 1973, and Feb 1981
- g. Tank 12 reported leaks in May 1976 and Sep 1981
- h. Tank 15 reported leaks in Jul 1981 and Aug 1981 through Oct 1981
- i. Tank 16 reported leaks in Jul 1948, Dec 1949 and Oct 1981
- j. Tank 19 "Back seepage" observed from holes in the steel liner

Response. Reporting requirements did not exist until the Environmental Protection Agency (EPA) began requiring all fuel releases be recorded and reported to State of Hawaii Department of Health (DOH) and EPA starting in 1988. Since then, Navy has been fully compliant and two (2) fuel releases have occurred:

- (1) 29 MAR 2012 – contractor discovered 6 gallons of JP5 trapped between the steel liner and concrete tank during routine maintenance (released back into tank).
- (2) 13 JAN 2014 – faulty contractor workmanship and poor Navy quality assurance oversight and procedural compliance led to a 27,000 gallon JP8 release during a routine return to service evolution.

Prior to 1988, the requirements to retain records were not standardized and varied greatly over the decades Navy operated the Red Hill facility. As a consequence, our records prior to 1988 were poorly documented and incomplete compared to post 1988. In many Red Hill reports and studies, tank histories were appended. These records were not verified and often restated other non-source document information from other non-substantiated documents. After extensive research and review, we verified the chart in the GPP report is merely a compilation of unofficial historic lists, which we are unable to verify for accuracy. A detailed search through archives identified a single binder containing unmarked and unsourced copies of the same leak lists that were documented in the 2008 report. The same unverified list was recopied to follow-on report appendices and referenced several times over the years, with no supporting documentation.

Specific to the request:

- a. Tank 1 fuel drop from Aug 1970 through Apr 1972

Date	Material	Quantity	Cause	Action Taken	Remediation
21 Aug 1970 - 23 Oct 1970	JP-5	4,623	unknown	unknown	Unknown
24 Oct 1970 - 03 May 1971	JP-5	16,830	unknown	unknown	Unknown
27 Jul 1971 - 02 Sep 1971	JP-5	5,031	unknown	unknown	Unknown
01 Mar 1972 - 26 Apr 1972	JP-5	4,810	unknown	unknown	Unknown

*There are no records to indicate the cause, action taken in response to the fuel drop.

b. Tank 7 fuel drop in May 1978 and Feb 1980

Date	Material	Quantity	Cause	Action Taken	Remediation
20 May 1978 - 21 May 1978	marine diesel fuel	unknown captured by tell- tale system	Unknown	Tank drained. Tank repaired under 1978 MILCON	Unknown
20 Feb 1980 – 08 Jan 1981	marine diesel fuel	6,505	Unknown	Tested and repaired under 1978 MILCON	Unknown

*There are no records to indicate the cause, action taken in response to the fuel drop.

c. Tank 9 Fuel drops from Apr 1958 through May 1958 and Jul 1978 through Feb 1981

Date	Material	Quantity	Cause	Action Taken	Remediation
28 Apr 1958 - 12 May 1958	marine diesel fuel	1,500 captured by tell-tale system	Unknown	Unknown	Unknown
23 May 1980 – 05 Feb 1981	marine diesel fuel	1,528	Unknown	Tested and repaired under 1978 MILCON	Unknown

*There are no records to indicate the cause, action taken in response to the fuel drop.

d. Tank 10 suspected leak in Jan 1973 and Jan 1981

Date	Material	Quantity	Cause	Action Taken	Remediation
Jan 1958	marine diesel fuel	Unknown	Unknown	Unknown	Unknown
11 Apr 1980 – 10 Feb 1981	marine diesel fuel	3,123	Unknown	Tested and repaired under 1978 MILCON	Unknown

*There are no records to indicate the cause, action taken to repair the suspected leak source, or what was done to remediate the suspected leak.

e. Tank 11 leak from Aug 1980 through Sep 1980

Date	Material	Quantity	Cause	Action Taken	Remediation
08 Aug 1980 - 15 Sep 1980	marine diesel fuel	25,628	Unknown	Tested and repaired under 1978 MILCON	Unknown

*There are no records to indicate the cause, action taken to repair the leak source, or what was done to remediate the leak.

- f. Tank 12 reported leaks in Jan 1964, Mar 1973, and Feb 1981

Date	Material	Quantity	Cause	Action Taken	Remediation
03 Feb 1981 - 05 Feb 1981	marine diesel fuel	2,880	Unknown	Tested and repaired under 1978 MILCON	Unknown

*For the date of Jan 1964, mention of 'known leak' was in dome is made and that subsequent contract work would fix it.

*For the date of Mar 1973, Tank was leak tested with water, but no leak was found.

- g. Tank 12 reported leaks in May 1976 and Sep 1981

*There is no mention of leaks for the dates of May 1976.

*There is mention of tank being removed from service on 05 May 1981, but no additional details.

- h. Tank 15 reported leaks in Jul 1981 and Aug 1981 through Oct 1981

*Tank was leak tested under MILCON P-060 starting 12 Apr 1981, but no further details are listed.

- i. Tank 16 reported leaks in Jul 1948, Dec 1949 and Oct 1981

Date	Material	Quantity	Cause	Action Taken	Remediation
21 Jul 1948 - 27 Jul 1948	marine diesel fuel	Unknown	Tell-tale pipe inside the tank	Tank drained, repaired and retested with water	Unknown
24 Jul 1949 – 10 Dec 1949	marine diesel fuel	28,746 captured by tell-tale system	Unknown	Tank drained and repaired	Unknown

*For the date of 23 Oct 1981, tank was being returned to service and found to leak. Tank removed from service on 10 Nov 1981 and repaired.

- j. Tank 19 "Back seepage" observed from holes in the steel liner

*Unable to find supporting documentation stating this.

3. Current Inquiry. Following up to August request, Congresswoman Gabbard requested on 26 Sep:

Inquiry. Regarding Naval Audit entitled 'Department of the Navy Red Hill and Upper Tank Farm Fuel Storage Facilities' published on 16AUG10, additional clarification requested.

- (1) An un-redacted copy of the NAS 2010 report
- (2) Discussion on non-compliance under the Groundwater Protection Plan (GPP)
- (3) Confirm accuracy of exhibit F, Tank Inspection and Record of Maintenance Intervals, to the NAS report
- (4) When did Navy implement the modified API-653 inspection standard

- (5) Provide list of what tanks have undergone modified API-653 inspections.
- (6) What policies and procedures, or mitigating effort, did the Navy implement at the Red Hill facility as a result of the audit's findings since its publishing on 16 Aug 2010 through the 13 Jan 2014 leak discovery in tank 5.

Response:

- (1) OLA is requesting an unredacted copy from the Navy Audit Service.
- (2) The Navy was non-compliant for two actions:
 - (a) Additional well sampling
FLCPH requested sampling funding in Feb 2009, and the contract was amended Jun 2009 to support Navy funded additional sampling to commence mid-July. By that time, the State of Hawaii had already completed its quarterly sampling (Jul-Sep) at Halawa, negating Navy's need to conduct a resample. The next completed sample occurred in October of 2009.
 - (b) Reporting as required by the GPP
The missed quarterly (Jul-Sep 2009) sample was not reported because it was not conducted.
- (3) The Navy did not fully record tank inspections prior to the 1988 EPA regulations. After reviewing existing records, we assess that exhibit F did not document all inspections prior to 1988 and that there are no records that contradict the chart.
- (4) The Navy used a modified API-653 approach since 1994. The modified API-653 uses applicable inspection criteria depending on the tanks being inspected, and often applies more stringent criteria where warranted. As an example, API-653 does not require complete scanning of internal tank surfaces, but all Red Hill tanks require 100% scanning before they are deemed certified and ready for service.
- (5) Tanks 2, 5, 6, 15, 16, and 20 were inspected using the modified API-653 inspection standard. Tanks 4, 13, 14, 17, and 18 are currently under contract for modified API-653 inspections.
- (6) The audit produced eighteen findings of which 12 are completed. Two of the remaining six are security and not tank integrity related. The remaining four are being executed as follows:
 - a. Finding 3. Market research on a suitable leak detection system was conducted annually since 2010, but nothing was found that appropriate for Red Hill to date. To address the finding, the precision leak detection system was incorporated into the AOC under Section 4 Tank Upgrade Alternatives.
 - b. Findings 9, 10, 11. These findings are being addressed via FY15 MILCON P-1551 that upgrades the fire suppression and ventilation system. Estimated completion is Sep 2017.