



DEPARTMENT OF THE NAVY

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
JBPHH, HAWAII 96860-5101

MAY 23 2019 *AP*

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Ser N4/0532  
May 15, 2019

**CERTIFIED NO: 7016 0910 0001 0891 7383**

Ms. Roxanne Kwan  
Hawaii State Department of Health  
Environmental Management Division  
Solid and Hazardous Waste Branch  
Underground Storage Tank Section  
2827 Waimano Home Road #100  
Pearl City, HI 96782

Dear Ms. Kwan:

SUBJECT: RESPONSE TO DOH LETTER U0416HM IN REGARDS TO UST PERMIT  
APPLICATION FOR RED HILL BULK FUEL STORAGE FACILITY, JBPHH,  
OAHU, DOH FACILITY ID NO. 9-102271

The Navy received DOH letter U0416HM of April 12, 2019 and is providing the following requested information. The revised permit application for Red Hill Bulk Fuel Storage Facility (RHBFSF) will be submitted separately.

A. Corrections to be made:

1. Please remove LCDR Blake Whittle from the Operator Name in the permit application Section IV. The Operator Name in this section should reflect the entity applying for the permit only.

**Navy Response:** The permit application will be revised.

2. Tanks F-1 to F-20 and F-ST1 to F-ST4 are comprised of field-constructed one quarter inch steel with reinforced concrete structural support. The primary containment material is steel. Please correct the application form Section XI.6.C. for tanks F-1 to F-20 and F-ST1 to F-ST4 and letter Sections 1 and 19.

**Navy Response:** The tanks are constructed of reinforced concrete and lined with steel. The primary containment material is steel. The permit application will be revised.

3. The "corrosion expert determinations" referred to in the application are not corrosion expert determinations as this is defined in the UST regulations and should be removed [letter Sections 2, 5, 20, 23]. The phrase "corrosion expert determination" on the application form refers specifically to an option for meeting the corrosion protection requirements of §11-280.1-20(b) and (c). To meet the requirements, the tank or piping must be "installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life" [§11-280.1-20(b)(4)(A) and (c)(3)(A)].

**Navy Response:** The permit application will be revised.

4. Please delete the statement "Piping is aboveground" from the section of the application describing secondary containment. The placement of the statement "Piping is aboveground" in the box designated "other" makes it unclear whether some "other" form of secondary containment is being claimed. The piping in the tunnels is aboveground and does not have nor require secondary containment [application form Section XI.7.D.iv. for piping associated with tanks F-1 to F-20 and F-ST1 to F-ST4].

**Navy Response:** The permit application will be revised.

5. Please remove all references to "other methods" and "other methods approved by the department" from the release detection sections of the application, since the DOH has not approved alternative methods of release detection [application form Section XI.11.K. for tanks F-1 to F-20 and F-ST1 to F-ST4 and associated piping and letter Sections 18 and 34].

**Navy Response:** The permit application will be revised.

**B. Additional information to be provided:**

1. A complete facility drawing showing locations of red hill storage tanks, surge tanks, (Hickam) product recovery tanks, Hickam airfield piping and hydrant pits, all other fuel receipt and dispensing points (i.e. piers). A complete property boundary drawing showing location of inset facility drawings may be used.

**Navy Response:** Location maps will be provided with the revised permit application.

2. A detailed tank and piping diagram showing how piping connects to each tank and which segments of piping are (a) in contact with the ground, (b) encased in concrete, and (c) aboveground. Piping in the tunnel that can be visually inspected is considered aboveground piping. The diagram should indicate which segments of piping have corrosion protection, whether piping is single- or double-walled, and the material of

construction, and should also include all USTs and aboveground storage tanks (ASTs) that are part of the UST system.

**Navy Response:** Tank and piping diagrams will be provided with the revised permit application.

3. A complete description of how fuel is dispensed, including which piping segments are pressurized for product dispensing. The letter portion of the permit application Section 6 indicates that dispensing is gravity only. However, Section XI.8.C. indicates pressure and piping between the ASTs and dispensing points at Hickam is pressurized. It is not clear whether fuel goes from tanks F-1 to F-20 through tanks F-ST1 to F-ST4 or through ASTs in the upper tank farm to dispensing points on the piers and whether there are underground piping segments involved. The concerns in this paragraph could be addressed by a detailed tank and piping diagram (see #2).

**Navy Response:** All piping segments in use for dispensing operations are pressurized. Detailed tank and piping diagrams will be provided with the revised permit application.

4. A description of release detection methods used for any underground segments of piping with enough detail to determine whether each method complies with the technical standards for that method and to demonstrate compliance with Section §11-280.1-41(b)(5). Please describe in the letter portion of the permit application which release detection method(s) is/are being used to meet the regulatory requirements for each piping segment.

**Navy Response:** The piping for tanks F-1 to F-20 and F-ST1 to F-ST4 that is located between the tank and the first valve (nozzle piping) is considered and tested as part of the RHBFSF tanks. Information on tank tightness testing will be presented in the revised permit application.

The piping located inside the RHBFSF tunnel is above ground; therefore, no release detection method for this above ground piping will be checked in Section XI.11 of the permit application form.

A line tightness test is performed annually on petroleum pipeline segments located outside the RHBFSF tunnel and fully or partially in contact with the ground. In January 2019, the leak detection rate per test section volume met the requirements of Hawaii Administrative Rules (HAR) §11-280.1-44(4)(A)(i), except for one pipeline section. This pipeline section was subsequently removed from service until it is repaired by replacement.

An annual static liquid pressure test is performed on pier pipelines to determine that no leaks occur under static liquid pressure at least 1.5 times the maximum allowable working pressure as required in 33 CFR 156.170. This meets the requirements of HAR §11-280.1-44(4)(A)(i). In January 2019, the pier pipelines passed the annual static pressure testing.

A line tightness test is performed annually on the piping associated with tanks PRT-Diamond Head and PRT-Ewa. Details of the annual line tightness testing will be provided in the revised permit application. The line tightness test meets the requirements of HAR §11-280.1-44(4)(A)(i).

Statistical inventory reconciliation will be unchecked in Section XI.11.H of the permit application form.

5. Detailed information about the corrosion protection provided for segments of piping that are in contact with the ground that demonstrates compliance with §11-280.1-20(c). See #6 for an example of the level of detail needed.

**Navy Response:** The requested information will be provided in the revised permit application.

6. Additional information about the impressed current cathodic protection system for tanks PRT-Diamond Head and PRT-Ewa that will enable verification of compliance with §11-280.1-20(b): description of rectifier, system drawing, date of installation, location of anode beds, if any, and the last two (2) NACE-certified CP system surveys.

**Navy Response:** The requested information will be provided in the revised permit application.

7. A description of all release detection methods used for tanks F-1 to F-20 and F-ST1 to F-ST4 with enough detail to determine whether each method complies with the technical standards for that method. Please describe in the letter portion of the permit application which release detection method(s) is/are being used to meet the regulatory requirements for these tanks. Release detection for each tank must include at least one (1) method that complies with the technical standards for that method listed in §11-280.1-43(4), (7), (8), (9), and (10) [see §11-280.1-41(a)(3)(A)].

**Navy Response:** The boxes for all tank release detection methods except for tank tightness testing will be unchecked. Information on tank tightness testing will be provided with the revised permit application. The tank tightness test meets the requirements of HAR §11-280.1-43(10)(A).

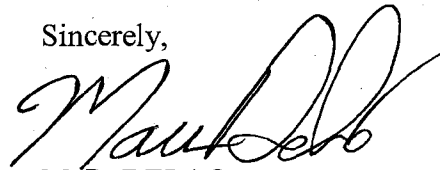
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8. The cover letter heading above Sections 35 to 38 states "RHBFSF Pipeline not aligned against F-1 - F-4 and F-ST1 - F-ST4". Please clarify to what piping this refers. Please ensure that the information provided will be sufficient to determine compliance with §11-280.1-41(b)(5) for all piping segments.

**Navy Response:** The RHBFSF pipeline not aligned against F-1 to F-20 and F-ST1 to F-ST4 refers to fuel piping that is located outside the RHBFSF tunnel. Information on this piping will be provided in the revised permit application.

If you have any questions regarding this matter or need any additional information, contact Ms. Raelynn Kishaba by phone at (808) 471-1171, extension 233 or by email at [raelynn.kishaba@navy.mil](mailto:raelynn.kishaba@navy.mil).

Sincerely,



M. R. DELAO  
Captain, CEC, U.S. Navy  
Regional Engineer  
By direction of the  
Commander

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Blind copy (via email) to:  
LCDR Blake Whittle, NAVSUP FLC Pearl Harbor  
John Floyd, NAVSUP FLC Pearl Harbor  
Brian Inouye, NAVSUP FLC Pearl Harbor