

Written Comments Received by Department of Health
Re: proposed repeal of chapter 11-281, HAR and adoption of
chapter 11-280.1, HAR (this PDF is 43 pages)

Klein, Noa

From: DAgostino, Holly <HDAgostino@parpacific.com>
Sent: Wednesday, May 02, 2018 12:17 PM
To: Klein, Noa
Subject: Dispensers

Hi Noa,

After we spoke, I took another look at the current regulation for UDCs, HAR 11-281 Section 19. The current regulation does not distinguish between “dispensers” and “dispenser systems.” It requires UDCs and UDC sensors for any “dispenser” installed after 8/9/13 (which is what Par has been doing). This is slightly different than the new requirement in 11-280.1-20(c), which requires UDCs and UDC sensors only for “dispenser systems” installed after 8/9/13. Am I misinterpreting it?

2013 HAR 11-281:

- “Dispenser” means equipment that is used to transfer a regulated substance from underground piping, through a rigid or flexible hose or piping located aboveground, to a point of use outside of the underground storage tank system such as a motor vehicle.

Draft 2018 11-280.1:

- “Dispenser” means equipment located aboveground that dispenses regulated substances from the UST system.
- “Dispenser system” means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system. The equipment necessary to connect the dispenser to the underground storage tank system includes check valves, shear valves, unburi ed risers or flexible connectors, or other transitional components that are underneath the dispenser and connect the dispenser to the underground piping.

I hope this makes sense. Thanks!

Holly Dagostino | Environmental Coordinator
Par Hawaii
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VIA ELECTRONIC MAIL TO noa.klein@doh.hawaii.gov

June 1, 2018

Attn: UST Rules
Hawaii Department of Health
Solid and Hazardous Waste Branch
2827 Waimano Home Road #100
Pearl City, HI 96782

**Subject: Comments on Proposed Regulation: Hawaii Administrative Rules 11-280.1,
 DRAFT dated April 2018**

Par Hawaii, Inc. (Par) has reviewed the Hawaii Department of Health's proposed underground storage tank (UST) regulation dated April 2018 (Hawaii Administrative Rules Title 11 Chapter 280.1 Draft), and we appreciate the opportunity to provide our comments below:

1. *Under-dispenser Containment (UDC) Sensors*

- In order to comply with the requirements of the currently effective regulation, HAR 11-281-19, UST owners/operators who replaced dispensers after 8/9/13 may have installed "stand-alone" liquid sensors in the UDC sumps. Stand-alone sensors immediately shut down AC power to the dispenser when fluid is detected in the dispenser pan. The benefit of the stand-alone sensor is that it controls and shuts down power to the dispenser without the need for additional relays, circuitry or wiring. A common model is the *Veeder-Root Stand-Alone Dispenser Pan Sensor, 847990-001, non-discriminating*. Stand-alone sensors are not connected to the tank monitoring system console.
- The draft regulation, HAR 11-280.1-37(a)(3), requires UST owners/operators to "*generate a record of the status of the under-dispenser containment and the sensor's proper operation at least every thirty days.*" For owners who utilize stand-alone sensors, it is not possible to generate a record of the dispenser sensor status because the sensors are not connected to the tank monitoring system console. Brand new or completely re-constructed UST systems may have UDC sensors that are connected to the tank monitoring system console. However, to re-wire an existing UST system to connect the UDC sensors to the console is impractical and would require significant and costly construction and electrical work at the facility.
- Stand-alone sensors are continuous monitoring systems that are designed to immediately shut down power to the dispenser when liquid is present in the UDC. They are tested annually by a certified UST technician, in accordance with the manufacturer's instructions. Testing the stand-alone sensors more frequently than the manufacturer's recommendation

would cause an additional cost and operational complication to UST owners/operators, because each time the sensors are tested, it requires shutting down and re-booting the dispenser.

Due to the considerations mentioned above, Par requests that the Department consider revising or removing the requirement in HAR 11-280.1-37(a)(3).

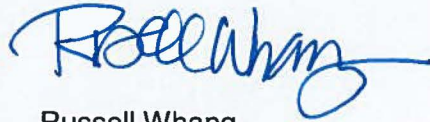
2. Sump Integrity Testing – Alternative Methods

- HAR 11-280.1, Section 35, paragraph (a)(2)(B) (draft) describes integrity testing that will be required for containment sumps that are used for interstitial monitoring of piping. Acceptable methods of integrity testing are included in §35(a)(1)(B)(i) through (iii), and the accepted Code of Practice, Petroleum Equipment Institute (PEI) Publication RP1200, is referenced in §38(f). The hydrostatic test procedure in PEI RP1200 specifies that the sump shall be filled with water to 4 inches above the highest penetration.
- Petroleum Marketers Association of America (PMAA) has developed guidance on a low-liquid level test which has been endorsed by EPA and has been accepted in other states. The PMAA guidance specifies that an automatic shut-off sensor shall be used in conjunction with the low-liquid test. The test procedure requires the sump to be filled only to the point of the sensor activation. In addition to being equally as protective of the environment as the high-liquid level test¹, there are several benefits of low-liquid testing:
 - Less waste water is produced.
 - The test takes less time, making it more efficient and results in less down-time for the facility and its customers.
 - Some equipment in the sumps may not be intended to be submerged in water, such as pumps and electrical junction boxes. The low-liquid level test will virtually eliminate this concern.
 - When using an automatic shut-off sensor, response time to any issues will be quick and there is a reduced chance that product would reach higher levels in the sump.
- Par requests that the Department consider approving an alternate method of sump integrity testing, specifically a low-liquid level test. Allowing the low-liquid level test will give UST owners/operators options for ensuring compliance with regulations while also focusing on protecting the environment. Given the various different types of sumps in our UST systems, we appreciate having the option to use different test methods depending on the situation, and in some cases the low-liquid level test would be a more appropriate and effective option.

¹ USEPA: <https://www.epa.gov/ust/underground-storage-tank-ust-technical-compendium-about-2015-ust-regulations#spillbuckets>. Accessed 6 March 2018.

Thank you for considering our requests. Please contact me at (808) 535-5941 or Holly Dagostino at (808) 763-2016 should you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Russell Whang", with a stylized flourish extending to the right.

Russell Whang
Vice President

Klein, Noa

From: @everyactioncustom.com on behalf of
< @everyactioncustom.com >
Sent: Wednesday, May 02, 2018 4:12 PM
To: Klein, Noa
Subject: Protect O'ahu's water -- 20 years is too long to wait

Dear Hazardous Waste Program Planner Noa Klein,

Aloha!

As a concerned resident dependent on Hawai'i's groundwater aquifers as my primary source of drinking water, I strongly urge the Department of Health to take the needed steps through this rulemaking process to protect Hawai'i's water from contamination. The Health Department should shorten the time frame—from 20 years to 10 years—for bringing field constructed underground storage tanks into compliance with state regulations on underground storage tanks. We are not likely to find adequate supplies of alternatively sourced water should the groundwater aquifers become contaminated.

My concerns arise primarily from field constructed underground storage tank facilities, such as the U.S. Navy's Red Hill Bulk Fuel Storage Facility, that has a long history of leaking fuel into the environment and sits directly above O'ahu's primary drinking aquifer. The Red Hill facility is not alone, there are a handful of other field constructed tank facilities that also continue to pose a threat to our environment. The people of Hawai'i cannot wait another 20 years for critical upgrades and leak prevention and detection systems to be installed to these facilities.

I am appreciative that the Health Department is updating its underground storage tank regulations in an inclusive fashion and am hopeful that the department will take into account the community's concerns.

Mahalo for the opportunity to provide comment on this extremely important issue.

Mahalo nui,

Sincerely,



DEPARTMENT OF THE NAVY

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

STATE OF HAWAII DEPARTMENT OF HEALTH

Testimony on Proposed Repeal of Hawaii Administrative Rules (HAR) Chapter 11-281, and adoption of HAR 11-280.1, Related to Underground Storage Tanks

Public Hearing Date and Time: May 31, 2018 9 am

Testimony on behalf of Navy Region Hawaii

Thank you for the opportunity to testify. First, both the Navy's and the Board of Water Supply (BWS)'s independent water quality reports show that Oahu's drinking water is safe. We respectfully support the intent of these proposed rules, but can only do so if the proposed rules do not conflict with an existing legally enforceable settlement and upgrade plan, the 2015 Red Hill Administrative Order on Consent (AOC) signed with the State Department of Health (DOH) and the U.S. Environmental Protection Agency (EPA). The AOC imposed wide ranging requirements on the Navy and Defense Logistics Agency with detailed deliverables and deadlines. The AOC requires evaluation and action in seven areas: Tank inspection, repair and maintenance; Tank upgrade alternatives; Release detection and tank tightness testing; Corrosion and metal fatigue practices; Investigation and remediation of releases; Groundwater protection and evaluation; and a Risk and vulnerability assessment. We recognize that the EPA and federal law require the DOH to update underground storage (UST) tank rules to incorporate the 2015 updates to EPA UST rules codified at 40 C.F.R. Part 280, or potentially lose delegated authority to regulate pursuant to 40 C.F.R. §282.61. Specific rules for field constructed underground storage tanks at 40 C.F.R. Part 280, Subpart K apply to Navy facilities.

We note the amended Chapter 11-280.1 is substantially reorganized from Chapter 11-281 and proposed rules discussed by the DOH in December 2017.

Specific comments pertaining to the Navy's Red Hill Bulk Fuel Storage Facility:

Tank inspection, repair and maintenance: Substandard work played a significant role in the 2014 release from tank 5, because a contractor drilled holes in the tank and did not properly repair the holes. Thorough inspection, repair, and maintenance form an important part of the DOH and EPA approved Tank Inspection, Repair, and Maintenance (TIRM) program submitted to regulators by the Navy and Defense Logistics Agency (DLA). In short, we want more inspection not less. Each scheduled "clean, inspect, and repair" cycle of a Navy tank requires several years to implement. We respectfully request clarification of how Section 70 functions with respect to the approved TIRM process. We further suggest revising the definition at §11-280.1-12: "Temporary

closure” or “temporarily closed” means that owners and operators do not deposit regulated substances into the UST or tank system nor dispense regulated substances from the UST or tank system for sixty days or longer and the removal of fuel is not a part of a repair or maintenance effort. (Underlined material added).

Tank upgrade alternatives: The AOC provides criteria for the Navy and DLA to submit recommendations to DOH and EPA, and alternatives shall be briefed to the United States Congress. Based on the Navy’s review of the proposed HAR updates, an approved tank upgrade solution does not necessarily require secondary containment, which is consistent with the AOC and allows for the best engineering solution for protecting human health and the environment.

Release detection and tank tightness testing: Requirements are consistent with EPA regulations at 40 C.F.R. 280, Subpart K. Under the AOC Section 4, three contractors came to Red Hill to perform leak detection sensitivity tests. Contractors completed testing at the end of April, and a report is being drafted. The EPA and DOH approved the testing methods and will weigh in on what leak detection to install and how frequently this leak detection will be used each year. This testing effort goes beyond the Navy’s compliance with the annual tank tightness test requirements outlined in 40 C.F.R. 280, Subpart K and in the proposed regulations under §11-280.1-43(10)(A). The Navy committed to this annual tank tightness test when we signed the AOC in 2015. The three miles of pipelines leading between Pearl Harbor and Red Hill are considered above ground in a tunnel, since fuels personnel walk this line regularly to visually check the pipeline is not leaking.

Corrosion and metal fatigue practices: Section 5 of the AOC Statement of Work addresses corrosion protection, and evaluation is ongoing. Current corrosion protection plans meet the corrosion protection requirements as proposed in §11-280.1-20. Past studies have indicated that because of the size and nature of the Red Hill Tanks, cathodic protection is not practicable for the Red Hill Tanks and might even result in damage to the tanks and the supporting reinforced concrete. Because the tanks are encased in concrete, cathodic protection is not required or effective at reducing corrosion of the tanks.

Investigation and remediation of releases: Section 6 & 7 of the approved AOC statement of work provides detailed investigation and remediation processes. Satisfaction of the AOC Section 6 & 7 requirements fulfills any applicable requirements in these proposed rules, and there are no additional requirements Subchapters 5 and 6 of §11-280.1 beyond the work performed under AOC requirements.

Groundwater protection and evaluation: The Navy has installed six additional monitoring wells, for a total of fourteen monitoring points around the Red Hill facility, and have plans to install several more to expand the network and collect additional necessary data. Recently acquired geologic data from our wells and seismic survey provide further evidence suggesting the existence of natural barriers between municipal drinking water wells and the facility. Independent tank tightness tests and improved inventory controls confirm the Red Hill tanks are not leaking. Satisfaction of the AOC

Section 6 & 7 requirements fulfills any applicable requirements in these proposed rules, and there are no additional requirements Subchapters 5 and 6 of §11-280.1 beyond the work performed under AOC requirements.

Risk and vulnerability assessment: Proposed rules do not address the risk and vulnerability impacts of the AOC.

The Red Hill facility is of vital strategic importance to our Nation and US Pacific Command.

The United States Pacific Command recently reaffirmed Red Hill's strategic importance on February 23rd, 2018 when Brigadier General Evan Miller wrote:

The Red Hill facility holds a significant percentage of petroleum war reserves required to defend national security interests in the Pacific region. It supports all US military forces stationed in and transiting through Hawaii via its hardened, underground, cyber-protected, gravity-fed system to Joint Base Pearl Harbor-Hickam. It supports the Hawaii Army and Air National Guards and is capable of defense support to civil authorities should circumstances dictate. There is no comparable US owned facility anywhere from India to mainland USA.

In summary, your military in Hawaii and throughout the Pacific needs continuous and uninterrupted access to large volume, secure and sustainable fuel storage facilities to support efforts in the Pacific. Navy fuel facilities provide fuel to support countless contingency operations, and is essential to safeguard our national interests and support humanitarian missions overseas. The forward presence provided by your military builds international cooperation, maintains regional stability, and ensures maritime security, including the free flow of commerce to Hawaii, the mainland, and throughout the Indo-Asia-Pacific region. Oahu's drinking water remains safe to drink and Red Hill can continue to operate safely with the process already established in the AOC, which is a legally enforceable process providing a roadmap for the Red Hill facility with enhanced oversight and approval roles for DOH and EPA.

Thank you for the opportunity to testify today.



DEPARTMENT OF THE NAVY

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

STATE OF HAWAII DEPARTMENT OF HEALTH Testimony on Proposed Repeal of Hawaii Administrative Rules (HAR) Chapter 11-281, and adoption of HAR 11-280.1, Related to Underground Storage Tanks

Public Hearing Date and Time: May 31, 2018, 9 am

Testimony on behalf of Navy Region Hawaii

Thank you for the opportunity to testify.

We have the following general comments pertaining to the proposed adoption of HAR 11-280.1:

Applicability of metal tanks and piping encased or surrounded by concrete: The preamble of 40 CFR 280 includes the following statement:

“Metal tanks and piping which are encased or surrounded by concrete have no metal in contact with the ground and are not subject to the corrosion protection requirements.”

The Navy recommends similar language be added to proposed section 11-280.1-10, Applicability.

Release detection for UST systems that store fuel solely for use by emergency power generators: These UST systems installed before August 9, 2013 will be required to have release detection within one year after the effective date of the new state UST rules. The December 2017 version of the proposed rules allowed owners and operators three years to comply with this new rule.

The Navy plans to replace these emergency generator USTs with tanks that comply with the new rules. One year may not be enough time for the existing emergency generator USTs to be replaced. The Navy recommends DOH allow at least two years after the effective date of the new state UST rules for existing emergency generator USTs to have release detection.

Thank you for the opportunity to testify.

Klein, Noa

From: Jove, Nolasco R <njove@honolulu.gov>
Sent: Thursday, May 31, 2018 2:44 PM
To: Klein, Noa
Cc: Perry, Thu; Kwan, Roxanne S; Lee, Leland Y S; Heard, David H.; Hamada, Cyril; Schultz, Scott L.
Subject: DOH UST Rule Revision - WTD Division Comments

Aloha Noa,

Our comments/suggestions on the requirements applicable to existing emergency generator tanks (installed before 8/9/13) are listed below. We considered the rationale for the EPA requirements (presented in a box for each requirement), which were based on comments they have received as well as evaluation and studies as contained in the Federal Register (Vol. 80, No. 135) dated 7/15/15. We noted that the focus of the revisions is on ensuring equipment is properly operated and maintained, rather than replacing or upgrading equipment already in place.

1. Spill Prevention

For spill prevention equipment testing, the DOH requirement is every 365 days while the EPA requirement is every 3 years beginning no later than 3 years after the effective date of the regulation. We agree with the basis of the EPA requirement that the 3-year testing frequency (along with periodic walkthrough inspections) is adequate to ensure that spill prevention equipment will contain any drips or spills during fuel delivery. Also, we agree with EPA's alignment of periodic spill, overfill, and containment sump testing as it will be easier to comply with the requirements.

We therefore suggest adoption of the above EPA requirement.

Rationale for EPA requirement (FR Sec IV.B.2, p. 41578): "Based on comments received, EPA is requiring owners and operators test spill prevention equipment at least once every three years. Commenters suggested that all operation and maintenance testing should be aligned so that all tests can be conducted at the same time. EPA agrees. To make it easier for owners and operators to comply, this final UST regulation aligns periodic spill, overfill, and secondary containment testing to the extent possible. Since spill prevention equipment has a relatively short lifespan, EPA thinks a three year testing frequency, when combined with periodic visual checks via the walkthrough inspection (see section B-1, FR p. 41576), is adequate to ensure spill prevention equipment will contain any drips or spills when the delivery hose is disconnected from the fill pipe."

2. Overfill Prevention

DOH and EPA overfill prevention equipment inspection requirements are both every 3 years (beginning no later than 3 years after the effective date).

As suggested in Item 1 above, the EPA requirements should be adopted to align the periodic spill, overfill, and containment sump testing for easier compliance.

Rationale for EPA requirement (FR Sec IV.B.3, p. 41579): "Commenters generally supported a three year or more frequent inspection cycle. EPA chose the three year time frame because it aligns with three year compliance inspections and is consistent with other operation and maintenance requirements, such as containment sump testing and spill prevention equipment testing."

3. Containment Sumps

DOH and EPA containment sump testing requirements are both every 3 years (beginning no later than 3 years after the effective date).

Also, as suggested above, the EPA requirements should be adopted to align the periodic spill, overfill, and containment sump testing for easier compliance.

Rationale for EPA requirement (FR Sec IV.B.4, p. 41580): “This final UST regulation requires owners and operators conduct testing of containment sumps used for interstitial monitoring of piping at least once every three years. Commenters generally supported a three year or more frequent inspection cycle. EPA is choosing the three year time frame to: Make compliance easier for owners and operators; align with three year compliance inspections; and be consistent with other operation and maintenance requirements, such as overfill prevention equipment inspections and spill prevention equipment testing.”

4. Release Detection

For release detection, the DOH requirement for emergency generator tanks is to meet the requirement no later than 1 year after the effective date while the EPA requirement is to meet the requirement no later than 3 years after the effective date.

Rationale for EPA requirement (FR Sec IV.C.1, p. 41584): “Based on support for increasing the final implementation date for release detection from one year and EPA’s goal of aligning regulatory implementation dates to make compliance easier for owners and operators, EPA is requiring owners and operators of emergency generator tanks installed on or before the effective date of this final UST regulation to meet the release detection requirement within three years of the effective date of this final UST regulation.”

On the release detection equipment operability testing, both DOH and EPA have the same requirement for annual testing frequency, but the DOH requires testing to begin 1 year after the effective date while EPA requires testing to begin 3 years after the effective date.

Rationale for EPA requirement (FR Sec IV.B.5, p. 41582): “Based on comments received and EPA’s goal to align all implementation dates for consistency and easier compliance, this final UST regulation requires owners and operators meet operation and maintenance for release detection requirements no later than three years after the effective date of the final UST regulation.”

We suggest adoption of the EPA requirements.

5. Secondary Containment

Tanks - DOH requires USTs installed prior to 8/9/13, to be provided with secondary containment not later than 10 years after the effective date of the new rules while EPA requires new and replaced tanks (after 4/11/16) to be provided with secondary containment. DOH cites EPA’s data showing higher number of releases from single walled tanks and piping compared with secondarily contained systems as among the bases for proposing to require secondary containment covering existing USTs. EPA has also considered this data but notes that retrofitting single walled tanks with secondary containment would be a significant financial burden for owners and operators. It is expected that single walled tanks will be replaced as they age and when replaced they must be secondarily contained. In addition, the proposed rule to upgrade existing single walled tanks is contrary to EPA focus on the revision of the rules which is to ensure equipment is properly operated and maintained, rather than replacing or upgrading equipment already in place.

On Tanks

Rationale for HI-DOH Requirement (FAQ-Secondary Containment and Interstitial Monitoring-Tanks, p. 7): “Data collected by EPA shows a higher number of releases from single-walled tanks compared with secondarily contained tanks (80 FR 41566, p. 41573). Secondary containment will reduce the chances of release to the environment by containing leaks within a secondary area and detecting them before they reach the environment. Many states already require secondary containment for all tanks, with requirements that have been in place for 10 years or longer. In addition, by the time this requirement is in effect, all single walled USTs operating within the state will be over 30 years old, and most will be 40 or more years old.”

Rationale for EPA Requirement ((FR Sec IV.A.2, p. 41574):

“Requiring retrofits of major components would be a significant financial burden for owners and operators. EPA anticipates owners and operators will replace single walled UST systems as they age. When owners and operators replace single walled UST systems after the effective date of the final UST regulation, tanks and piping must be secondarily contained and new dispensers must have UDC.”

“New definitions in the final UST regulation are: ...

- Replaced—For a tank, this means to remove a tank and install another tank. For piping, it means to remove 50 percent or more of piping and install other piping, excluding connectors, connected to a single tank. For tanks with multiple piping runs, this definition applies independently to each piping run.
- Secondary containment or secondarily contained—This means a release prevention and release detection system for a tank or piping. This system has an inner and outer barrier with an interstitial space that is monitored for leaks. This term includes containment sumps when used for interstitial monitoring of piping.”

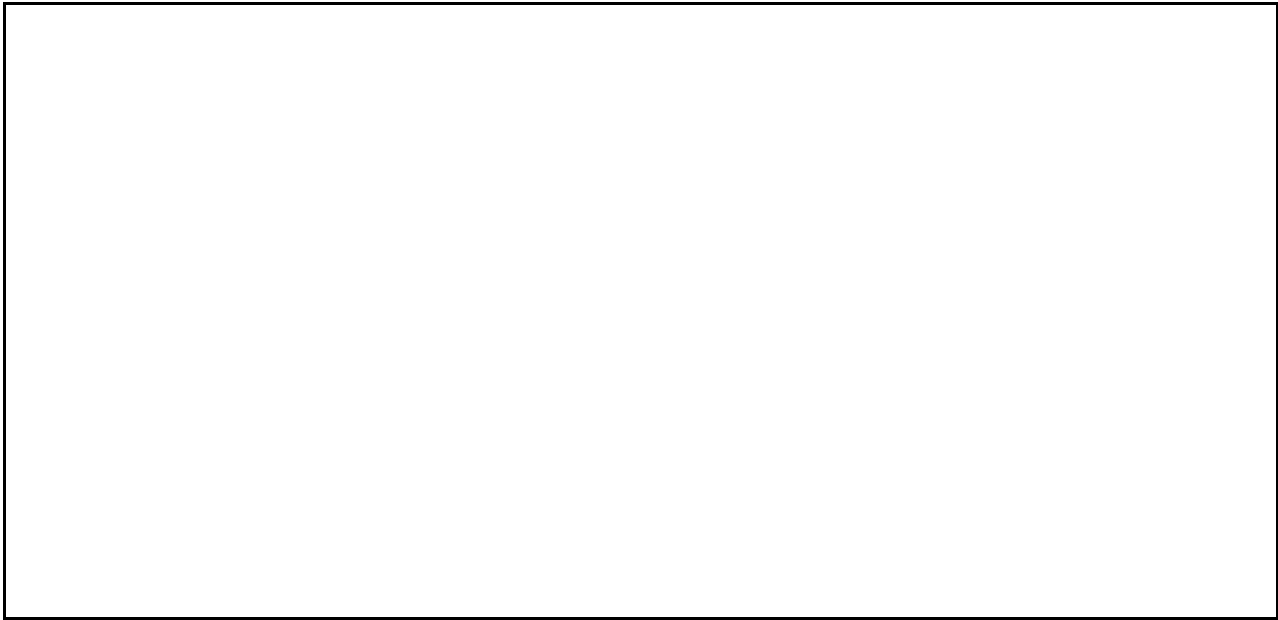
Piping - DOH requires piping installed before 8/9/13 must be provided with secondary containment not later than 10 years after the effective date of the new rules while EPA requires secondary containment for the entire piping run when 50 percent or more of a piping run is replaced. Based on EPA study, replacement cost of an entire piping run is equal to repair cost when approximately 60% of a piping run is repaired, hence its requirement for the entire piping run to be secondarily contained is when 50% or more of a piping run is replaced.

On Piping

Rationale for HI-DOH Requirement (FAQ-Secondary Containment and Interstitial Monitoring-Piping, p. 8):

“When replacing a section of piping, it is most practical to replace the entire piping run with secondarily contained piping at one time.”

Rationale for EPA Requirement ((FR Sec IV.A.2, p. 41575): “... EPA performed a screening analysis using limited, readily available data to determine when repair cost approached replacement cost (and at what point owners and operators were most likely to replace the entire piping run rather than repair it). The screening analysis suggested replacement cost of an entire piping run became equal to repair cost when about 60 percent of a piping run is repaired. Since 60 percent was an approximate screening number, EPA in this final UST regulation is requiring owners and operators to secondarily contain the entire piping run when 50 percent or more of a piping run is replaced. Fifty percent represents half of a piping run, is consistent with most implementing agency decisions, and provides flexibility for allowing repairs while continuing to protect the environment. Fifty percent also prevents owners and operators from leaving small pipe sections in the ground to avoid this secondary containment requirement. If an UST has multiple piping runs, the secondary containment requirement applies independently to each piping run where 50 percent or more of piping is replaced. Currently installed piping runs, and piping runs where less than 50 percent of the piping is repaired, do not require secondary containment.”



We suggest adoption of the above EPA secondary containment requirements.

6. Walkthrough Inspections

For monthly and annual walkthrough inspections, DOH requires the inspections to begin not later than 1 year after the effective date while EPA requires the inspections to begin no later than 3 years after the effective date. Based on comments received, EPA made the requirement for the inspections to begin no later than 3 years after the effective date, to align all operation and maintenance requirements. As mentioned above, this will make compliance easier and also provide enough time to know the tasks involved.

We therefore suggest your adoption of the EPA regulation requiring walkthrough inspections to begin no later than 3 years after the effective date.

Rationale for EPA Requirements (FR B.1, p. 41576):

“In 2011, EPA proposed to implement the walkthrough inspection requirement on the effective date of the final UST regulation. However, based on comments received and to align implementation of all operation and maintenance requirements, owners and operators must begin conducting walkthrough inspections not later than three years after the effective date of this final UST regulation. This change will make compliance easier and allow owners and operators ample time to understand their walkthrough inspection responsibilities.”

7. Operator Training

DOH requires Class A & B operators designated on or after effective date of new rules to meet the revised training requirements within 30 days of assuming duties; Class C operators designated after the effective date to be trained before assuming duties. DOH also needs time to re-evaluate all training programs to ensure that they conform with the new requirements. On the other hand, EPA requires compliance with training requirements 3 years after the effective date. Considering the need for revision of training programs by training providers and re-evaluation of the programs by DOH, more time should be allowed for completion of operators training after the effective date.

We therefore suggest that DOH adopt the EPA requirement for operators' training to meet revised requirements to begin 3 years after the effective date.

Rationale for EPA Requirement (FR A.1, p. 41572): “This final UST regulation requires UST owners and operators ensure all Class A, B, and C operators successfully complete a training program or a comparable examination within three years of the effective date of this final UST regulation... EPA is aligning implementation of operator training with the three year inspection requirement, which will make it easier for UST system owners and operators to comply.”

We hope for your favorable consideration.

Nolasco Jove
Wastewater Plant Engineer I
City & County of Honolulu
Department of Environmental Services
Division of Wastewater Treatment & Disposal
1350 Sand Island Parkway
Honolulu, HI 96819
808-768-4480

Klein, Noa

From: Liz Bogdanski <ebogdanski@outlook.com>
Sent: Thursday, May 31, 2018 4:23 PM
To: Klein, Noa; Liz Bogdanski
Subject: 30 days vrs. monthly
Attachments: EPA UST Release Detection Brochure 2018.pdf

Hi Noa,

I was not expecting nor prepared to give testimony today, regarding the requirement for tank and line release detection testing and the walkthrough inspections, so I wanted to follow up. You can use the below wording as my statement.

Each of the requirements for the release detection testing and the walkthrough inspections are different, i.e. monthly, thirty days, 31 days (see below). The ATG method for line and tank release detection use continuous monitoring, so in the event that a leak accrues the system alarm would go off to alert the operator as soon as it was detected regardless of the amount of days between test.

Attached is an 2018 EPA Release Detection Brochure stating "monthly leak test". Is the intent of the regulation to test/inspect monthly? The wording between EPA and DOH seem to be inconsistent and it makes for confusion and recordkeeping challenging.

Line Release Detection:

11-280.1-41(b)(1)(A)(ii) states "Have an annual line tightness test conducted in accordance with section...or have **monthly** monitoring conducted in accordance with section..."

Tank Release Detection:

11-280.1-43(4)(C)(ii) states "Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurement to determine the leak status of the tank at least once every **thirty days**."

Walkthrough:

11-280.1-36(1)

"**Every thirty-one days:**"

Thanks in advance for DOH's consideration to asses and clarify the wording to represent the intent of the regulation.

Respectfully,
Liz Bogdanski

Owners and operators of regulated underground storage tanks (USTs) on tribal lands must comply with federal UST regulations.

This compliance assistance brochure highlights best management practices for storage tank release detection.

Note: This document is a resource to promote compliance and does not replace the federal UST regulations.

EPA developed this brochure to help UST owners and operators in Indian country comply with the federal UST regulations.

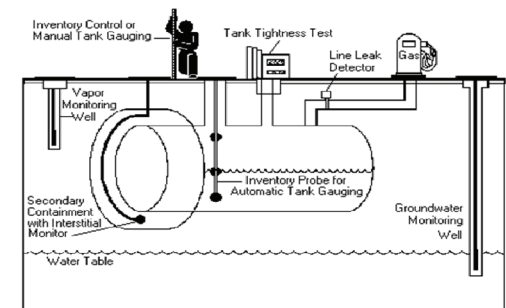
This brochure is one in a series of EPA compliance assistance brochures designed to help owners and operators comply with UST regulations.

Other brochures focus on spill buckets, overflow protection, recordkeeping and notification, financial responsibility, insurance, and piping release detection.

www.epa.gov/oust/pubs

STORAGE TANK RELEASE DETECTION

BEST MANAGEMENT PRACTICES FOR YOUR UNDERGROUND STORAGE TANK



Office of Underground Storage Tanks
www.epa.gov/oust
August 2013
EPA-510-F-13-003

Compliance Assistance In
Indian Country

RELEASE DETECTION

What is release detection?

Underground storage tank (UST) [release detection](#) is an electronic or manual method or combination of methods designed to help you quickly detect releases from your tank.

What type of storage tank release detection must you use?

You must conduct one of the following:

- ☞ [automatic tank gauging \(ATG\)](#),
- ☞ [interstitial monitoring](#),
- ☞ [groundwater monitoring](#),
- ☞ [vapor monitoring](#),
- ☞ [manual tank gauging](#) (for tanks 2,000 gallons or less),
- ☞ [tank tightness test and inventory control](#) (in some cases, there is a ten year limit), or
- ☞ another method approved by the [implementing agency](#).

Your release detection device must be installed, calibrated, operated, and maintained according to manufacturer's instructions.

What should you do to ensure your release detection method is working properly? If you use:

- ☞ **ATG:** Check your printout and make sure:
 - * the ATG probe is working;
 - * there is enough down time between fuel delivery and testing; and
 - * the tank product level is at an appropriate test level.

```

LEAK TEST REPORT
T 2: SUPER
TEST STARTING TIME:
JAN 22, 2007 2:02 PM

TEST LENGTH 5 HOURS
STARTING TEMP = 31.0 F
ENDING TEMP = 27.7 F

LEAK TEST RESULTS
0.2 GAL/HR TEST INVALID
0.2 GAL/HR FLAGS:
RECENT DELIVERY
CHANGE IN TANK TEMP ZONE
TEMP CHANGE TOO LARGE

TEST ENDING TIME:
JAN 22, 2007 7:02 PM
    
```

Invalid test due to inadequate down-time

```

START LEAK TEST
FEB 7, 2011 12:30 AM

TEST LENGTH 2 HOURS

T 1: UNLEAD
VOLUME = 601 GALS
ULLAGE = 2407 GALS
90% ULLAGE = 2106 GALS
TC VOLUME = 613 GALS
HEIGHT = 16.25 INCHES
WATER = 0.00 INCHES
TEMP = 30.9 DEG F
    
```

```

0.2 GAL/HR FLAGS:
LOW LEVEL TEST ERROR
    
```

Invalid test due to low product level

Immediately respond and investigate any audible alarms or flashing lights.

Not all ATG alarms are due to releases. However, releases have gone undetected when alarms are either ignored or the ATG is turned off to stop flashing lights or beeps.



ATG in alarm status

- ☞ **Interstitial monitoring:** Inspect your system and:
 - * look for liquid at the lowest point of the UST containment and record the results;
 - * if the sensor alarms, contact your service provider to find the source of the alarm and replace malfunctioning electronic sensors.
- ☞ **Vapor or groundwater monitoring:** Check your well and well cover and make sure:
 - * it is installed in an area where leaks can not enter into the monitoring well;
 - * the well caps are secure; and
 - * the well caps are not damaged.



Monitoring well placed in the flow surface run-off



Monitoring well with missing cover and filled with debris

- ☞ **Inventory control:** Use the right equipment and make sure:
 - * the gauge stick is not warped; its ends are not worn, broken, or shortened; and markings are clearly legible
 - * readings are recorded daily and reconciled monthly. Use water finding paste to check for water on the tank bottom with record the reading.



Gauge stick with a broken end.



Checking for water on bottom of tank with paste.

- ☞ **Statistical Inventory Reconciliation (SIR):** Collect the right information and:
 - * record the data according to your vendor's instruction; and
 - * have a trained professional analyze your data.

What are some common UST release detection problems?

ATG

- ☞ Not performing a monthly leak test.
- ☞ ATG malfunctioning or improperly programmed.
- ☞ Not responding to ATG alarms.
- ☞ Malfunctioning or disconnected probe.
- ☞ Not having printer paper installed.
- ☞ Not having enough product in tank.
- ☞ Not allowing enough time for tests.

Interstitial Monitoring

- ☞ No sensor.
- ☞ Malfunctioning sensor.
- ☞ Improperly installed sensor.



Interstitial monitoring sensor

SIR

- ☞ Not further investigating inconclusive results.
- ☞ Not obtaining vendor reports in a timely manner.

Inventory Control

- ☞ Not gauging the tank daily, checking for water monthly, or recording all deliveries.
- ☞ Not performing proper calculations to reconcile data at the end of each month.
- ☞ Not conducting an annual tightness test.

Tightness Testing

- ☞ Not having enough product in the tank to perform the leak test.

Recordkeeping

- ☞ Not maintaining printed copies of electronic monthly leak detection records.
- ☞ Not maintaining written logs of manual monthly interstitial monitoring checks.
- ☞ Not keeping daily and monthly inventory records.

For more information on storage tank release detection, see EPA's *Straight Talk On Tanks: Leak Detection Methods For Petroleum Underground Storage Tanks And Piping* at www.epa.gov/oust/pubs/straight.htm or order free copies by calling (800) 490-9198.



BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com



May 31, 2018

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ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer

Dr. Virginia Pressler
Director
State of Hawaii
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Dr. Pressler,

Subject: Board of Water Supply Testimony on Hawaii Department of Health
Proposed Underground Storage Tank Regulations (Proposed Repeal of
Chapter 11-281 and Adoption of Chapter 11-280.1 Hawaii Administrative
Rules, Updated April 26, 2018)

The Honolulu Board of Water Supply (BWS) appreciates the opportunity to offer comments to the Department of Health's proposed revisions to State underground storage tank (UST) rules and will be submitting written detailed remarks to the proposed Hawaii Administrative Rules chapter 11-280.1. Today, I would like to present an overview of our comments.

As the state's largest municipal water purveyor, we will always be concerned with the storage of more than 200 million gallons of fuel located 100 feet above a sole-source groundwater aquifer in single walled USTs without secondary containment and interstitial monitoring. We believe this technology offers our groundwater the best protection in lieu of relocating it away from the aquifer.

As our primary source of potable water in Hawaii, groundwater must be preserved and protected as stated in Hawaii's Constitution that mandates all public natural resources are held in trust for the benefit of the people and that the State protect and conserve all natural resources, including water, for the benefit of present and future generations.

1. As currently written, the organizational structure of the proposed DOH rules makes it difficult to compare requirements for field-constructed tanks to the current federal rules. DOH should clarify which rules apply to previously deferred UST systems with field-constructed tanks greater than 50,000 gallons, and those rules should be aggregated into one section. All provisions should be cross-referenced to the federal rules or identified as new provisions that do not appear in the federal rules.
2. The BWS does not support the twenty-year secondary containment deadline for field constructed USTs set forth in the proposed rules. The potential impacts to the groundwater beneath field-constructed USTs pose an unacceptable risk to our critical

drinking water resources. DOH should shorten the twenty-year allowance for upgrading previously deferred systems with secondary containment to ten years.

3. The BWS does not support provisions in state UST rules that allow exemptions to the secondary containment requirements using an alternative tank design. If an exemption to the requirement for secondary containment for previously deferred systems is to be retained, the proposed DOH rules should make explicit that any such exemption granted be justified solely by a scientifically sound, engineering analysis that clearly demonstrates the alternative design would provide an equivalent degree of human health and environmental protection and does not present a greater danger to human health or the environment.
4. BWS views large UST system piping posing an unacceptable risk to drinking water resources. DOH should require, by the same deadline applied to previously deferred UST systems, secondary containment for all piping that cannot be visually inspected, including piping in contact with soil or located within concrete cast against soil.
5. There is no existing industry standard for designing, constructing or retrofitting large field-constructed USTs. We request DOH provide justification for its allowing conformance to published codes of practice, in lieu of site-specific engineering analysis, for field-constructed UST systems with a capacity greater than 50,000 gallons.
6. BWS is not convinced that single-walled UST systems provide an equivalent level of protection to human health or the environment as secondary containment systems. DOH should not grant any variances for large field-constructed UST systems to operate without secondary containment.

Thank you for the opportunity to testify.

Very truly yours,


ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com



June 1, 2018

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
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JADE T. BUTAY, Ex-Officio

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer *Ellen*

Director of Health
State of Hawaii
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Director of Health,

Subject: Board of Water Supply Comments on the Hawaii Department of Health Proposed Underground Storage Tank Regulations (Proposed Repeal of Chapter 11-281 and Adoption of Chapter 11-280.1 Hawaii Administrative Rules, Updated April 26, 2018)

The Honolulu Board of Water Supply (BWS) offers the following comments on the subject proposed Hawaii Department of Health (DOH) Underground Storage Tank (UST) rule changes. A copy of the official public hearing notice is included in Attachment A.

Introduction

Safeguarding our drinking water supply is constitutionally and statutorily mandated. The Hawaii Constitution requires that, “[f]or the benefit of present and future generations, the State and its political subdivisions shall conserve and protect ... all natural resources, including ... water ... and shall promote the development and utilization of these resources ... in a manner consistent with their conservation” and further declares that “[a]ll public natural resources are held in trust for the benefit of the people.” Hawaii Constitution Article XI, § 1; *see also* Hawaii Constitution Article XI, § 7 (“The State has an obligation to protect, control and regulate the use of Hawaii’s water resources for the benefit of its people.”). The Supreme Court of Hawaii has concluded that this constitutional mandate “encompasses a duty to promote the reasonable and beneficial use of water resources in order to maximize their social and economic benefits to the people of this state” and, moreover, this responsibility is “unlimited by any surface-ground distinction,” extending to all water resources, including groundwater. *In re Water Use Permit Applications*, 94 Hawaii 97, 133-135, 139 (2000).

State policy for water resources in Hawaii is likewise directed toward achieving the highest water quality consistent with maximum benefit to the people of the state. See

H.R.S. § 174C-2(c) (the Hawaii Water Code “shall be liberally interpreted to obtain maximum beneficial use of the waters of the State”). Pertinent here, drinking water is the highest beneficial use of groundwater. State law governing USTs only serves to bolster these public trust commitments, expressly providing that UST systems “shall be designed, constructed, installed, upgraded, maintained, repaired, and operated to prevent releases of the stored regulated substances for the operational life of the tank or tank system.” H.R.S. § 342L-32(b)(1).

The lands and waters of Hawaii are unique and delicately balanced resources, the protection of which is vital to the economy of the State, and the protection of groundwater is a matter of the highest priority. As the primary source of potable water in Hawaii, groundwater must be preserved in as close to pristine condition as possible and accommodate the needs of multiple public and private users. This is consistent with Hawaii’s constitutional mandate that all public natural resources are held in trust for the benefit of the people and that the State protect and conserve all natural resources, including water, for the benefit of present and future generations.

The need to preserve and protect our irreplaceable drinking water resources for present and future generations requires any proposed DOH UST rules to address the considerable risk to Hawaii’s drinking water posed by large field-constructed UST systems.

Summary of BWS Comments

1. DOH should clarify which rules apply to previously deferred facilities with field-constructed tanks greater than 50,000 gallons, and those rules should be aggregated into one section. All provisions should be cross-referenced to the federal rules or identified as new provisions that do not appear in the federal rules.
2. DOH should shorten the twenty-year allowance for upgrading previously deferred systems with secondary containment to ten years.
3. If an exemption to the requirement for secondary containment for previously deferred systems is to be retained, DOH should make explicit that any such exemption granted be justified by a scientifically sound, engineering analysis that clearly demonstrates the alternative design would provide an equivalent degree of human health and environmental protection and does not present a greater danger to human health or the environment.
4. DOH should require, by the same deadline applied to previously deferred UST systems, secondary containment for all piping that cannot be visually inspected, including piping in contact with soil or located within concrete cast against soil.

5. DOH should not allow simple conformance to published codes of practice, in lieu of site-specific engineering analysis, for field-constructed UST systems with a capacity greater than 50,000 gallons.
6. DOH should not grant any variances for large field-constructed UST systems to operate without secondary containment.

Detailed Comments

Our detailed comments are as follows:

- The proposed DOH UST rules deviate from both the organizational structure and certain substantive requirements of the 2015 United States Environmental Protection Agency (EPA) UST rule revisions. Existing federal UST rules generally aggregate the requirements for the previously deferred USTs into a single location: **Subpart K—UST Systems with Field-Constructed Tanks and Airport Hydrant Fuel Distribution Systems**. The proposed DOH rules, in contrast, have removed a draft Subchapter 11 contained in an earlier rules version dated December 20, 2017, which had mirrored federal Subpart K, and appear to have dispersed those requirements throughout other subchapters.

Previously deferred facilities with field-constructed tanks greater than 50,000 gallons comprise a considerable risk to Hawaii's drinking water resources. As such, it is critical that every regulatory requirement for field-constructed tanks be provided in a clear, unambiguous and concise manner. Owners and operators of field-constructed UST systems should be able to find all the provisions for these important installations in one location in the new DOH UST rules. The BWS has found the newest version of the proposed chapter of the Hawaii Administrative Rules, which relies on multiple exemptions and cross-references to other regulatory provisions to establish the requirements for these types of facilities, to be cumbersome and confusing. This confusion should be eliminated to avoid any and all potential for unintended rule ambiguities, inadvertent construal of the reorganization of the chapter as an intentional departure from federal UST requirements, and/or difficulty for administrative application and enforcement of the provisions.

As currently written, the proposed DOH UST rules also make it difficult to compare requirements for previously deferred tanks to the current federal rules. DOH should provide a crosswalk table that cross-references all the proposed DOH UST rules provisions to their federal counterparts and identify all new proposed DOH UST rule provisions that do not appear in the federal rules. Such a table would be useful for determining whether the proposed DOH UST rules

are at least as stringent as federal UST regulations in Title 40 Code of Federal Regulations Part 280 (40 CFR Part 280).

- Proposed DOH UST rules section 11-280.1-21(d)(2)(B) provides:

Not later than twenty years after the effective date of these rules, tanks and piping installed before the effective date of these rules must be provided with secondary containment that meets the requirements of section 11-280.1-24 or must utilize a design which the director determines is protective of human health and the environment, except for:

(i) Suction piping that meets the requirements of section 11-280.1-41(b)(6);

(ii) Piping associated with UST systems with field-constructed tanks greater than 50,000 gallons; and

(iii) Piping associated with airport hydrant systems.

The BWS has several concerns with this provision as written.

First, the twenty-year deadline set forth in the proposed rules provision is simply not expeditious enough. The potential impacts to the groundwater beneath field-constructed USTs, like those at the RHBFSF, pose an unacceptable risk to our critical drinking water resources and, consequently, urgent action is needed to ensure the safety of our drinking water resources. As the agency charged with Oahu's municipal water resources and providing residents with safe and dependable water service, it is clear to the BWS that twenty years is far too long of a time period to allow owners and operators of UST systems with field-constructed tanks to bring themselves into compliance with these tank upgrade requirements. The currently-proposed secondary containment upgrade timeline should be reduced to ten years.

Second, the proposed rules provision includes an exemption to the secondary containment requirement at DOH's sole discretion, without specifying the requisite level of justification for such a determination. The BWS does not believe that a broad exemption to the secondary containment mandate should be included in state UST rules. In the event any such exemption is to be retained within the regulatory framework, a requirement should be included that the administrative determination be justified with rigorous scientific, engineering and risk analyses that clearly demonstrate that the alternative design meets or exceeds the performance associated with secondary containment devised and constructed in accordance with these or successor rules. In particular, it should be established that any alternate design results in an equivalent degree of human health and environmental protection and does not present a greater danger to human health or the environment.

Finally, the DOH proposed UST rules provision allows the use of single-wall release detection systems for piping associated with field-constructed UST systems that are larger than 50,000 gallons. As with the tanks themselves, this exemption for large UST systems poses an unacceptable risk to drinking water resources as UST system piping is of equal or greater risk for a release. All piping that cannot be visually inspected, including piping in contact with soil or located within concrete cast against soil, should be upgraded with secondary containment on the same schedule required for the field-constructed tanks themselves.

- Proposed DOH rules section 11-280.25 provides lists of published codes of practice, conformance with which “may be used to comply with” certain performance standards and requirements of the proposed rules. However, DOH itself has recognized that there is no existing industry standard for designing, constructing or retrofitting large field-constructed USTs. Nor are we aware of any basis for accepting that the published codes of practice referenced in section 11-280.1-25(g) provide sufficient direction and risk mitigation for large field-constructed USTs or UST systems. The Red Hill Bulk Fuel Storage Facility (RHBFSF) stores nearly 200 million gallons of fuel in colossal World War II vintage field-constructed USTs a mere 100 feet above a high-quality sole-source aquifer. DOH should provide its justification that the codes of practice referenced in section 11-280.1-25(g) are sufficient performance standards under the circumstances present at and on the scale necessary for the RHBFSF; otherwise, this provision should be deleted.
- Given the considerable risk to human health and the environment, DOH should prohibit all requests for variances to allow large field-constructed USTs installed before the effective date of the new rule to remain in a single-walled configuration and operate without secondary containment. Single-wall systems simply do not provide an equivalent level of protection. The language of proposed DOH rules section 11-280.1-332 should be modified as follows:

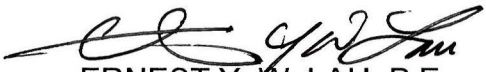
Variances allowed. Provisions of chapter 342L, Hawaii Revised Statutes, and this chapter relating to USTs or tank systems which are more stringent than Title 40, part 280 of the Code of Federal Regulations, published by the Office of the Federal Register, as amended as of July 1, 2017, may be varied by the director in accordance with sections 342L-5 and 342L-6, Hawaii Revised Statutes, and this chapter; provided, however, that no variance shall be granted for UST systems with field-constructed tanks with a capacity greater than 50,000 gallons to operate without secondary

Director of Health
June 1, 2018
Page 6

containment. No variance may be less stringent than the federal requirements.

Thank you for the opportunity to comment. If you have any questions, please feel free to call Erwin Kawata at 808-748-5080.

Very truly yours,


ERNEST Y.W. LAU, P.E.
Manager and Chief Engineer

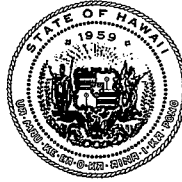
cc: Mr. Steve Linder
United States Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

State of Hawaii
Department of Health
Solid and Hazardous Waste Branch
Attn: UST Rules
2827 Waimano Home Rd, #100
Pearl City, Hawaii 96782

Attachment A

Public Meeting Notice - Proposed DOH UST Rules – May 31, 2018

DAVID Y. IGE
GOVERNOR OF HAWAII



VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

April 30, 2018

To Owners/Operators of USTs and Interested parties:

The State of Hawaii, Department of Health will hold a public hearing for the proposed repeal of Hawaii Administrative Rules, Chapter 11-281 and adoption of Chapter 11-280.1 entitled, *Underground Storage Tanks*. The proposed repeal/adoption updates rules regulating owners and operators of underground storage tanks (USTs) in Hawaii, primarily to align state regulations with updates to the U.S. Environmental Protection Agency's federal UST Program.

The proposed rules to be adopted/repealed can be viewed at 2827 Waimano Home Rd., #100, Pearl City, Hawaii from Mon-Fri, 8am-4pm (except state holidays). The draft rules are posted online at <http://health.hawaii.gov/shwb/ust-har>. Copies will be mailed on request and payment of a 5-cent/page copy fee and postage; call (808) 586-4226 to request.

The public hearing will be at **9:00 am on Thursday, May 31, 2018 at the State Lab Auditorium at 2725 Waimano Home Rd, Pearl City**. All interested parties may attend to present their testimonies. The purpose of the hearing will be to **ONLY** accept formal testimony (written and oral) in front of a hearings officer. There will not be a formal presentation. There will not be a question/answer session.

Anyone unable to attend may send written testimony to the following address, or noa.klein@doh.hawaii.gov:

Solid and Hazardous Waste Branch
Attn: UST Rules
2827 Waimano Home Rd, #100
Pearl City, HI 96782

Testimony must be received by June 5, 2018. To request an auxiliary aid or service (e.g. ASL interpreter, large print) for the hearing, call (808) 586-4226 (voice/TDD) or e-mail thu.perry@doh.hawaii.gov by May 24, 2018.

Klein, Noa

From: Adamson, Katharine <KAdamson@alohagas.com>
Sent: Friday, June 01, 2018 11:54 AM
To: Klein, Noa
Subject: Comments on HAR 11-280.1
Attachments: Comments on HAR 11.280.1.docx; Letter to DOH_Containment Sump_Alternative Test Procedure_3.19.18.pdf

Hi Noa,

Thanks again for all of your hard work on these regulations or for the chance to comment.

Please see our comments on HAR 11-280.1 attached.

Thank you,
Katie

1. Requirement

§11-280.1-35(a)(2)(B) – “The containment sumps used for interstitial monitoring of piping are tested at least once every three years to ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with one of the criteria in paragraph (1)(B)(i) to (iii).”

§11-280.1-35(a)(1)(B)(iii) – “Requirements determined by the department to be no less protective of human health and the environment than the requirements listed in clauses (i) and (ii).

Comment

On page 11 of the *Summary of Changes and Frequently Asked Questions* (December 20, 2017) it states that, “To use option (iii), the department must have pre-approved the specific testing method.” On March 19, 2018, Aloha Petroleum submitted an alternative test procedure for containment sump integrity testing to the State of Hawaii, Department of Health (DOH), Solid & Hazardous Waste Branch (Attachment 1). Aloha Petroleum requests approval to utilize low liquid level testing combined with a positive shutdown configuration as an alternative testing method for containment sumps, as described in Attachment 1.

2. Requirement

§11-280.1-37(a)(3) – “Sensing devices for under-dispenser containment required by section 11-280.1-21(c) must: (3) Generate a record of the status of the under-dispenser containment and the sensor’s proper operation at least every thirty days.”

Comment

Not all under-dispenser containment sensors are electrically connected to the automatic tank gauge. These “stand-alone” under-dispenser containment sensors function by shutting down power to the specific dispenser when tripped by the presence of liquid. They do not generate a record of status or proper operation (i.e., Sensor report, alarm report.) Under-dispenser containment sensors, including “stand-alone” sensors, are annually tested for functionality.



March 19, 2018

Aloha Petroleum, Ltd.
1132 Bishop St., Suite 1700
Honolulu, HI 96813

State of Hawaii, Department of Health
Solid & Hazardous Waste Branch
Attn: Thu Perry
2827 Waimano Home Road
Pearl City, Hawaii 96782

RE: **Hawaii Administrative Rules, Chapter 11-280.1-35 (Draft)**
Alternative Test Procedure for Containment Sump Integrity Testing

Dear Mrs. Perry,

In accordance with 2015 amendments to the Code of Federal Regulations, Title 40, Chapter I, Subchapter I, Part 280 (40 CFR 280), the December 20, 2017, draft of Hawaii Administrative Rules, Chapter 11-280.1 (HAR 11-280.1), entitled *Underground Storage Tanks* (USTs), requires periodic testing of containment sumps used for interstitial monitoring of piping.

40 CFR 280 requires sumps to be tested in accordance with one of the following criteria:

- Manufacturers requirements;
- A code of practice developed by a nationally recognized organization; or
- Requirements determined by the implementing agency to be no less protective of human health and the environment than manufacturer or industry code of practice.

Additionally, the draft language in HAR 11-280.1-35(1)(B)(iii) allows for the adoption of testing criteria determined by State of Hawaii, Department of Health (DOH) to be no less protective of human health and the environment than requirements developed by the manufacturer or industry code of practice. The *Summary of Changes and Frequently Asked Questions* published by DOH in conjunction with the draft regulations states on page 11 that in order, “To use option (iii), the department must have *pre-approved* the specific testing method.”

The Petroleum Equipment Institute’s Recommended Practice 1200-12 (PEI RP-1200-12), which requires testing the sump to four inches above the highest penetration, is the only known code of practice developed by a nationally recognized association that is currently available to petroleum marketers for hydrostatic testing of containment sumps.

Aloha Petroleum (Aloha) is submitting this letter to provide a specific alternative testing method for periodic testing of containment sumps for your consideration and to request pre-approval



from DOH for the alternative testing method, known as low liquid level testing, as it is described within the contents of this letter.

I. Background

The U.S. Environmental Protection Agency's (EPA's) Office of Underground Storage Tanks (OUST) has acknowledged that PEI RP-1200-12 creates unusual challenges and unintended consequences, both for tank owners and the environment.

Known challenges and unintended environmental consequences of PEI RP-1200-12 include:

- Difficulty accessing the sump, at times requiring dispensers to be removed in order to prepare for and perform testing;
- Potential to harm electrical components within the sump, therefore requiring electrical junction boxes to be relocated prior to testing;
- Potential to disincentive owners from upgrading systems or using the most protective release detection methods; and
- Generation of *excessive* volumes of potentially hazardous waste water.

II. Proposed Alternative Test Procedure

Please consider the following test procedure for approval as an alternative containment sump test method, in accordance with the authority granted to DOH by 40 CFR 280.35(a)(1)(ii)(C).

It should be noted that the EPA modified their *UST Technical Compendium about the 2015 UST Regulations* in May 2017, to announce that they consider the following test procedure to be no less protective of the environment than the existing code of practice, PEI RP-1200-12.

Low Liquid Level Testing Combined with Positive Shutdown Configuration

- A liquid level sensor is mounted at the lowest point in the sump and a periodic test is performed by adding liquid to a point that will ensure activation of the sensor; and
 - The pump automatically shuts off when product activates the sensor, or
 - The dispenser automatically shuts off when product activates the sensor, and the facility is always staffed when the pumps are operational.

III. Operability of Sump Sensors

Aloha uses two types of sump sensors; Veeder-Root discriminating sensors and Veeder-Root non-discriminating sensors. For both types, the manufacturer certifies that the, "fuel alarm is



triggered when liquid reaches 1.0 inch high on both dispenser pan and containment sump sensors.”

Additionally, Aloha’s maintenance technicians are thoroughly trained to mount sensors at the lowest point in the sump, and extensive spot checks conducted by the Environmental, Health and Safety Department have indicated that this procedure is consistently followed.

IV. Environmental Benefits of Low Liquid Level Testing

Waste minimization and resource conservation are philosophical pillars of the Resource Conservation and Recovery Act (RCRA).

Independent of regulatory exemptions, sump test water would be considered a hazardous waste if it exhibits any of the characteristics of hazardous waste described in 40 CFR 261.21-24. Approximately 0.007 ounces of benzene in 100 gallons (0.5 mg/L) of test water would result in an exceedance of the toxicity characteristic limit under RCRA.

Even when sumps are thoroughly cleaned prior to testing, it is likely sump test water will come into contact with residual hydrocarbons that could result in an exceedance of 0.5 mg/L of benzene in test water.

Aloha has roughly 65 locations subject to sump testing requirements, with an average of three submersible turbine pump (STP) sumps and four dispenser pans per location. Testing sumps using PEI RP-1200-12 would require 150 to 300 gallons per STP sump and about 25 gallons per dispenser pan. Based on these estimates, each location would require 550 to 1,000 gallons of water to test the sumps using PEI RP-1200-12, depending on the number of sumps, sump dimensions and penetration heights.

Based on a tri-annual testing schedule, Aloha alone would generate 35,750 to 65,000 gallons of potentially hazardous waste water every three years, in order to comply with a requirement that is intended to protect the environment.

Rather, testing sumps using the alternative test procedure outlined in this letter would generate less than 100 gallons of test water per site, equaling a more reasonable 6,500 gallons of test water every three years.

V. Recommendations

It would seem imprudent to unnecessarily require petroleum marketers in Hawaii to generate hundreds of thousands of gallons of potentially hazardous waste water in order to test the



integrity of containment sumps, when an alternative solution exists that the EPA considers to be as equally protective of the environment.

Aloha strongly encourages DOH to approve low liquid level testing combined with a positive shutdown configuration as an alternative testing method for containment sumps, for the purpose of significantly reducing the amount of potentially hazardous waste generated in our finite and unique islands.

Should you have any questions, please contact me by email at kadamson@alohagas.com or by phone at (808) 522-9749.

Sincerely,

Katie Adamson
Environmental, Health & Safety Specialist
Aloha Petroleum, Ltd.

cc: Roxanne Kwan, Solid & Hazardous Waste Branch, Section Head
Lene Ichinotsubo, Solid & Hazardous Waste Branch, Acting Office Manager

DOH Public Hearing re: adoption of Chapter 11-280.1

Hello, I am Melanie Lau and I am not part of an organization - I am just a private citizen who would like to make a few comments on the proposed repeal and adoption of rules regarding underground storage tanks, and, more specifically, about the Red Hill storage tanks.

1. I think the Hawaii State Dept. of Health should continue to be a part of the task force charged with oversight of the Administration Order on Consent regarding tank upgrades at Red Hill. I understand that repeal of chapter 11-281 and adoption of chapter 11-280.1 is mostly for “housekeeping” reasons, to align state regulations with updates to the US EPA federal UST program, but please be sure that the State does not give away its voice or control over field constructed tanks (such as the Red Hill tanks) or the issue.
2. It concerns me that the 20 tanks at Red Hill are situated over the Halawa aquifer which supplies clean drinking water for people from Moanalua to Hawaii Kai. This includes the major business districts of Honolulu, the University of Hawaii, and Pearl Harbor. Each tank holds 12.5 million gallons of fuel, which when multiplied by 18-20 tanks, means 225 to 240 million gallons of fuel sits over the aquifer. Once the aquifer is contaminated, at least 500,000 people will not have clean drinking water.
 - a. My question for the Navy, is how are you sure these tanks are impenetrable to enemy attack?
 - b. How are you sure they will not rupture with an earthquake or other natural disaster?
 - c. What will the Navy do for clean water should they rupture?
 - d. Ship it in?
 - e. What about the non-military people, what will they do for water?
 - f. I understand defense readiness is at the top of the Navy’s list of priorities, but if your servicemen are drinking contaminated water, how can they be battle ready?
 - g. Many local people support the servicemen so they can do their job, but if they are scrounging for water, how can these local people be of support?
3. If the Navy will ship in the water, then why not ship in the fuel instead? Preserve the aquifer from harm and you will not have the clean water problem.
4. Have you thought outside the box - literally? If shipping in water is your solution to the contamination, then how about having the fuel in tankers, instead? These tankers can patrol the ocean and be in constant motion, so they are not “sitting ducks” all in the same place. A supertanker holds 84 million gallons of oil. Only 3 supertankers would be needed to hold the 240 million gallons of fuel sitting in Red Hill. Perhaps breaking the load up into 20 regular tankers would be more strategically prudent.

Thank you. Melanie Lau melanie.lau@hawaiiantel.net

DAVID Y. IGE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

JADE T. BUTAY
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DIR 1.11372

May 31, 2018

Lene Ichinotsubo, Acting Program Manager
Solid and Hazardous Waste Branch
State of Hawaii, Department of Health
2827 Waimano Home Rd, #100
Pearl City, HI 96782

Dear Ms. Ichinotsubo:

SUBJECT: COMMENTS ON PROPOSED REPEAL OF HAWAII
ADMINISTRATIVE RULES (HAR), CHAPTER 11-281 AND
ADOPTION OF CHAPTER 11-280.1 ENTITLED, "UNDERGROUND
STORAGE TANKS"

In accordance with Public Hearing Notice dated April 30, 2018, the State of Hawaii Department of Transportation (DOT) submits the attached comments regarding the proposed changes to the Hawaii Administrative Rules noted above.

Should you have any questions, please contact Chris Takeno at (808) 586-2504.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jade T. Butay".

JADE T. BUTAY
Director of Transportation

Attachment

Department of Transportation

Comments to Hawaii Administrative Rules (HAR), Title 11, Chapter 280.1, UST

NO	PAGE	SECTION	COMMENT/PROPOSAL	RATIONAL
1		General Comment	Request DOH develop a chart of requirements and deadlines to clarify and avoid confusion on when required actions are due or to be completed.	
2	26	§11-280.1-21(b)(2)(B) Upgrading of UST systems	“Not later than one year after the effective date of these rules, the system performance standards under section 11-280.1-20(d);” Would like the ability for State agencies (such as DOT) to apply for an extension to required upgrading of systems.	The extension would be necessary because agencies must get Legislative approval for funds to upgrade.
3	44	§11-280.1-37(a)(3) Periodic inspection and maintenance of under-dispenser containment sensing devices	Modification proposal (changes in bold underline): “Generate a record of the status of the under-dispenser containment and the sensor’s proper operation at least every thirty-one days.”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
4	49	§11-280.1-41(a)(1)(A) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed before August 9, 2013 must be monitored for releases at least every thirty-one days using one of the methods listed...”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
5	49	§11-280.1-41(a)(1)(B) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Not later than ten years after the effective date of these rules, tanks installed before August 9, 2013 must be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7).”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
6	50	§11-280.1-41(a)(1)(C) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed on or after August 9, 2013 must be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7).”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
7	50	§11-280.1-41(a)(2)(A) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed before the effective date of these rules must be monitored for releases at least every thirty-one days using one of the methods listed...”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)

Department of Transportation

Comments to Hawaii Administrative Rules (HAR), Title 11, Chapter 280.1, UST

NO	PAGE	SECTION	COMMENT/PROPOSAL	RATIONAL
8	50	§11-280.1-41(a)(2)(B) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed on or after the effective date of these rules must be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7).”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
9	50	§11-280.1-41(a)(3)(A) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed before the effective date of these rules must be monitored for releases at least every thirty-one days using one of the methods listed...”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
10	51	§11-280.1-41(a)(3)(B) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Tanks installed on or after the effective date of these rules must be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7).”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
11	52	§11-280.1-41(b)(2)(A)(i) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7);”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
12	52	§11-280.1-41(b)(2)(B)(i) Requirements for petroleum UST systems	Modification proposal (changes in bold underline): “Be monitored for releases at least every thirty-one days in accordance with section 11-280.1-43(7);”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
13	54	§11-280.1-42 Requirements for hazardous substance UST systems	Modification proposal (changes in bold underline): “Owners and operators of hazardous substance UST systems must monitor these systems in accordance with section 11-280.1-43(7) at least every thirty-one days.”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
14	58	§11-280.1-43(4)(C)(i) Methods of release detection for tanks	Modification proposal (changes in bold underline): “In-tank static testing conducted at least once every thirty-one days;”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
15	58	§11-280.1-43(4)(C)(ii) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Continuous in-tank leak detection operating on an uninterrupted basis or operating within a process that allows the system to gather incremental measurements to determine the leak status of the tank at least once every thirty-one days.”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)

Department of Transportation

Comments to Hawaii Administrative Rules (HAR), Title 11, Chapter 280.1, UST

NO	PAGE	SECTION	COMMENT/PROPOSAL	RATIONAL
16	62	§11-280.1-43(8)(B) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Be capable of detecting a leak rate of 0.2 gallon per hour or a release of one hundred fifty gallons within thirty-one days;”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
17	63	§11-280.1-43(10)(B) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Use an automatic tank gauging system to perform release detection at least every thirty-one days that can detect a leak rate less than or equal to one gallon per hour.”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
18	63	§11-280.1-43(10)(C) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Use an automatic tank gauging system to perform release detection at least every thirty-one days that can detect a leak rate less than or equal to two gallons per hour.”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
19	63	§11-280.1-43(10)(E) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Perform inventory control (conducted in accordance with Department of Defense Directive 4140.25, ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, or equivalent procedures) at least every thirty-one days that can detect a leak equal to or less than 0.5 percent of flow-through”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
20	63	§11-280.1-43(10)(E)(ii) Methods of release detection for tanks	Modification proposal (changes in bold underline): “Perform vapor monitoring or groundwater monitoring (conducted in accordance with paragraph (5) or (6), respectively, for the stored regulated substance) at least every thirty-one days;”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)
21	66	§11-280.1-44(4)(C) Methods of release detection for piping	Modification proposal (changes in bold underline): “Perform inventory control (conducted in accordance with Department of Defense Directive 4140.25, ATA Airport Fuel Facility Operations and Maintenance Guidance Manual, or equivalent procedures) at least every thirty-one days that can detect a leak equal to or less than 0.5 percent of flow-through;”	Consistent with the walk though inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)

Department of Transportation

Comments to Hawaii Administrative Rules (HAR), Title 11, Chapter 280.1, UST

NO	PAGE	SECTION	COMMENT/PROPOSAL	RATIONAL
22	66	§11-280.1-44(4)(C)(ii) Methods of release detection for piping	Modification proposal (changes in bold underline): Perform vapor monitoring or groundwater monitoring (conducted in accordance with section 11-280.1-43(5) or (6), respectively, for the stored regulated substance) at least every thirty-one days;	Consistent with the walk through inspection intervals every thirty-one days. See proposed HAR, 11-280.1-36(a)(1)



SIERRA CLUB OF HAWAI'I

MĀLAMA I KA HONUA. *Cherish the Earth.*

June 5, 2018

Hawai'i Department of Health
Attn: UST Rules
Noa Klein
2827 Waimano Home Road #100
Pearl City, Hawai'i 96782

Aloha Ms. Klein,

The Sierra Club of Hawai'i offers these written comments in addition to the verbal testimony provided on May 31, 2018.

First, thank you very much for incorporating our comment that the permitting timeframe for the Red Hill fuel tanks should be reduced. The new proposed rules reduce the timeframe from three years to one year for receiving a new permit on existing facilities that were previously exempted from permit requirements. See, HAR 11-280.1-1-10(a)(1)(A). This is an important and meaningful improvement from our perspective.

Second, we are seeking two additional changes in the newly proposed version of the regulations in HAR 11-280.1-21(d)(2)(B):

Not later than **twenty ten years** after the effective date of these rules, tanks and piping installed before the effective date of these rules must be provided with secondary containment that meets the requirements of section 11-280.1-24 or must utilize a design which ~~the director determines is protective of human health and the environment~~ **results in an equivalent degree of human health and environmental protection and does not present a greater danger to human health or the environment.**

IN SUPPORT OF OUR AMENDMENTS TO THE PROPOSED UST REGULATIONS

I. TEN YEARS IS A REASONABLE TIMEFRAME FOR COMPLIANCE

A. Risk to water supply is significant

It is unacceptable and undisputed that petroleum products like naphthalene and benzene are currently detected in the groundwater near the Red Hill fuel tanks. It is undisputed that after the

last leak the Health Department declared that “the storage of up to 187 million gallons of fuel, 100 feet above a drinking water resource, is inherently dangerous.” In a February 23, 2018 letter the U.S. Environmental Protection Agency (EPA) and the Health Department severely criticized the Navy’s groundwater modeling for not being protective of water resources, lacking crucial data, and “at odds” with other data. The analysis found that the Navy’s modeling fails to account for the more than 200,000 gallons of fuel that has leaked from the tanks since 1943 and never been cleaned up.

The underground storage tanks at Red Hill continue to pose a serious threat to the aquifer. Each of the active underground storage tanks at the Red Hill Bulk Fuel Storage Facility can store up to 12.5 million gallons of fuel. Well-over one hundred million gallons of petroleum products are stored there at any given time. The Health Department itself recognizes that “[n]o underground storage tank or underground storage tank system in Hawai‘i poses as great a threat to groundwater as the underground storage tanks at the Red Hill Fuel Storage Facility.”

Because of the poor choice made in 1943 to site a major fuel facility 100 feet above the aquifer, we are now confronted with a Flint, Michigan type situation. Failure to take immediate protective action is unreasonable.

B. Timeframe consistent with Administrative Order on Consent

The Administrative Order on Consent (AOC) anticipates new regulations imposing additional requirements on the operation of the Red Hill fuel facility and sets an outer deadline of 22 years that allows for an earlier completion date.

In the AOC, paragraphs 8(b)(iii), 11, and 18(d) make clear that the Navy should anticipate new federal and state regulations for field-constructed underground storage tanks that will impose new requirements on the Red Hill facility, consistent with the AOC.

The Health Department can impose a faster timeline because the AOC dictates only a final deadline of 22 years from the effective date. The Statement of Work provides that:

“implementation [of the AOC] will occur in phases so that all Tanks in operation will deploy [Best Available Practicable Technology], as approved by the Regulatory Agencies, **within** twenty-two (22) years.” Statement of Work, Red Hill Administrative Order on Consent, page 1 (emphasis added).

There is nothing in the AOC or Statement of Work that forbids the Red Hill Facility from being upgraded prior to the 22-year deadline.

Adopting regulations with the requirement for secondary containment in 10 years does not violate or jeopardize the AOC. Quite the opposite, adopting this timeframe in these regulations gives the Navy the kind of urgent justification needed to secure the necessary funding and

expertise from the Department of Defense to either quickly upgrade the existing tanks or, if that is not possible, then begin the process of an orderly relocation of the fuel to a safer facility.

II. VARIANCE LANGUAGE SHOULD MATCH STATE LAW

State law provides the department with narrow discretion to allow alternatives to the specific requirements detailed in its regulations. Haw. Rev. Stat. §342L-5 states:

Variations allowed. Provisions under this chapter deemed more stringent than the federal rules established under Subtitle I of the federal Resource Conservation and Recovery Act, as added by the federal Hazardous and Solid Waste Amendments of 1984, may be varied by the department, when the variance results in an equivalent degree of human health and environmental protection and does not present a greater danger to human health or the environment.

The regulations cannot go beyond this statutory language. Adopting our proposed changes to regulations better reflects the department's statutory authority for granting a variance for underground storage tanks via HRS §342L-5.

III. IMPOSE STRICTER REQUIREMENTS TO PROTECT WATER RESOURCES

The Navy has demonstrated that it can adapt to our high expectations to protect the environment. From modifying their use of sonar to protect marine mammals to changing training exercises to protect native species and cultural sites, the Navy has a record of meeting our expectations.

Similarly, however, where we fail to set high expectations for the Navy, serious, permanent harm has been done. Kaho'olawe provides a relevant cautionary tale in this situation. Allowed to use this island for targeting practice with little or no limitation, the Navy bombed Kaho'olawe so hard it permanently cracked the caprock and drained the aquifer on that island. After committing only \$44 million to clean up its training site, the Navy walked away from Kaho'olawe leaving the state with a \$2.8 million annual budget for restoration that it cannot afford.

The U.S. Navy can and will do whatever is necessary to fulfill their mission and comply with state and federal law. In a March 7th letter directing the Navy to revise its Tank Upgrade Alternatives decision framework, the EPA and Health Department said the Navy shall ensure "their tank upgrade proposal meets all applicable federal and state laws and regulations." The 2018 Defense Appropriations Act already includes the "Red Hill Oversight and Environmental Protection Act of 2017," requiring the Navy to program funds necessary to upgrade the Red Hill tanks. The Navy's Red Hill Project Manager confirmed in a statement to the press that the timeframe for upgrades can be accelerated.

We need to set high expectations for the Navy so we can guarantee O'ahu's water resources are fully protected for the long-term. Adopting rules with a tighter timeline for compliance gives the Department of Health more options for ensuring full compliance and protecting O'ahu's drinking water supply.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Townsend', with a stylized, flowing script.

Marti Townsend
Director
Sierra Club of Hawai'i

Klein, Noa

From: Steve Jackson <lucho888889@gmail.com>
Sent: Tuesday, June 05, 2018 4:50 PM
To: Klein, Noa
Subject: Testimony

The Hawaii Legislature indicated that Hawaii rules should be equal to federal rules. Please adopt rules identical to federal rules.