DEPARTMENT OF THE NAVY
COMMANDER NAVY REGION HAWAII
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HOUSE ENERGY AND ENVIRONMENTAL PROTECTION COMMITTEE
Testimony on House Bill 2712 H.D. 1, Related to Underground Storage Tanks

Hearing Date and Time: Wednesday, February 14, 2018 at 8:30 a.m.

Testimony on behalf of Navy Region Hawaii

Good morning, Chair Mizuno, Vice Chair Kobayashi, and Representatives,

Thank you for the opportunity to testify. I am Captain Richard Hayes of the United States Navy. I am the commanding officer of Naval Facilities Engineering Command (NAVFAC) Hawaii, and also the Regional Engineer for Navy Region Hawaii. With me is Mr. Mark Manfredi, Program Director for the Red Hill Facility, and personnel from the Navy Supply Command, Navy Region Hawaii, NAVFAC, and the Defense Logistics Agency. I am testifying on behalf of the U.S. Navy and Department of Defense on Hawaii House Bill 2712. As currently written this bill primarily targets the Department of Defense (DoD) Red Hill Bulk Fuel Storage Facility and conflicts with an active, legally binding agreement with the Environmental Protection Agency (EPA) and State of Hawaii Department of Health (DOH). The EPA/DOH currently regulate the Red Hill facility under a written agreement signed in September 2015 known as the Administrative Order on Consent (AOC), which is more rigorous and protective than current Regulations. My testimony consists of four points:

1. The Administrative Order on Consent process is working and on track; AOC is enforceable and drives the development of upgrades to the Red Hill fuel facility.
2. Drinking water remains safe.
3. The Red Hill tanks are not leaking.
4. The Red Hill facility is vital to national defense.

1. The Administrative Order on Consent process works; it is enforceable and drives the development of upgrades to the Red Hill fuel facility.

The negotiated Administrative Order on Consent (AOC) has been successful and predictably directs actions as intended. To date the Navy and DoD have invested over $33 million and tens of thousands of hours specifically towards the AOC, and over $240 million improving the facility since 2005. The AOC focus is maintaining our

safe drinking water. The Navy is committed to the AOC which enables EPA and DOH as regulators to have expanded and comprehensive ability to inspect, evaluate, and approve Red Hill actions beyond what is required under State and Federal regulations. The AOC sets hard deadlines for deliverables and is enforceable by the EPA and DOH. To date the Navy met every AOC deadline. To ensure we accomplish our work in a transparent and inclusive manner the AOC solicits and addresses external subject matter opinions. This process enables EPA, DOH, Defense Logistics Agency (DLA), Navy, and other stakeholders to collaboratively address tank inspection, repair and maintenance; tank upgrade alternatives; release detection/tank tightness testing; corrosion testing; investigation and remediation; groundwater protection; as well as a risk and vulnerability assessment. The AOC creates legally enforceable decisions which are implemented using the federal procurement processes and, where necessary, the military construction process. Over $240 million spent on Red Hill facility improvements include: installed groundwater and soil vapor monitoring systems, structurally reinforced and renovated the tunnels and passageways, improved ventilation, tank interiors, oil tight door systems, fire protection systems, pipelines, and Red Hill drinking water shaft security. This is in addition to our normally occurring preventive maintenance, tank testing and inspections. Progress to date includes:

- Completed Section 6 and 7 (ground water assessment and modeling) analysis work plan with EPA and DOH approval.
- Completed the Current Fuel Release Monitoring Systems Report (Section 4.3) with EPA approval.
- Completed the Corrosion and Metal Fatigue Practices Report (Section 5.2) with EPA and DOH approval.
- Completed Section 6 and 7 (Monitoring Well Installation Plan).
- Added 6 new monitoring wells with additional wells planned.
- Completed the Sampling and Analysis Plan with EPA and DOH approval.
- Completed the Existing Data Evaluation Summary Report with EPA ad DOH approval.
- Completed the Section 2 tank inspection, maintenance, and repair report with EPA and DOH approval.
- Completed the Section 3 tank upgrade alternatives report.
- Currently testing vendor proposals under the approved New Release Detection Alternatives Report (Section 4.6).
- Scoping the Destructive Testing effort.
- Continuing progress on the Section 8 Risk and Vulnerability Study.
- Completed the first draft of the Section 8f. Alternate Site Study.
- Completed seismic evaluation study.
- Currently executing synoptic water level testing.

As proposed, HB2712 proposes a specific material solution as the tank upgrade alternative, explicitly identifying a secondary containment solution with

interstitial monitoring by 2028, without the technical evaluation and proper due diligence necessary to support this alternative. A directed solution that lacks sound engineering judgment and scrutiny under the AOC process will not yield optimal results and is contrary to the spirit of the AOC. The Navy has demonstrated good faith in complying with the AOC.

Addressing tank upgrade alternatives at Red Hill is a unique and very complex issue, which is why the Navy supports the engineering based process mandated by the AOC. The Navy, with input from subject matter experts, undertook a rigorous evaluation of the leading six tank upgrade alternatives, three of which are double-wall options. Deadlines are tight to accomplish our goal. With the analysis in hand, the Navy and regulators will decide on the best available practicable solution to continue upgrading the Red Hill tanks. Regulators must approve solutions, and provide valuable feedback at every stage to produce a thorough and effective product. The TUA Report demonstrates the challenges associated with successfully completing a major upgrade to the facility, in sharp contrast to the seemingly arbitrary ten year deadline imposed by this bill.

This step by step, engineering driven process incrementally evaluates best available practicable solutions – the AOC is not just a one-time assessment. The AOC reviews best available practicable solutions every five years, likely yielding over time a more innovative approach than the fixed solution mandated by HB2712.

The timelines outlined in HB2712 are not practicable while maintaining an operating fuel facility to support military operations in Hawaii and throughout the Pacific. These timelines are not based on sound construction knowledge or consideration for the engineering and logistical challenges that will be encountered in executing a project of this magnitude. Working within the Red Hill facility presents many physical space constraints that will significantly impede a rapid construction effort. For example, there are limited tunnel access points. All material, equipment and personnel must travel and operate through tunnels less than the width of an automobile. **The timelines outlined in HB2712 are not practicable and threaten the continued operation of the facility and the military's readiness and ability to respond to a crisis within the Pacific region.**

The National Defense Authorization Act (NDAA) of 2017 requires the Navy, DLA, and EPA to brief the House Armed Services Committee on its Tank Upgrade Alternative recommendation upon final review. We respectfully remind the Chair and Committee members that there are no "off the shelf" solutions to many of these requirements. Assessing the best available practicable technology requires consideration of alternatives – including some untested alternatives – as well as considering public input. We remain committed to the AOC process, which

focuses on achieving the best solutions for Red Hill.

2. Drinking water remains safe.

Past and current validated testing confirms, and all parties agree, that drinking water from the Red Hill shaft as well as nearby municipal wells is safe for human consumption. An EPA certified third party laboratory tests drinking water samples to validate analytical results. The Navy works with regulators at EPA and DOH, and with other stakeholders to ensure it remains safe. All analytical results are submitted to the regulatory agency which evaluates and confirms monitoring data. Testing records confirm that the drinking water meets or exceeds all Federal and State Safe Drinking Water Standards.

Since the fuel release in 2014, the Navy has added additional monitoring wells, installing the newest operating well in November 2017. The Navy installed the first groundwater monitoring well in 2002. In 2008, the Navy developed and implemented a DOH approved Groundwater Protection Plan that incorporated the existing groundwater monitoring wells. Today, there are 14 ground water monitoring sites around the Red Hill facility to detect possible migration of contaminants toward the drinking water sources by collecting samples using procedures developed with EPA and DOH. The Navy, with the approval of regulators, is assessing locations to expand the monitoring well network both inside and outside of Navy property to further improve groundwater flow models. The Navy provides the complete suite of studies, analytical data, and technical reports to the regulatory agencies and shares data for public review. The Navy updated the Ground Water Protection Plan in 2009, 2010, and again in 2014, each time with DOH approval. The Navy is consulting with DOH and EPA to continually evolve and update the Groundwater Protection Plan. Recent hydro-geological data provided additional evidence to the extent of a physical barrier that separates Red Hill from public water sources, supporting the 2015 EPA and DOH assessment that any migration from Red Hill to local drinking water wells is "unlikely". Our work continues on this effort.

We entirely agree that protecting the drinking water in Hawaii is an unquestioned, non- negotiable imperative. We are meeting this requirement through the AOC with our regulators, DOH and EPA.

3. Red Hill tanks are not leaking.

The Navy began a more stringent leak detection test at Red Hill in 2008 for two tanks, and then tested the remaining operational tanks in 2009. This new test, a tank tightness test, is a procedure that confirms the sound integrity of the tank. Operators fill the tank and precisely measure pressure over time to ensure the tank is not leaking. Planned to be a biennial test, the Navy increased tank

tightness testing frequency to annually in 2015. The AOC and its Statement of Work (SOW) incorporated this test. The Navy most recently completed the Red Hill annual tank tightness test in December 2017. All operating tanks continue to pass leak detection criteria of Title 40 of the U.S. Code of Federal Regulations. **Red Hill tanks are not leaking.** Further, as required under the AOC, the Navy is currently in the process of evaluating three potential state of the art release detection systems to further enhance leak detection capability at Red Hill.

In 2014, contractors completed a multi-year service inspection and planned maintenance on Tank 5. Upon refilling the tank after being certified for return to service, the Navy experienced a release of 27,000 gals of jet fuel. There were three major failures that resulted in the fuel release, poor workmanship and lack of quality control by the contractor, poor quality assurance oversight by the Navy, and the operators' lack of procedural compliance. The Navy took appropriate and corrective actions to fix the contractor's issues, lack of quality control and procedural failures. **No other tanks were involved in the 2014 fuel release.** The Navy reiterates for the record, that the official estimation for the 2014 fuel release from Red Hill Tank 5, based on best accounting practices, is approximately 27,000 gallons, not 40,000 gallons as the bill indicates.

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

Red Hill's importance hasn't changed in the past four years; if anything its importance has increased. Three years ago Brigadier General O'Neil, Director of Logistics, addressing PACOM's command of Air Force, Marines, Army, and Navy forces, testified (paraphrasing for clarity only):

> 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 feed system to Joint Base Pearl Harbor-Hickam. It supports the Hawaii Army and Air National Guard 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. USPACOM remains committed to operating environmentally sound facilities, demonstrated through a trained workforce and continued financial investment that has improved safety, accountability, detection and monitoring at Red Hill.

Red Hill has been vital to our nation since construction; it is vital today; and will remain vital for the foreseeable future. The DoD asks the Legislature to defer this bill to allow DOH to continue its work with EPA and the Navy. We remain committed to protecting drinking water in Hawaii as an unquestioned, non-negotiable requirement. The AOC describes tasks that the Navy will complete within certain time constraints and is dedicated to meeting that requirement. This legally enforceable process provides the roadmap for the Red Hill facility with enhanced oversight and approval

roles for DOH and EPA with expert resources beyond what this bill proposes.

In summary, your military in Hawaii and throughout the Pacific needs continuous and uninterrupted access to large volume, secure and sustainable fuel storage facilities. The Red Hill facility provides fuel to support countless contingency operations in the Pacific, 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. Red Hill will continue to operate safely with the process already established in the AOC. We respectfully request your support to defer action on this bill to ensure that the State Department of Health, the EPA, DLA, the Navy, and other stakeholders have sufficient time to complete our collaborative Administrative Order on Consent.

Thank you for the opportunity to testify today.

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
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Testimony in OPPOSITION to HB2712 HD1
RELATING TO UNDERGROUND STORAGE TANKS

REPRESENTATIVE JOHN M. MIZUNO, CHAIR
HOUSE COMMITTEE ON HEALTH & HUMAN SERVICES

Hearing Date: February 14, 2018 8:30 am Room Number: 329

Fiscal Implications: None

Department Testimony: The department of health opposes HB2712 HD1.

It is not possible for the department to make rules as proposed in the current measure and remain an approved state underground storage tank (UST) program under federal law. Some of the rules required by the bill are less stringent than the federal underground storage tank regulations, which would constitute a violation of the requirements for state UST programs in Title 40 Code of Federal Regulations (CFR) §281-11. Other parts of the bill are problematic because they require rules which either conflict with the Administrative Order on Consent in Department Docket No. 15-UST-EA-01 (AOC) or which fail to provide owners and operators of UST systems time to come into compliance with them. Additionally, the proposed timeline for the department to complete the rulemaking required by this measure, which must be done pursuant to the requirements of chapter 91, Hawaii Revised Statutes (HRS), is simply not possible.

The department's procedures for rulemaking (governed by chapters 91 and 201M, HRS, chapters 2-1 and 11-1, HAR, and Administrative Directive No. 09-01) include: public informational meetings during rule drafting; formatting review by the Legislative Reference Bureau; review by the Attorney General, EPA, and the Small Business Regulatory Review Board; a memo to the Governor explaining the reasons for the proposed regulatory change and the possible impacts on the department's programs, the public, and the State's economy; thirty day public notice; public

hearing and comment period; and department response to public comments. The department would require more time than this bill provides to rework its current draft rules to incorporate the changes required by this measure and complete the rulemaking process.

The state's UST program is a federally approved and funded program. Therefore, the department is already required under 40 CFR Part 281 ("Approval of State Underground Storage Tank Programs") to adopt state rules at least as stringent as the new federal rules by October 13, 2018 (the federal rules were updated in 2015). The department is currently engaged in the rulemaking process and the conflicting rule proposals in this bill would significantly interfere with department's ability to comply with the federal deadline.

Several parts of this bill conflict with the goal of creating a comprehensive and internally consistent regulatory program. Having analyzed the current measure, we've found the following problems with the proposed requirements for the department's regulations:

1. Page 4 lines 12-17 – requiring field constructed tanks (FCTs) greater than 50,000 gallons and installed before July 15, 2015 to meet upgrade requirements in 40 CFR section 280.21.

   The tank upgrade requirements in 40 CFR section 280.21 are less stringent than the federal regulations for FCTs with regard to cathodic protection, allowing an internal liner alternative. The federal regulations that apply to these tanks (40 CFR section 280.252(b)(1)) require owners and operators to meet either the performance standards for new tanks in 40 CFR section 280.20(a) or cathodic protection. The new tank performance standards in 40 CFR section 280.20 are more stringent than the upgrade requirements in 40 CFR section 280.21. The state cannot adopt rules less stringent than the federal rules.

2. Page 4 lines 12-14, 18-19 – requiring FCTs greater than 50,000 gallons and installed before July 15, 2015 to upgrade with secondary containment with interstitial monitoring by July 1, 2028.

This requirement conflicts with an existing enforceable Agreement on Consent (AOC) between the US Navy, the Defense Logistics Agency (DLA), the department, and the US EPA for the Red Hill bulk fuel storage facility. The AOC process allows and encourages the development of new tank design and release detection technologies, and the department would promulgate rules consistent with the AOC that preserve the possibility that new, more protective technologies may be developed and introduced.

3. Page 4 lines 12-14 and page 5 lines 12-18 – allowing FCTs greater than 50,000 gallons and installed before July 15, 2015 to use a release detection method that can detect a 0.5 gallon per hour leak at 95% probability.

The option to use a release detection method that can detect a 0.5 gallon per hour leak at 95% probability could be considered less stringent than the federal rules because there are no other technical specifications required with this option. The release detection option called "other methods" in 40 CFR section 280.43(i) that does not include other technical specifications is more stringent because it requires the ability to detect a 0.2 gallon per hour leak at 95% probability. The state cannot adopt rules less stringent than the federal rules.

4. Page 4 lines 12-14 and page 5 line 4 through top of 6 line 2 – requiring FCTs greater than 50,000 gallons and installed before July 15, 2015 to install a release detection system by July 1, 2019.

The department believes this timeline is too short for compliance by regulated entities to be feasible given the complexity of the requisite procurement and construction.

5. Page 6 lines 3-14 – requirement for FCTs installed on or after July 15, 2015 to be secondarily contained and have interstitial monitoring.

These requirements do not specify an effective date(s), implying that they become effective on the effective date of new rules, which would immediately render certain tanks and piping already installed without secondary containment and interstitial

monitoring in violation of the rules without affording the owner or operator an opportunity to come into compliance.

6. Page 6 lines 3-5 and 7-14 - requirement for FCTs installed on or after July 15, 2015 to have interstitial monitoring with certain specifications.

This paragraph requires interstitial monitoring, but refers to technical terms (vacuum, pressure, hydrostatic testing, and leak rates) relevant to other forms of release detection that do not apply to interstitial monitoring. Interstitial monitoring in 40 CFR 280 subpart D means interstitial monitoring in accordance with technical specifications in 40 CFR section 280.43(g).

7. Page 6 lines 15-18, and p. 8 lines 4-10 – allowing onsite integral piping connected to FCTs greater than 50,000 gallons and installed before July 15, 2015 to use a release detection method that can detect a 0.5 gallon per hour leak at 95% probability.

The option to use a release detection method that can detect a 0.5 gallon per hour leak at 95% probability could be considered less stringent than the federal rules because there are no other technical specifications required by the measure to accompany this option. The release detection option called "other methods" in 40 CFR section 280.43(i) that does not include other technical specifications is more stringent because it requires the ability to detect a 0.2 gallon per hour leak at 95% probability. The state cannot adopt rules less stringent than the federal rules.

8. Page 6 lines 15-18, page 7 lines 6-13, and page 8 lines 4-16 – requiring onsite integral piping connected to FCTs greater than 50,000 gallons and installed before July 15, 2015 to install a release detection system by July 1, 2019.

The department believes this timeline is too short for compliance by regulated entities to be feasible given the complexity of the requisite procurement and construction.

9. Page 6 lines 15-18 and page 7 lines 13-19 – requiring onsite integral piping connected to FCTs greater than 50,000 gallons and installed before July 15, 2015 and in contact with soil or concrete to meet corrosion protection requirements.

   The rationale for including concrete, as opposed to soil only, in this requirement is not clear.

   Thank you for the opportunity to testify on this measure.

BOARD OF WATER SUPPLY

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February 14, 2018

The Honorable John M. Mizuno, Chair
and Members
Committee on Health & Human Services
Hawaii State Capitol, Room 329
Honolulu, Hawaii 96813

Dear Chair Mizuno and Members:

Subject: House Bill 2712 HD 1: Relating to Underground Storage Tanks

The Honolulu Board of Water Supply (BWS) strongly supports House Bill (HB) 2712 House Draft (HD) 1 and recommends the revisions shown in the attached bill mark up to address technical concerns raised in a senate companion version of this bill. The bill and the recommended changes ensures the protection of our environment and underground sources of drinking water from the adverse impacts of leaking underground petroleum fuel tank systems. The BWS also respectfully recommends revising the effective date of HB 2712 HD 1 to July 1, 2018. However, we also understand the intent of the January 28, 2045 date is to encourage further discussion and support keeping it for that purpose.

The Department of Health (DOH) recently proposed revisions to Hawaii state rules that would require large field constructed underground storage tanks (USTs) either (i) be provided with secondary containment beginning twenty years after the effective date of the rules or (ii) utilize a tank design and release detection method which the director determines are protective of human health and the environment. DOH's proposal is concerning because, (1) it mirrors the long timeline under the Red Hill Administrative Order on Consent (AOC); and (2) can allow a tank design that does not have an annular space around the tank that can collect any leaked fuel and still be large enough to allow periodic inspection of the primary and secondary tanks. This design is unique to secondary containment and one that we believe provides our aquifers and environment the best protection from leaks from USTs.

This bill will ensure large field-constructed USTs and its piping be equipped with secondary containment and establishes a firm deadline for its installation. Our support for this measure is driven by the need to protect our drinking water aquifers and our concerns with the current direction being taken by the Parties under the Red Hill AOC.

The existing Red Hill AOC and schedule for its implementation does not respond commensurately to the imminent risk associated with the Navy's storage of millions of gallons of fuel above our sole-source aquifer. Soil and rock samples collected from below 19 of the 20 tanks at Red Hill show evidence of staining. Petroleum chemical contaminants have been found in groundwater samples collected from underneath the tanks that exceed current DOH Environmental Action Levels (EALs) for groundwater in one part of the aquifer.

Even according to the Navy's own preliminary risk assessment report submitted under the AOC, there have been 37 documented leaks occurring at Red Hill since the facility began operations in 1943—an average of one leak every other year. The report is also estimating the frequencies of future leaks by not only using Red Hill data but also including data from United States commercial nuclear power plants and data from Navy installations other than the Red Hill facility. We are concerned about its relevance and application because power plant data is predominantly from above ground storage tanks, storing water rather than fuel and constructed to nuclear industry standards, and maintained in a highly regulated environment which is not replicated at Red Hill. The other Navy tank installation data are from tanks that are not anywhere as large as the Red Hill tanks, not all underground, a mix of single and double-walled tanks, and tanks with cathodic protection that is not present in the Red Hill tanks. The report also fails to analyze the risk of earthquakes. BWS has significant concerns that seismic shaking could result in a break near the base of a tank, causing a tear and resulting in the release of millions of gallons of fuel into the environment.

Additionally, the interim groundwater modeling work currently underway discounts data that indicates regional groundwater flow direction could be from Red Hill toward Halawa Valley and the significant potential impact to a major BWS groundwater supply source, Halawa Shaft. The Navy interim modeling efforts indicate a strong predisposition to groundwater flow from Red Hill to Pearl Harbor and discounts any data to the contrary. Relying solely on the Navy's modeling work could under inform the decisions made to improve the facility and protect groundwater.

For these reasons, BWS relies on this bill to ensure the protective capabilities of secondary containment are in place to safeguard our drinking water especially if the Red Hill facility wants to store large volumes of fuel just 100 feet above our aquifer. Red Hill is the state's largest field-constructed UST facility that should be regulated to a level proportional to the extremely large volume of fuel that it stores. The groundwater aquifer underneath the facility is called the Southern Oahu Basal Aquifer and is designated by the United States Environmental Protection Agency (EPA) as a sole source aquifer and principal source of drinking water for Wahiawa, Ewa and portions of Honolulu that if contaminated would create a significant hazard to public health. The

need to preserve and protect groundwater quality and quantity now and into the future outweighs the continued operation of large field-constructed USTs without secondary containment and we strongly ask for your support of this measure.

Thank you for the opportunity to testify.

Very truly yours,

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

Attachment

Recommended revisions to HB 2712 HD1

HOUSE OF REPRESENTATIVES
TWENTY-NINTH LEGISLATURE, 2018
STATE OF HAWAII

H.B. NO. 2712 H.D. 1

A BILL FOR AN ACT

RELATING TO UNDERGROUND STORAGE TANKS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that underground storage tank and tank system regulations are intended to protect the environment by preventing the release of petroleum and hazardous substances into the environment. According to the Environmental Protection Agency, underground storage tank systems pose a substantial threat to human health and the environment.

The legislature also finds that 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 an urgent 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.

The legislature further finds that the storage, transportation, and disposal of petroleum products, pollutants, and hazardous substances in underground storage tanks and tank

systems within the jurisdiction of the State and in state waters are a hazardous undertaking, and that spills, discharges, and releases of the substances that occur as a result of private and governmental actions involving the storage, transportation, and disposal of these products pose serious threats to the environment of the State, to citizens of the State, and to other interests deriving livelihood from the State. These hazards have occurred in the past and are occurring now, and present future threats of potentially catastrophic proportions, all of which are expressly declared to be inimical to the paramount interests of the State as set forth in this section. Such state interests outweigh any economic burdens imposed by the legislature upon those engaged in storing, transporting, or disposing of petroleum products, pollutants, and hazardous substances and related activities.

The legislature further finds that the Red Hill bulk fuel storage facility, the State's largest field-constructed underground storage tank system, stores more fuel in a single location than any other underground storage tank system in Hawaii. The facility stores up to 187 million gallons of fuel per day, has a total capacity of 250 million gallons, and is

located only one hundred feet above a federally designated sole-source aquifer drinking water source. Core samples from nineteen of the twenty tanks at Red Hill have existing contamination, and a release of nearly forty thousand gallons of petroleum products in 2014 further endangered Hawaii's groundwater resources. However, chapter 11-281, Hawaii Administrative Rules, exempts field-constructed underground storage tanks, tank systems, and related piping, including the Red Hill bulk fuel storage facility, from the requirements that must be met by owners and operators of other underground storage tanks or tank systems. Providing the State's largest field-constructed underground storage tank facility with an exemption from regulatory requirements that must be met by other underground storage tank and tank system owners is extremely detrimental to human health and the environment.

The purpose of this Act is to protect the State's underground drinking water sources and surrounding environment by requiring the department of health to adopt rules for underground storage tanks, tank systems, and related piping that conform with recent revisions to federal regulations and include additional requirements for certain field-constructed

no less stringent than any regulation established pursuant to federal law

underground storage tanks including compliance with certain requirements in chapter 11-281, Hawaii Administrative Rules, or successor rules.

October 13, 2018

SECTION 2. On or before ~~September 1, 2018~~, the department of health shall adopt rules pursuant to chapter 91, Hawaii Revised Statutes, including necessary revisions, to conform Hawaii's underground storage tank and tank system rules with the July 15, 2015, revisions to the United States Environmental Protection Agency underground storage tank regulations codified in title 40 Code of Federal Regulations part 280; provided that the department shall additionally require through rules that:

All

(1) Field-constructed underground storage tanks with storage capacities greater than fifty thousand gallons ~~that were installed before July 15, 2015,~~ shall:

~~(A) Be subject to the upgrade requirements specified in title 40 Code of Federal Regulations section 280.21;~~

(A)

~~(B)~~ Be required to upgrade with secondary containment with interstitial monitoring by July 1, 2028; and

(B)

~~(C)~~ Be subject to the permitting requirements specified in chapter 11-281, Hawaii Administrative Rules, or successor rules; ~~and~~

~~(D) Prior to upgrading with secondary containment:~~

~~(i) Be subject to the release detection rules specified in title 40 Code of Federal Regulations part 280, subpart D;~~

~~(ii) Except for the exemption from secondary containment and release detection, be subject to title 40 Code of Federal Regulations part 280, subpart K; and~~

~~(iii) Be monitored using release detection methods authorized in chapter 11-281, Hawaii Administrative Rules, or successor rules; or use a release detection method that can detect a 0.5 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05;~~

~~provided further that owners and operators of field-constructed storage tank systems without secondary containment shall install a release~~

~~detection system meeting the requirements of this paragraph by July 1, 2019;~~

~~(2) Field-constructed underground storage tank systems first installed or replaced on or after July 15, 2015, shall:~~

~~(A) Be secondarily contained; and~~

~~(B) Have interstitial monitoring in accordance with title 40 Code of Federal Regulations part 280, subpart D, using either vacuum, pressure, hydrostatic, electronic sensors, or other methods of release detection that can detect a 0.2 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05;~~

(2) All

~~(3)~~ Onsite integral piping connected to any field-constructed underground storage tanks with storage capacities greater than fifty thousand gallons ~~that was installed before July 15, 2015,~~ shall:

(A) Be required to upgrade with secondary containment with interstitial monitoring by July 1, 2028, if

the piping is in contact with the soil, concrete, or cannot be visually inspected;

(B) Be subject to the permitting requirements specified in chapter 11-281, Hawaii Administrative Rules, or successor rules; and

~~(C) Prior to upgrading with secondary containment:~~

~~(i) Be subject to the release detection rules specified in title 40 Code of Federal Regulations part 280, subpart D;~~

~~(ii) Except for the exemption from secondary containment and release detection, be subject to title 40 Code of Federal Regulations part 280, subpart K. Metallic piping that is in contact with the soil or with concrete must have corrosion protection in accordance with title 40 Code of Federal Regulations part 280 and with chapter 11-281, Hawaii Administrative Rules, or successor rules. Non-metallic piping must be listed by Underwriters Laboratories (UL) and meet UL 971 standards, be certified by a~~

national or internationally recognized laboratory, or be approved by a State of Hawaii Registered Professional Engineer; and

(iii) Be monitored using release detection methods authorized in chapter 11-281, Hawaii Administrative Rules, or successor rules; or use a release detection method that can detect a 0.5 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05; provided further that owners and operators of field-constructed storage tanks system onsite integral piping without secondary containment shall install a release detection system meeting the requirements of this paragraph by July 1, 2019;

provided that onsite integral piping that is not in contact with the soil that can be visually inspected shall perform release detection with monthly visual inspections and integrity testing by a certified American Petroleum Institute (API)

~~571 inspector in accordance with API Standard 571 every ten years; provided further that in addition to the requirements in this subparagraph, onsite integral piping that is in contact with the soil or with concrete must be integrity tested by a certified API 571 Inspector in accordance with API Standard 571 every three years;~~

~~provided that~~ "onsite integral piping" means on-site piping, originating or terminating at the regulated storage tank or tanks, that conveys regulated substances. Vapor, or other recovery lines, pipeline facilities, and vent lines, are not considered integral piping. Integral piping includes all valves, elbows, joints, flanges, pumps, and flexible connectors associated with the pipe originating at the storage tank up to the union of the integral piping with the dispensing system, the fill valve, the forwarding pump used for transferring regulated substances to a flow-through process tank or an industrial production or manufacturing point of use,

the first flange or connection within a loading rack containment area, or the first shoreside valve after the marine transfer area for on-site piping at regulated UST facilities;

(4) Owners and operators of field-constructed underground storage tanks that fail to meet the deadline specified in paragraph ~~(1)(B)~~ (1)(A) and ~~(3)(A)~~ (2)(A) shall empty the storage tank system, take the system out-of-service by July 1, 2028, and permanently close the tank by July 1, 2030, in accordance with chapter 11-281, Hawaii Administrative Rules, or successor rules; and

(5) The department of health shall revoke the permits of any owners and operators of field-constructed underground storage tanks that fail to meet the deadline specified in paragraph ~~(1)(B)~~ (1)(A) and ~~(3)(A)~~ (2)(A) for upgrading with secondary containment; and

~~(6) Field-constructed underground storage tanks shall not be installed on or after July 1, 2019, unless the storage tank and piping have secondary containment and comply with all requirements specified in chapter~~

~~11-281, Hawaii Administrative Rules, or successor rules.~~

SECTION 3. This Act shall take effect on ~~January 28, 2045~~ July 1, 2018.

LEAGUE OF WOMEN VOTERS®

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COMMITTEE ON HEALTH AND HUMAN SERVICES

Wednesday, February 14, 2018, 8:30 a.m., Room 329

HB2712 HD1 RELATING TO UNDERGROUND STORAGE TANKS

TESTIMONY

Nancy Davlantes, Legislative Committee, League of Women Voters of Hawaii

Chair Mizuno, Vice-Chair Kobayashi, and Committee Members:

The League of Women Voters of Hawaii strongly supports HB2712 HD1 that requires "on or before 9/1/2018, that the department of health adopt rules for underground storage tanks and tank systems to conform with certain federal regulations and that include additional requirements for field-constructed underground storage tanks and tank systems."

The League's commitment to protect our environment is embodied in the national statement of our intent to "promote an environment beneficial to life through the protection and wise management of natural resources in the public interest."

The debate over this issue has pitted the state Department of Health against the Honolulu Board of Water Supply, each of which is tasked with protecting the welfare of Hawaii citizens albeit with separate missions.

In our review of the press coverage, testimony, and positions taken by both sides, it is our conclusion that the bottom line in all of this is the vital importance of Oahu's primary aquifer that supplies drinking water to more than 600,000 residents and is just 100 feet below these fuel tanks. We agree with those who say that the 20-year time frame for studies and upgrades agreed to among the Navy, the U.S EPA, and the state Health Department in 2015 does not address the urgency required.

While the Navy assures that the tanks aren't leaking now and that they are crucial to military readiness, and the Chamber of Commerce emphasizes the economic significance of the military presence in Hawaii, studies are not what is needed now. What is required is a plan of action to decide how the tanks will be upgraded so that the work can begin sooner rather than later, most certainly not 20 years later.

Thank you for the opportunity to submit testimony.

HB-2712-HD-1
Submitted on: 2/13/2018 3:18:14 AM
Testimony for HHS on 2/14/2018 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities Committee	Support	No

Comments:

PRESENTATION OF THE

OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES

DEMOCRATIC PARTY OF HAWAII

TO THE COMMITTEE ON HEALTH & HUMAN SERVICES

THE HOUSE OF REPRESENTATIVES

TWENTY-NINTH LEGISLATURE

REGULAR SESSION OF 2018

Wednesday, February 14, 2018

8:30 a.m.

Hawaii State Capitol, Conference Room 329

RE: **Testimony in Support** of HB HB2712 HD1 RELATING TO UNDERGROUND STORAGE TANKS

To the Honorable John M. Mizuno, Chair; the Honorable Bertrand Kobayashi, Vice-Chair and the Members of the Committee on Health and Human Services:

Good morning. My name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on House Bill No.2712 HD1 regarding the adoption of rules for underground storage tanks and tank systems in conformity with federal regulations that include requirements for field-constructed underground storage tanks and tank systems.

The OCC Legislative Priorities Committee is in favor of House Bill No.HB2712 HD1 and supports its passage as the Red Hill bulk fuel storage facility stores up to 187 million gallons of fuel per day, having a total capacity of 250 million gallons and is located merely one hundred feet above a federally designated sole-source drinking water aquifer. Core samples from nineteen of the twenty tanks at Red Hill have existing contamination and a release of nearly forty thousand gallons of petroleum products in 2014 which endangered Hawaii's groundwater resources.

House Bill No.HB2712 HD1 is in alignment with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it requires the department of health to adopt rules for underground storage tanks, tank systems, and related piping that conform with recent revisions to federal regulations and include additional requirements for certain field-constructed underground storage tanks including compliance with certain requirements in chapter 11-281, Hawaii Administrative Rules, or successor rules.

The DPH Platform states that "[w]e support the protection of our 'aina against destruction by corporate, government, or military usage and expect full restoration and reparation of environmental damage. To handle current and future demands for water, we must assess the current condition of our aquifers and take appropriate actions to secure our freshwater resources.

We support the democratic participation of citizens and residents to protect (I) valuable coastal ecosystems and reefs from misuse and (ii) beaches for public use and recreation. The Hawai'i Coastal Zone Management (CZM) law, HRS Chapter 205A, currently provides for public participation in the management of coastal resources.

We believe in the vigorous enforcement of our environmental laws and increased public-private stewardship and citizen involvement in protecting our resources. We know that climate change is a real threat to our islands and the world.(Platform of the DPH, P. 8, Lines 422-433 (2016)).

Given that House Bill No.HB2712 HD1 provides for the adoption of rules for underground storage tanks and tank systems in conformity with certain federal regulations that include requirements for field-constructed underground storage tanks and tank systems, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/*s/* **Melodie Aduja**

Melodie Aduja, Chair, OCC Legislative Priorities Committee

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HB-2712-HD-1
Submitted on: 2/12/2018 9:24:37 PM
Testimony for HHS on 2/14/2018 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:

Chamber of Commerce HAWAII
The Voice of Business

Testimony to the House Committee on Health and Human Services
Wednesday, February 14, 2018 at 8:30 A.M.
Conference Room 329, State Capitol

RE: HOUSE BILL 2712 RELATING TO UNDERGROUND STORAGE TANKS

Chair Mizuno, Vice Chair Kobayashi, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **opposes** HB 2712, which requires, on or before 9/1/2018, that the Department of Health adopt rules for underground storage tanks and tank systems to conform with certain federal regulations and that include additional requirements for field-constructed underground storage tanks and tank systems.

In recognizing how critical the U.S. military presence is to Hawaii's economy, the Chamber underscores that the Red Hill fuel facility is vital to military readiness as it supports all Hawaii-based military actions and a significant share of many more in the Indo-Asia-Pacific region.

It is the understanding of the Chamber that this legislation threatens the U.S. military's ability to respond to crisis in the region, whether it is conflict or humanitarian aid/disaster relief, due to the fact that the requirements proposed in this bill are not feasible based on the timeline prescribed in it. The military's ability to remain "ready to respond" is essential for preserving the military's presence in the State and protecting our second largest industry. If the current bill is passed it is likely that the Red Hill facility will not be able to meet these mandates. The Chamber requests that you defer this measure indefinitely.

Thank you for the opportunity to testify.

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LATE

HB-2712-HD-1
Submitted on: 2/13/2018 7:17:52 PM
Testimony for HHS on 2/14/2018 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments: