

**HAWAII ADMINISTRATIVE RULES  
TITLE 11 CHAPTER 54  
WATER QUALITY STANDARDS  
2022 TRIENNIAL REVIEW  
DOCKET NO. CWB-1-22  
RESPONSE TO COMMENTS**

**DEPARTMENT OF HEALTH  
ENVIRONMENTAL MANAGEMENT DIVISION  
CLEAN WATER BRANCH  
PEARL CITY, HAWAII  
JUNE 2022**

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## **I. BACKGROUND**

State water quality standards (WQS) provide the regulatory basis for protecting, assessing, and restoring water bodies in Hawaii. State WQS are specified at Title 11, Chapter 54 of the Hawaii Administrative Rules (HAR Chapter 11-54).<sup>1</sup> The Hawaii State Department of Health (HDOH), Clean Water Branch is required to review state WQS at least once every three years.

HDOH completed the last triennial review of state WQS in March 2019. For 2022, HDOH performed a review and proposed actions for thirteen (13) areas of state WQS.<sup>2</sup> The proposed actions include amending current state requirements, developing future state requirements, adopting recent federal recommendations and requirements, and implementing state requirements.

On February 11, 2022, HDOH published notices of both the public comment period and the virtual public hearing of the 2022 triennial review in the Honolulu Star Advertiser, The Garden Island, Maui News, West Hawaii Today, Hawaii Tribune-Herald, and MidWeek. HDOH received written comments from February 11 through March 30, 2022, about the proposed actions to update, if necessary, certain areas of state WQS. HDOH received no oral comments about the proposed actions in the virtual public hearing on March 30, 2022.

## **II. RESPONSE TO COMMENTS**

HDOH extends its gratitude to all commenters. A total of five (5) commenters submitted input during the public comment period. Attendees of the virtual public hearing did not submit any comments.

HDOH appreciates all the comments that were submitted. Below is the summary of all comments submitted and the responses from HDOH regarding rules changes considered for HAR Chapter 11-54.

### **A. Comments from County of Hawaii, Planning Department**

**Comment 1:** HDOH should consider adding a definition of “reef area” as specified in the depth requirement of zones of mixing in class AA marine waters.

**Response 1:** The commenter is correct in stating that “reef area” is not defined in HAR Chapter 11-54. Only definitions of “reef flat” and “reef community” are specified. HDOH will consider updating HAR Chapter 11-54 to account for the lack of a definition of “reef area.”

**Comment 2:** HDOH should consider extending to reef areas in class A marine waters the current depth requirement of zones of mixing for reef areas in class AA marine waters.

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<sup>1</sup> [Hawaii Administrative Rules, HAR Chapter 11-54, Water Quality Standards](#)

<sup>2</sup> [HDOH Details of 2022 Triennial Review of Water Quality Standards \(February 2022\)](#)

**Response 2:** Thank you for identifying the current depth requirement of zones of mixing for reef areas in class AA marine waters as an area of state WQS that should be updated to equally protect all marine waters.

As described in Table 6 called “Protection of Marine Waters,”<sup>2</sup> HDOH will consider updating HAR Chapter 11-54 to equally and adequately protect all marine waters. Specifically, a discharge that is prohibited in one class may be prohibited in all classes to equally protect all marine waters. Also, a discharge that is allowed in one class may be prohibited in other classes to adequately protect all marine waters. HDOH will provide rationales for prohibiting or allowing discharges into marine waters.

**Comment 3:** HDOH should consider increasing the depth requirement of zones of mixing in all marine waters to account for the ecological tolerances of reef building organisms.

**Response 3:** The depth and distance from shore requirements of zones of mixing were originally specified in Chapter 37-A to regulate state WQS in coastal waters. In the 1968 version (dated 1968.01.26) of Chapter 37-A, “near shore waters” were defined as three distinct categories of coastal waters:

- a) waters bounded by a defined reef area; or
- b) waters (not bounded by a defined reef area) with a depth less than 10 fathoms; or
- c) waters (not bounded by a defined reef area) with a depth greater than 10 fathoms and up to a distance of one thousand (1,000) feet from the shoreline.

The prohibition of zones of mixing in “near shore waters” from Chapter 37-A was extended to class AA marine waters by specifying similar requirements in the first version (dated 1982.11.12) of HAR Chapter 11-54. However, the requirements for zones of mixing in class AA marine waters, that were specified in HAR §11-54-3(c)(1), incorrectly combined categories a) and b) of “near shore waters” into a single requirement as follows:

- a) within a defined reef area, in waters of a depth less than ten (10) fathoms; or
- b) in waters up to a distance of one thousand (1,000) feet offshore if there is no defined reef area and if the depth is greater than ten (10) fathoms.

HDOH will first consider updating HAR Chapter 11-54 to correctly specify the prohibition requirements for zones of mixing in class AA marine waters. During future triennial reviews of state WQS, HDOH will consider increasing the depth requirement of zones of mixing in all marine waters to account for the ecological tolerances of reef building organisms.

**Comment 4:** Besides water quality criteria for the protection of aquatic life, HDOH should also consider including water quality criteria that the U.S. Environmental Protection Agency (EPA) recommended for organoleptic effects, plastic trash, and contaminants of emerging concern (CECs).

**Response 4:** State WQS specify the basic water quality criteria that are applicable to all surface waters and that must be met to maintain water quality. The six (6) basic water quality criteria are specified in HAR §11-54-4(a), and they require that state waters must be free of “floating debris, oil, grease, scum, or other floating materials;” and “substances in amounts sufficient to produce

taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity, or other conditions in the receiving waters.” Unless deemed necessary during upcoming triennial reviews of state WQS, HDOH will not consider updating HAR Chapter 11-54 to include water quality criteria for plastic trash and organoleptic effects.

Contaminants of emerging concern (CECs) refer to unregulated substances that may present potential risks to human health, aquatic life, and the environment. CECs include industrially manufactured substances, such as prescribed pharmaceuticals and personal care products, as well as naturally occurring substances such as algal toxins. Currently, the scientific understanding and scientific data on CECs that are required to determine their potential risks to human health, aquatic life, and the environment are often limited and slowly evolving.

In April 2022, the EPA proposed recommended criteria for Perfluorooctanoic Acid (PFOA) and Perfluorooctyl Sulfonic Acid (PFOS). PFOA and PFOS are the two most widely used chemicals in the per- and polyfluoroalkyl class of chemical substances (PFAS), and they are commonly identified as CECs. The ambient water quality criteria that the EPA recommended for PFOA and PFOS are only applicable to aquatic life in fresh waters. Data limitations prevented the derivation of recommended criteria for PFOA and PFOS in estuarine (i.e., brackish) and marine waters. For upcoming triennial reviews of state WQS, HDOH will continue to evaluate all criteria recommended by the EPA. HDOH will consider adopting, if deemed necessary, applicable criteria recommended by the EPA for the protection of human health and aquatic life from the potential risks of CECs such as PFOA and PFOS.

**Comment 5:** HDOH should consider expanding the scope of protection to include the water quality of ground waters.

**Response 5:** HAR Chapter 11-54 only provides the regulatory basis for the prevention, control, and abatement of water pollution from point sources into state surface waters. Since June 2021, new regulations, that are specified at Title 11, Chapter 56 of the Hawaii Administrative Rules (HAR Chapter 11-56) entitled “Nonpoint Source Pollution Control,”<sup>3</sup> provide for the protection of state waters including ground waters by requiring applicable entities to implement water pollution prevention plans and to control non-point sources of pollution due to their activities.

Statewide, ground waters are protected through the Groundwater Protection Program which is administered by HDOH, Safe Drinking Water Branch. Overall, HDOH administers both federally and non-federally mandated programs that protect ground waters through the assessment of ground water quality, and the implementation of pollution prevention measures. HDOH will not consider expanding the scope of protection in HAR Chapter 11-54 to include the water quality of ground waters.

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<sup>3</sup> [Hawaii Administrative Rules, HAR Chapter 11-56, Nonpoint Source Pollution Control](#)

## **B. Comments from Michael A. Fernandez**

**Comment 6:** There are no regulations in HAR Chapter 11-54 that specify the approved procedures for handling non-processed and processed discharges from private saltwater swimming pools.

**Comment 7:** There are no regulations in HAR Chapter 11-54 that specify the state waters where discharges from private saltwater swimming pools are allowed.

**Response to Comment 6 and Comment 7:** State WQS provide the regulatory basis for the protection of surface waters, and for the management of water quality of surface waters in Hawaii. Overall, state WQS specify the basic and specific water quality criteria that are applicable to surface waters and that must be met to maintain water quality. It is not the intent of state WQS to protect surface waters by comprehensively specifying the requirements that must be met by all types of discharges including discharges from private saltwater swimming pools. Instead, such discharges are addressed by water pollution control statutes and regulations.

The provisions for water pollution control in the State are codified in chapter 342D of the Hawaii Revised Statutes (HRS 342D), and the regulations for water pollution control, that are specified at Title 11, Chapter 55 of the Hawaii Administrative Rules (HAR Chapter 11-55),<sup>4</sup> are adopted pursuant to HRS 342D. As codified in HRS §342D-50(a), “no person, including any public body, shall discharge any water pollutant into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this chapter, or a permit or variance issued by the director.”

A National Pollutant Discharge Elimination System (NPDES) permit is therefore required prior to any discharges from a private saltwater swimming pool into state waters such as, for example, coastal waters, streams, or wetlands. HDOH, Clean Water Branch, administers the NPDES permit program in the State. The regulations for the NPDES program are specified in HAR Chapter 11-55, entitled “Water Pollution Control.”

The failure to obtain an NPDES permit before discharging into state waters and the failure to comply with any requirement in an issued NPDES permit are violations of both the federal Clean Water Act and HRS 342D. Violations are enforced pursuant to HRS 342D, and they are punishable by both civil and criminal penalties.

Pending review and approval, if an NPDES permit will be issued for discharges from a private saltwater swimming pool into a state water, the permit holder will then be legally obligated to comply with all of the NPDES permit requirements, including effluent limitations. Specifically, the NPDES permit holder may be responsible for treating the effluent prior to discharge in order to ensure compliance with the NPDES permit requirements.

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<sup>4</sup> [Hawaii Administrative Rules, HAR Chapter 11-55, Water Pollution Control](#)

As required by federal regulations, the NPDES permit will include effluent limitations that are derived from the applicable WQS for the state surface water receiving the discharge. The effluent limitations will be derived based on:

- Basic water quality criteria specified in HAR §11-54-4. There are basic water quality criteria including narrative requirements and toxic criteria for all state surface waters. The applicable toxic criteria depend on whether the state surface water receiving the discharge is freshwater or saltwater.
- Specific water quality criteria specified in HAR §11-54-5. There are specific water quality criteria for pollutants like nutrients, solids, pH, dissolved oxygen, temperature, and salinity. The applicable specific water quality criteria depend on whether the state surface water receiving the discharge is a stream, wetland, estuary, embayment, or open coastal water.
- Recreational water quality criteria specified in HAR §11-54-8. There are bacteria criteria applicable to all state surface waters.

There are alternatives for the disposal of discharges from a private saltwater swimming pool that do not require a NPDES permit. The alternatives are:

- Discharge to an Underground Injection Well. The discharger needs to contact HDOH, Safe Drinking Water Branch, for approval and permitting requirements.
- Discharge to a Municipal Separate Storm Sewer System (MS4) with a NPDES permit allowing such discharge. The discharger needs to contact the owner of the MS4 for approval and permitting requirements.
- Discharge to a wastewater treatment plant collection system. The discharger needs to contact the owner of the wastewater treatment plant for approval and permitting requirements.
- Land application with no discharge to any state surface waters. The discharger is responsible for determining and obtaining any approvals or permits required by law.

**Comment 8:** There are no regulations in HAR Chapter 11-54 that specify the salinity requirements of brackish and saline waters.

**Response 8:** State waters are classified as either inland waters or marine waters. Inland waters may be fresh, brackish, or saline. HAR §11-54-1 specifies that brackish waters have salinity greater than five-tenths (0.5) parts per thousand (ppt) and less than thirty-two (32) ppt. In other words, saline waters have salinity of 32 ppt or greater, and fresh waters have salinity of 0.5 ppt or less.

### C. Comment from Clifton M. Hasegawa & Associates, LLC

**Comment 9:** The scope of the triennial review of state WQS should be consistent with the statutory provisions of HAR Chapter 11-54, and it should be expanded to include the protection of ground waters and the management of ground water quality.

**Response 9:** The commenter is correct in stating that the statutory basis of “state waters” in HAR Chapter 11-54 include ground waters. It is codified in HRS §342D-1 that state waters include “all waters, fresh, brackish, or salt, around and within the State, including, but not

limited to, coastal waters, streams, rivers, drainage ditches, ponds, reservoirs, canals, ground waters, and lakes; provided that drainage ditches, ponds, and reservoirs required as a part of a water pollution control system are excluded.”

There are three key components to state WQS, including antidegradation requirements to protect the existing uses of state waters; designated uses to identify the beneficial values of state waters; and water quality criteria to protect the designated uses of state waters. Ultimately, water quality criteria for the protection of human health and aquatic life are specified in permits that are issued to regulate the discharge of pollutants from point sources into state surface waters with exceptions.

Accordingly, it is clarified in HAR §11-54-1 that the regulations of this chapter do “not apply to groundwater, except the director may in the director’s discretion take appropriate actions when the director believes that the discharge of pollutants to the ground or groundwater has adversely affected, is adversely affecting, or will adversely affect the quality of any state water other than groundwater.” In other words, HAR Chapter 11-54 only provides the regulatory basis for the prevention, control, and abatement of water pollution from point sources into state surface waters.

As noted in Response 5, since June 2021, there is a new regulatory framework for the protection of state waters from new and existing non-point sources of pollution (HAR Chapter 11-56). HDOH will not consider expanding the scope of HAR Chapter 11-54 to include the protection of ground waters and the management of ground water quality.

#### **D. Comments from Susan A. Pcola-Davis**

**Comment 10:** Appendix E of HAR Chapter 11-54, called “Numeric Standards for Toxic Pollutants Applicable to All Waters,” should be updated due to the Red Hill Fuel Storage Facility leak from November 2021; the numeric criteria for Total Petroleum Hydrocarbons (TPHs) and xylene should be added.

**Response 10:** Thank you for strongly supporting the HDOH proposal to update Appendix E of HAR Chapter 11-54, and to add water quality criteria for TPHs and xylene.

**Comment 11:** Appendix E of HAR Chapter 11-54 should also be updated to add numeric criteria for other toxic contaminants from the Red Hill Fuel Storage Facility leak.

**Response 11:** To better protect state waters from leakages of fuel, HDOH will also consider adding numeric criteria for other toxic pollutants, besides petroleum hydrocarbons, from the Red Hill Fuel Storage Facility leak. Depending on the availability of national recommended water quality criteria from the EPA, HDOH will consider adding numeric criteria for the protection of human health and aquatic life from exposure to relevant toxic pollutants from the Red Hill Fuel Storage Facility leak.

**Comment 12:** The proposed numeric criteria for TPHs should be used as a trigger to mitigate future leakages of fuel to state waters.



**Response 12:** HDOH concurs with the commenter about the necessity to specify triggers that will allow for the mitigation of future leakages of fuel. However, the specification of triggers is beyond the scope of HAR Chapter 11-54 since the regulations of the NPDES permit program are specified in HAR Chapter 11-55. Chronologically, the water quality criteria of relevant toxic pollutants from the Red Hill Fuel Storage Facility Leak must first be specified in HAR Chapter 11-54. The updated water quality criteria are then specified in permits to protect state waters from future leakages of fuel.

HDOH will consider adding, at the same time, both the water quality criteria for relevant toxic pollutants, including petroleum hydrocarbons such as TPHs and xylene, and the requirements for the prevention, control, and abatement of discharges that are associated with facilities operating fuel storage tanks. If it is not possible to update HAR Chapters 11-54 and 11-55 at the same time, HDOH will only consider adding requirements for the regulation of discharges from fuel storage tanks after the specification of water quality criteria for relevant toxic pollutants from the Red Hill Fuel Storage Facility Leak.

#### **E. Comment from Lacey H. Quintero**

**Comment 13:** HDOH is not fulfilling its mission of protecting and improving the health and environment for all people in the State with respect to the Red Hill contamination. First, the goal of protecting and enhancing air and water quality is not met. Second, the goal of assuring basic physical and mental health care is also not met.

**Response 13:** The commenter is correct in stating that the mission of HDOH is to protect and improve the health and environment for all people in the State. To effectively achieve its statewide mission and many goals, HDOH is functionally structured into three distinct administrations for the management of health resources, behavioral health services, and environmental health services.

Specifically, the goals of protecting state surface waters, and of managing the water quality of state surface waters are administered by HDOH, Environmental Management Division. However, the goals of assuring the basic physical and mental health care for all people in the State do not fall under the purview of the Environmental Management Division. Within the context of the 2022 triennial review of state WQS, HDOH is only responding to the portions of a submitted comment that address the protection of state surface waters, and the management of water quality of state surface waters.

To better protect state surface waters from future leakages of fuel like the leak from the Red Hill Fuel Storage Facility that occurred in November 2021, HDOH will consider updating Appendix E of HAR Chapter 11-54 to add water quality criteria for total petroleum hydrocarbons (TPHs) and xylene. HDOH will also consider updating Appendix E of HAR Chapter 11-54 to add water quality criteria for other toxic pollutants, besides petroleum hydrocarbons, from the Red Hill Fuel Storage Facility leak.