

BACKGROUND

Water Quality Standards (WQS) are the foundation of various water pollution control programs mandated by the Clean Water Act (CWA). The three core components of WQS are designated uses, water quality criteria, and antidegradation requirements. Specifically, designated uses identify the beneficial values of all surface waters, water quality criteria define the necessary conditions for achieving designated uses, and antidegradation requirements provide the regulatory framework for protecting existing uses. The core of WQS regulations has been in place since 1983, and it provides the regulatory basis for assessing, protecting and restoring water bodies in the United States.

In August 2015, the U.S. Environmental Protection Agency (EPA) published revisions to the federal WQS regulations found in the Code of Federal Regulations (CFR) at Title 40, Part 131 (40 CFR §131). Overall, these revisions clarified the requirements in six major areas of WQS¹:

1. Administrator's Determinations
2. Designated Uses
3. Triennial Reviews
4. Antidegradation
5. WQS Variances
6. Provisions Authorizing the Use of Schedules of Compliance

The Hawaii State Department of Health (HDOH) is required to review State WQS and EPA promulgated WQS at least once every three years, and to modify and adopt appropriate State WQS regulations found in Hawaii Administrative Rules (HAR) at Title 11, Chapter 54 (HAR 11-54). As part of the latest triennial review, HDOH solicited input, from the public and various stakeholders, about the State's intent to revise certain areas of WQS regulations. All revisions to State WQS regulations must be subject to the public participation process, and they must be adopted by the State and approved by the EPA.

HDOH provided a 45-day public comment period and held a public hearing, on 15 March 2019, about the State's intent to revise certain WQS regulations. Six distinct commenters, including federal and municipal entities, a commercial business, a non-governmental organization, and interested individuals, submitted about forty comments to HDOH during this period. Some of the comments addressed issues that are beyond the current scope of the proposed WQS revisions, and that may be considered by HDOH in future WQS revisions. A copy of the HDOH responses to these public comments can be viewed online at the HDOH Clean Water Branch (CWB) website² in the "Public Notices and Updates" section. As stated in the responses, HDOH intends to amend HAR 11-54 with authorizing language that is consistent with federal statutes and regulations, and that allows the use of flexibilities including use attainability analyses, WQS variances, and site-specific criteria.

¹ <https://www.epa.gov/sites/production/files/2018-10/documents/wqs-regulatory-revisions-final-rule-factsheet.pdf>

² <https://health.hawaii.gov/cwb/files/2019/06/WQS-Triennial-RTC-062119.pdf>

RATIONALE FOR ADDING REGULATIONS FOR USE ATTAINABILITY ANALYSES

The CWA mandates a comprehensive program whose ultimate objective is to restore and to maintain the chemical, physical, and biological integrity of all waters. The goal of the CWA is to attain water quality that provides for the protection and propagation of fish, shellfish, and wildlife, and for recreation in and on all waters. All designated uses, that reflect the “fishable/swimmable” goal stated in section 101(a)(2) of the CWA, are presumed attainable unless demonstrated otherwise.

The CWA also mandates States to establish and adopt (subject to EPA approval) WQS regulations to protect public health or welfare, and the quality of all surface waters. States must establish WQS by taking into consideration the use and value of water bodies for propagation of fish and wildlife, recreation, and other uses such as public water supply, agriculture, industry, and navigation. These beneficial uses are stated in section 303(c)(2)(A) of the CWA and they are to be protected or achieved through State WQS regulations. Per 40 CFR §131.3(q), the “other uses” are referred to as non-101(a)(2) uses (i.e., uses that are unrelated to the protection and propagation of fish, shellfish, wildlife or recreation in and on the water).

Since the enactment of the CWA, many States, including Hawaii, have established water body classification systems whereby all similar types of water bodies were assigned uniform WQS. Most States do not generally revise assigned uses. However, some State have recognized the uniqueness of different water bodies, and as a result, they have revised WQS of individual water systems, and assigned to them appropriate uses and applicable WQS. HDOH is interested in **adopting regulatory language that allows the specification of appropriate uses and applicable WQS for individual water systems.**

Per 40 CFR §131.3(g), a Use Attainability Analysis (UAA) is defined as a structured scientific assessment of physical, chemical, biological, or economic factors to determine the attainable uses for a water body. Specifically, a UAA can be conducted to demonstrate that attaining a use is not feasible because of one of the six factors listed in 40 CFR §131.10(g):

1. Naturally occurring pollutant concentrations prevent the attainment of the use.
2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met.
3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.
4. Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use.
5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude the attainment of aquatic life protection uses.
6. Controls more stringent than those required by sections 301(b) and 306 of the CWA would result in substantial and widespread economic and social impact.

The latest revisions to the federal WQS regulations clarify when a UAA is and is not required for 101(a)(2) and non-101(a)(2) uses. Per 40 CFR §131.10(j), a UAA is required in the following situations:

- when designating a non-101(a)(2) use.
- when designating a sub-category of a 101(a)(2) use to specify criteria less stringent than previously applicable.
- when removing a 101(a)(2) use.
- when removing a sub-category of a 101(a)(2) use.

Per 40 CFR §131.10(k), a UAA is not required in the following situations:

- when designating a 101(a)(2) use.
- when designating a sub-category of a 101(a)(2) use to specify criteria as stringent as previously applicable.
- when removing a non-101(a)(2) use.
- when revising a non-101(a)(2) use.

Per 40 CFR §131.10(h), it is important to stress that a State may not remove a designated use if it is an existing one or an attainable one. The CWA provides various tools, including limitations in NPDES permits for point sources and best management practices for non-point sources, to control or to reduce discharges of pollutants, and hence, to attain water quality goals.

The adoption of a use based on a UAA is a WQS revision that is subject to both the public participation and EPA approval processes. A State must provide both public notice and public hearing for a UAA. If a State adopts a new or revised WQS based on a UAA then it shall also adopt a Highest Attainable Use (HAU). Per 40 CFR §131.3(m), a HAU is defined as a modified 101(a)(2) use that can be attained based on a UAA, and any other information or analyses. There are no requirements for a HAU if it can be demonstrated that a relevant 101(a)(2) use, and sub-categories of this use, are not attainable. Although such situations are rare, it is conceivable for a State to completely remove a 101(a)(2) use and to concurrently adopt another designated use.

Since the adoption of a use less than a HAU could lower WQS and also affect public health, a scientific assessment (i.e., a UAA) of factors affecting the attainment of a use must include analyses of both the current and prospective conditions of a water body. Specifically, a UAA must not only determine a use that is attainable right now but also one that is deemed attainable in the future (i.e., HAU) pending the implementation of effluent limits and best management practices. To ensure the determination of a HAU, HDOH intends **to require that a UAA or a scientifically defensible analysis be conducted to demonstrate the non-attainment of a use.**

The following additional section is proposed for HAR 11-54:

§11-54-9.1.5 Use Attainability Analysis. (a)

As used in this section:

"Highest attainable use" or "HAU" means the modified use that is both closest to the uses specified in section 303(c)(2)(A) of the Act and attainable based on a UAA or other scientifically defensible analyses that were used to evaluate attainability.

"Use attainability analysis" or "UAA" means a structured scientific assessment of the factors affecting the attainment of the use, which may include factors as described in 40 C.F.R. §131.10(g).

(b) A UAA or other scientifically defensible analyses may be conducted to demonstrate the non-attainment of a use, as described in this chapter.

(c) A UAA shall not be inconsistent with federal regulations on protecting and designating uses as described in 40 C.F.R. §131.10.

(d) A HAU shall be adopted whenever a use, as described in this chapter, is demonstrated to be non-attainable based on a UAA or other scientifically defensible analyses.

(e) The decision to adopt the results of a UAA or other scientifically defensible analyses, demonstrating the non-attainment of a use, shall be subject to public participation requirements. The department shall hold one or more public hearings when adopting the results of a UAA or other scientifically defensible analyses in accordance with applicable provisions of chapter 91, HRS, and 40 C.F.R. §25. The results of a UAA or other scientifically defensible analyses, and supporting information shall be made available to the public prior to the hearing.

(f) The results of a UAA or other scientifically defensible analyses, demonstrating the non-attainment of a use, shall not be effective until they are adopted by the department and approved by the EPA.

[Eff and comp _____] (Auth: HRS §§342D-4, 342D-5) (Imp: §§342D-4, 342D-5; 40 C.F.R. §§25.5, 131.10; 33 U.S.C. §1313(303))

RATIONALE FOR WQS VARIANCES

Per Hawaii Revised Statutes (HRS) at Title 19, Health, Chapter 342D, Water Pollution, Section 7, Variances (HRS 342D-7), HDOH has the authority to grant variances that allow for the discharge of water pollutants in excess of applicable standards when there are no substantial risks to human health or safety. Specifically, HRS 342D-7 allows for a variance when it can be shown that 1) full compliance with the standards would produce serious hardship without equal or greater benefits to the public, and 2) practicable means for the adequate prevention, control, or abatement of the water pollution involved are not available. The length of a variance is a period not exceeding five years, and only until the necessary means for prevention, control, or abatement become practicable. As described, the statutes provide HDOH the authority to grant water quality variances (i.e., WQS variances), and they leave regulatory requirements for the protection of water quality to the discretion of HDOH. Therefore, HDOH now intends **to adopt regulations for administering WQS variances, only applicable to dischargers and not to water bodies, in order to promote the incremental attainment of water quality goals, and to allow, as necessary, the temporary and conditional downgrading of water quality criteria that are applicable to specific dischargers.**

In August 2015, the EPA promulgated new WQS regulations at 40 CFR §131 to clarify the use of WQS variances when a designated use is not attainable in the near-term but is deemed attainable in the future. Specifically, the EPA amended federal WQS regulations to allow the temporary and conditional downgrading of the WQS applicable to a segment of a water body, an entire water body, a permittee, or a group of permittees. The EPA has stressed the utility of multiple permittee WQS variances when addressing situations where various dischargers (i.e., a group of permittees) are all experiencing similar challenges in meeting the limit for a specific pollutant, regardless of whether they are located on the same water body. Depending on the parameters being considered, a State could streamline its WQS variance process by adopting a single rule that applies to all affected permittees. As a pre-requisite to the adoption of multiple permittee WQS variances, a State can list group characteristics and establish eligibility requirements for each permittee in the group. Group characteristics may include the type of permittee (public or private), the size of a permittee (small or large), the source of revenue (tax or service), or the type of effluent (sanitary or industrial). Eligibility requirements may include same designated use and applicable criterion, same water body, or similar treatment technology.

A temporary and modified WQS becomes applicable through the adoption of a “variance” to WQS³, and it is subject to both the public participation and EPA approval processes. Per 40 CFR §131.3(o), a WQS variance is defined to be a time-limited designated use and criterion, for specific pollutant(s) or water quality parameter(s), that reflect the Highest Attainable Condition (HAC) throughout the term of this WQS variance. This HAC must not lower the water quality that is currently attained. A State has the flexibility to express the HAC as a numeric pollutant concentration, a numeric effluent condition, or any other quantitative expression of pollutant reduction that is achievable with the installation of pollutant control technologies, and if applicable, the adoption and implementation of a Pollutant Minimization Program (PMP). Per 40

³ <https://www.govinfo.gov/content/pkg/FR-2013-09-04/pdf/2013-21140.pdf>

CFR §131.3(p), a PMP is defined to be a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings. Specifically, a PMP is a plan that is tailored to address the circumstances of a discharger, and it includes activities ranging from control to offset strategies. The aim of these strategies is to reduce the loadings of an applicable water pollutant from upstream and other sources.

Per 40 CFR §131.14(b)(1)(iv), the term of a WQS variance must only be as long as necessary to achieve the HAC. Per 40 CFR §131.14(b)(1)(v), if a WQS variance has a term greater than five years then a re-evaluation, using all existing and readily available information, of the HAC must occur no less frequently than every five years. A State has the flexibility to determine how it intends to obtain public input on the re-evaluation of a HAC, and it must submit the results of this re-evaluation to the EPA within thirty days of its completion.

Per 40 CFR §131.14(b)(2)(i), the documents required to demonstrate the need for a WQS variance depend on the type of use: either 101(a)(2) or non-101(a)(2). For a 101(a)(2) use, a State must demonstrate that attaining the designated use and criterion, for the term of a WQS variance, is not feasible because of one of the six factors listed in 40 CFR §131.10(g). Besides these six factors, actions, which are necessary to facilitate lake, wetland, or stream restoration, through dam removal or other significant reconfiguration activities can also be used as a factor to preclude attainment of the designated use and criterion for the term of a WQS variance. For a non-101(a)(2) use, a State must submit documentation justifying how its consideration of the use and value of a water body supports the WQS variance and term.

Per 40 CFR §131.14(a)(4), a State may not adopt a WQS variance if the designated use and criterion, that are addressed, can be achieved by implementing technology-based effluent limits as required in sections 301(b) and 306 of the Act. Once adopted by a State and approved by the EPA, a State may use a WQS variance, including the applicable HAC, for the purpose of developing and incorporating effluent limitations in NDPES permits. For the term of a WQS variance, a State must retain, in its standards, the underlying designated use and original specified criterion that are addressed. All other standards, which are not specifically addressed by a WQS variance, remain applicable.

As described above, the requirements for a WQS variance can be broken into distinct areas. They are:

- Non-attainment
- Applicability
- Interim condition and HAC
- Term
- Re-evaluation
- Renewal

For each area, there are differences between federal regulations and Hawaii statutes for administering WQS variances. HDOH intends **to administer requirements like those specified in the federal regulations at 40 CFR §131.14, and to include, in HAR 11-54, the following three requirements:**

1. **Demonstration of non-attainment based on one of seven factors**
2. **Determination of a HAC**
3. **Re-evaluation of interim conditions**

First, Hawaii statutes only allow for a discharge of water pollutant in excess of applicable standards (i.e., a WQS variance) when compliance with the standards would produce serious hardship without equal or greater benefits to the public. For a 101(a)(2) use, the federal regulations allow the adoption of a WQS variance when the attainment of a designated use and criterion is not feasible because of one of the six factors, listed in 40 CFR §131.10(g), or the restoration-related factor. For the 40 CFR §131.10(g)(6) factor, there is guidance, especially from the EPA, on the methodologies for estimating the financial cost of pollution controls, and for demonstrating the economic burden of these controls. In order to conform with federal regulations and in a manner similar to its proposed process for conducting UAAs, HDOH intends **to require for all uses, including both 101(a)(2) and non-101(a)(2) uses, an assessment of one of the 40 CFR §131.10(g) factors or the utilization of the restoration-related factor to demonstrate the non-attainment of a criterion throughout the term of a WQS variance.**

Second, Hawaii statutes only allow WQS variances for dischargers while federal regulations allow WQS variances for dischargers, as well as for water bodies. For a WQS variance applicable to a discharger or dischargers, federal regulations require a State to specify the highest attainable interim condition (i.e., the HAC) as a quantifiable expression or a narrative requirement. Hawaii statutes do not currently have requirements for a highest attainable interim condition throughout the term of a WQS variance. HDOH intends **to require the specification of a HAC, as either the highest attainable criterion or the interim effluent condition reflecting the greatest pollutant reduction achievable, which is applicable to a discharger or dischargers for the term of a WQS variance.** In order to monitor the interim condition, each discharger shall be required to sample effluent and/or receiving waters, and to report these sampling results to HDOH.

Third, Hawaii statutes only allow the issuance of a WQS variance with a period not exceeding five years, or until the necessary means for the adequate prevention, control, or abatement of the water pollution involved will become practicable. These statutes are different from federal regulations that allow for a term longer than five years, or as long as necessary to achieve the HAC with the implementation of pollutant control activities, and, if applicable, other activities identified through a PMP. For a WQS variance with a term greater than five years, federal regulations also require a re-evaluation of the HAC to occur no less frequently than every five years. A WQS variance granted by HDOH has a maximum period of five years; however, the statutes allow for the renewal of a WQS variance for periods not exceeding five years provided that all requirements of the immediately preceding WQS variance are met. **For situations when the term required to achieve a HAC exceeds a period of five years, HDOH intends to allow the issuance of a WQS variance administered by a series of NPDES permits, with each NPDES permit having a duration not exceeding five years. HDOH also intends to require the re-evaluation of the HAC, at a frequency no less frequently than every five years, with the aim of determining the water quality progress achieved.**

The following additional section is proposed for HAR 11-54:

§11-54-9.2 Water Quality Standards Variance.

(a) As used in this section:

"Permit" means an authorization, license, or equivalent control document issued by the department to implement the requirements specified in chapter 11-55. Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit.

"Pollutant Minimization Program" or "PMP" means a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings.

"WQS variance" or "variance" means a time-limited criterion, for a specific pollutant or a water quality parameter, which reflects the highest attainable condition (HAC) during the term of the variance.

(b) A time-limited change to a criterion, as described in this chapter, shall be consistent with the provisions of section 342D-7, HRS. The following requirements shall apply when considering the application for a variance:

(1) A variance may be considered if a criterion can be demonstrated as not feasibly attainable throughout the term of the variance. Complete assessments, detailed descriptions, supporting analyses, water quality data, and any additional information requested by the department shall be submitted to demonstrate that the attainment of a criterion is not feasible throughout the term based on any of the factors listed in 40 C.F.R. §131.10(g);

(2) A variance may be considered if a criterion cannot be attained while restoration or other significant

reconfiguration activities are being implemented; and

- (3) A variance shall not be considered if a criterion addressed by the variance can be achieved by implementing technology-based effluent limits required under chapter 11-55.

(c) A variance shall identify a discharger or dischargers subject to the variance. A variance shall also identify the criterion and the water body to which the variance applies. All other criteria not specifically addressed by a variance shall remain applicable.

(d) A highest attainable condition (HAC) shall be quantifiably specified as either the highest attainable interim condition or the interim effluent condition that reflects the greatest pollutant reduction achievable throughout the term of a variance. The following requirements shall apply when specifying a HAC:

- (1) A HAC shall not result in any lowering of the currently attained ambient water quality unless restoration activities are necessary, as described in section 11-54-9.2(b)(2);
- (2) A HAC shall take into consideration the installation of pollutant control technologies and, if applicable, the adoption and implementation of a PMP; and
- (3) If the length of time required to achieve a HAC exceeds five years, the HAC of each succeeding permit, in a series of permits, shall be at least as stringent as the HAC of the preceding permit.

(e) The term of a variance shall be only as long as necessary to achieve the HAC; provided no permit shall have a term exceeding five years. The following requirements shall apply when specifying the term of a variance:

- (1) A term may start from the date EPA approves the variance or from a date specified by the department; and
- (2) If the length of time required to achieve a HAC exceeds five years, the department may consider issuing a series of permits; provided no permit, in a series of permits, shall have a term exceeding five years.

(f) The decision to approve the application for a variance shall be subject to public participation requirements. The department shall hold one or more public hearings when approving the application for a variance in accordance with applicable provisions of chapter 91, HRS, and 40 C.F.R. §25. The application for a variance and supporting information shall be made available to the public prior to the hearing.

(g) A variance shall not be effective until it is adopted by the department and approved by the EPA.

(h) Re-evaluation of a variance or a permit in a series of permits shall be conducted no less frequently than every five years, and at least one hundred eighty days prior to the end of such a variance or such a permit to review the HAC using all existing and readily available information. The following requirements shall apply when conducting a re-evaluation:

- (1) A re-evaluation shall determine the water quality progress achieved. Available documents, supporting analyses, water quality data, and any additional information requested by the department shall be submitted to determine the water quality progress achieved;
- (2) The results of a re-evaluation may modify the HAC of a variance or the HAC(s) of succeeding permits in a series of permits;

- (3) The department shall obtain, in accordance with chapter 91, HRS, public comment on a re-evaluation;
- (4) The department shall submit, in accordance with 40 C.F.R. §131.14(b) (1) (v), the results of a re-evaluation to the EPA; and
- (5) If the department does not conduct a re-evaluation as specified or does not submit the results of a re-evaluation as required, then a variance shall no longer be applicable.

(i) All specified conditions of an expiring variance must have been met in order for a discharger to request a renewal. The following requirements shall apply when requesting a renewal of a variance:

- (1) A renewal shall provide for a HAC at least as stringent as the expiring HAC; and
- (2) A renewal shall take into consideration the installation of pollutant control technologies and, if applicable, the adoption and implementation of a PMP.
[Eff and comp _____] (Auth: HRS §§342D-4, 342D-5, 342D-7, Ch. 342E)
(Imp: §§342D-4, 342D-5, 342D-6, 342D-7, Ch. 342E; 40 §§131.10, 131.14)

RATIONALE FOR SITE-SPECIFIC AQUATIC LIFE CRITERIA

The CWA mandates the development and implementation of WQS that may include numerical or narrative criteria. Numerical criteria for specific chemicals, especially toxic pollutants, are crucial for the protection against potential impacts to human health and aquatic ecosystems. For aquatic life numerical criteria, the EPA uses the results from tests conducted in controlled laboratory environments. Specifically, data about acute (i.e., short-term) and chronic (i.e., long-term) toxicities are determined for various freshwater and saltwater aquatic species. These toxicology tests are conducted on the premise that data for the species selected to derive the national criteria (i.e., those recommended by the EPA) are representative of the sensitivities of untested species.

There are inherent differences in species between laboratory environments, where aquatic life WQS criteria are derived, and aquatic ecosystems, where these criteria are implemented. Moreover, there are actual differences in water characteristics that can affect the toxicity of pollutants. Per 40 CFR §131.11(b)(1)(ii), a State has the flexibility to adopt, based on scientifically defensible rationale and methods, numeric WQS that are modified to reflect site-specific conditions. Overall, a site-specific (i.e., “modified”) WQS criterion must be as stringent as necessary to protect the applicable designated use.

A site-specific aquatic life WQS criterion is derived by considering the physical, chemical, and biological conditions that characterize a water body. Typically, chemical conditions include water characteristics such as hardness and temperature, while biological conditions include species compositions for fishes and plants. In order to address the differences in physical, chemical and biological conditions between laboratory environments and aquatic ecosystems, a State may adopt site-specific criteria under one or more of the following situations:

1. Species sensitivity. The main species present at a specific water body are either more or less sensitive than those utilized in the national criteria dataset. For example, the national criteria dataset contains data for various aquatic species that are very sensitive to a specific toxic pollutant. However, if none of these species are found at a specific water body where traces of this toxic pollutant have been detected in water samples, then the applicable criteria may be modified.
2. Toxicity variation. The toxicity of a water pollutant is significantly altered by the physico-chemical characteristics of a specific water body. In freshwater environments, the acute and chronic toxicity criteria for metals decrease as hardness increases. For copper, the EPA recommends using the freshwater Biotic Ligand Model (BLM) to derive the acute and chronic toxicity criteria in fresh waters.⁴ In July 2016, the EPA issued a peer-reviewed draft to update its recommendation for using the saltwater BLM to estimate the toxicities of copper in marine and estuarine waters.⁵ The BLM requires the input of physical and chemical parameters that characterize a specific water body.
3. Natural background. The aquatic life criteria, recommended by the EPA, may require adjustments to reflect the natural background conditions of a specific water body. By

⁴ <https://www.epa.gov/sites/production/files/2019-02/documents/al-freshwater-copper-2007-revision.pdf>

⁵ <https://www.epa.gov/sites/production/files/2016-08/documents/copper-estuarine-marine-draft-factsheet.pdf>

definition, natural background is a background concentration that is only due to non-anthropogenic (i.e., non-manmade) sources. The EPA has recognized that certain pollutants may naturally occur in concentrations greater than the applicable criteria.⁶ Accordingly, the EPA has provided States with guidance on setting certain site-specific aquatic life criteria, for a specific water body, equal to background concentrations.

As described in the above situations, the EPA has developed scientific procedures and frameworks to derive site-specific aquatic life criteria. Depending on the applicable circumstances, the following processes can be used:

- A. Recalculation Procedure. This process takes into account the differences in sensitivities of the aquatic species tested for the national criteria dataset and those found at a specific site. For a specific site, the basic concept is to retain tested species which are closely related to locally occurring species, and if possible, to replace tested species with other common species which are better substitutes. Special care should be exercised when removing any species from the national criteria dataset since some tested species are needed to represent untested species.
- B. Water-Effect Ratio (WER) and Streamlined WER Procedures for metals. These processes take into account the differences in toxicity of a metal in site-specific water and in laboratory dilution water. By definition, the WER is the ratio of the toxicity of a metal in site water to the toxicity of the same metal in laboratory water. This ratio is, by default, assumed to be equal to one (i.e., unity). When using the WER procedure, collected samples and simulated samples must be representative of the actual conditions at a specific site to ensure the validity of the WER-derived toxicity criterion.
- C. Biotic Ligand Model (BLM) for copper and potentially other metals. This process takes into account water parameters that directly influence the toxicity of copper at a specific site. These parameters may include temperature, pH, alkalinity, salinity, or concentrations of dissolved organic carbon. A very extensive dataset of input parameters is therefore required to estimate the water toxicity of copper. It is possible to use default values, which are developed by the EPA, in place of missing water input parameters.
- D. Natural Conditions Framework for temperature, pH, and dissolved oxygen criteria. This process aims to standardize the methodologies, which are adopted by States, to characterize the natural conditions used in developing the site-specific aquatic life criteria for temperature, pH, and dissolved oxygen. Since manmade disturbances may be widespread or pervasive at a specific site, the task of accurately characterizing natural conditions is inherently tied to the challenge of successfully identifying anthropogenic conditions.

Properly derived site-specific aquatic life criteria protect the designated uses of a specific water body. The adoption of site-specific procedures (i.e., equations to derive site-specific criteria for general or narrow applicability) is a revision to WQS regulations, and therefore, it is subject to the public participation and EPA approval processes. HDOH intends **to introduce authorizing**

⁶ <https://www.epa.gov/sites/production/files/2014-08/documents/naturalbackground-memo.pdf>

language that references scientific procedures, promulgated by the EPA, for the proper derivation of site-specific aquatic life criteria.

The following additional section is proposed for HAR 11-54:

§11-54-9.3 Site-Specific Aquatic Life Criterion.

(a) As used in this section:

"Criterion" means an element of WQS, as described in this chapter, that is expressed as a constituent concentration, a numeric level, or a narrative statement, and that represents a quality of water supporting a particular use. When criteria are met, water quality shall generally protect the designated use.

"EPA PB85-227049" means "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses," December 2010 unless otherwise noted.

"EPA 823-B-17-001" means "Water Quality Standards Handbook," Chapter 3, Water Quality Criteria, Section 3.5.2, Site-Specific Aquatic Life Water Quality Criteria, November 2017 unless otherwise noted.

(b) A site-specific aquatic life criterion shall be consistent with federal regulations on adopting criteria that protect designated uses as described in 40 C.F.R. §131.11.

(c) A site-specific aquatic life criterion may be derived to address species sensitivity, toxicity variation, natural background, or any combination of these situations.

(d) A site-specific aquatic life criterion may be based on scientific guidelines described in EPA PB85-227049.

(e) A site-specific aquatic life criterion may be derived with scientific processes described in EPA 823-B-17-001 or other scientifically defensible methods.

(f) The decision to adopt a site-specific aquatic life criterion shall be based on a scientific demonstration that the derived criterion protects the designated use, as described in this chapter.

(g) The decision to adopt a site-specific aquatic life criterion shall be subject to public participation requirements. The department shall hold one or more public hearings when adopting a site-specific aquatic life criterion in accordance with applicable provisions of chapter 91, HRS, and 40 C.F.R. §25. The site-specific aquatic life criterion and supporting information shall be made available to the public prior to the hearing.

(h) A site-specific aquatic life criterion shall not be effective until it is adopted by the department and approved by the EPA. [Eff and comp] (Auth: HRS §187A-1, §§342D-4, 342D-5) (Imp: §§342D-4, 342D-5; 40 C.F.R. §§25.5, 131.11)

SUMMARY

The CWA mandates a comprehensive program whose ultimate objective is to restore and to maintain the chemical, physical, and biological integrity of all waters. This goal is achieved through the development and implementation of WQS. The EPA has provided States with regulatory mechanisms to modify WQS on a site-specific basis. These flexible mechanisms allow States to designate uses that better reflect actual conditions and to take measures that incrementally improve water quality.

MODIFICATION RELATED TO SITE-SPECIFIC FLEXIBILITIES

HDOH intends to amend HAR 11-54 with authorizing language that allows the use of other regulatory mechanisms, including UAAs, WQS variances, and site-specific aquatic life criteria, to address site-specific conditions. In order to achieve this, HDOH intends to remove the requirements for “Water Quality Certification” from the existing sections HAR 11-54-9.1, and HAR 11-54-9.1.01 to HAR 11-54-9.1.09, and to include them in the new chapter 53, titled “Section 401 Water Quality Certification,” of the Hawaii Administrative Rules (HAR 11-53). HDOH also intends to transfer the discharge requirements for zones of mixing and intake credits, which are respectively specified in sections HAR 11-54-9 and HAR 11-54-12, to the existing chapter 55, titled “Water Pollution Control,” of the Hawaii Administrative Rules (HAR 11-55). The following modifications are proposed for HAR 11-54:

1. Repeal existing section 9.1 for “Water Quality Certification.” As mentioned above, the water quality certification requirements will be moved to HAR 11-53.
2. Repeal existing sections 9.1.01 to 9.1.09, all related to “Water Quality Certification.” As mentioned above, the water quality certification requirements will be moved to HAR 11-53.
3. Repeal existing section 9 for “Zones Of Mixing.” As mentioned above, the mixing zone requirements will be transferred to HAR 11-55.
4. Repeal existing section 12 for “Intake Credits.” As mentioned above, the intake credit requirements will be transferred to HAR 11-55.
5. Add new section 9.0.5 for “Site-Specific Flexibilities” and include definitions.
6. Add new sections 9.1.5, 9.2, and 9.3 for “Use Attainability Analysis,” “Water Quality Standards Variance,” and “Site-Specific Criterion,” respectively.
7. Renumber existing section 11 as new section 9.4 for “Schedule Of Compliance.”
8. Add reserved sections 11 and 12.0.5.

1. Repeal existing section HAR 11-54-9.1
2. Repeal existing sections HAR 11-54-9.1.01 to HAR 11-54-9.1.09

~~§11-54-9.1 Water quality certification. As used in sections 11-54-9.1.01 to 11-54-9.1.10:~~

~~"33 CFR" means the Code of Federal Regulations, Title 33, Corps of Engineers, Department of the Army, Department of Defense, revised as of July 1, 2011, unless otherwise specified.~~

~~"40 CFR" means the Code of Federal Regulations, Title 40, Protection of the Environment, revised as of July 1, 2011, unless otherwise specified.~~

~~"Act" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-483 and Public Law 97-117, 33 U.S.C. section 1251 et. seq.~~

~~"Agent" means a duly authorized representative of the owner as defined in section 11-55-7(b).~~

~~"Discharge" means the same thing as defined in Section 502(16) of the Act.~~

~~"Discharge of a pollutant" and "discharge of pollutants" means the same thing as defined in section 502(12) of the Act.~~

~~"Duly authorized representative" means a person or position as defined in 40 CFR section 122.22(b).~~

~~"License or permit" means any permit, certificate, approval, registration, charter, membership, statutory exemption or other form of permission granted by an agency of the federal government to conduct any activity which may result in any discharge into navigable waters.~~

~~"Licensing or permitting agency" means any agency of the federal government to which a federal application is made for a "license or permit."~~

~~"Navigable waters" means the waters of the United States, including the territorial seas.~~

~~"Owner" means the person who owns any "facility"~~

or "activity" which results in any discharge into navigable waters.

"Pollutant" means the same thing as defined in section 502(6) of the Act.

"Territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.

"Water quality certification" or "certification" means a statement which asserts that a proposed discharge resulting from an activity will not violate applicable water quality standards and the applicable provisions of sections 301, 302, 303, 306 and 307 of the Act. A water quality certification is required by section 401 of the Act from any applicant for a federal license or permit to conduct any activity, including the construction or operation of facilities which may result in any discharge into navigable waters.

"Water quality certification application" means any forms provided by the director for use in obtaining the water quality certification.

"Water quality standards" means standards established pursuant to section 10(c) of the Act, and state-adopted water quality standards for navigable waters which are not interstate waters.

"Waters of the United States" or "waters of the U.S." means:

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters, including interstate "wetlands";
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows,

~~playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:~~

~~(A) Which are or could be used by interstate or foreign travelers for recreational or other purposes;~~

~~(B) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or~~

~~(C) Which are used or could be used for industrial purposes by industries in interstate commerce;~~

~~(4) All impoundments of waters otherwise defined as waters of the United States under this definition;~~

~~(5) Tributaries of waters identified in paragraphs (1) through (4) of this definition;~~

~~(6) The territorial sea; and~~

~~(7) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.]~~

[Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17 /00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; comp 11/15/14; R]
(Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.01 Water quality certification; contents of certification. (a) A certification made by the department shall include:~~

~~(1) The legal name(s), street address, contact person's name and position title, and telephone and fax numbers of the owner and, if applicable, its duly authorized representative;~~

- ~~(2) A statement that the director has either:~~
- ~~(A) Examined the application made by the owner or its duly authorized representative to the licensing or permitting agency (specifically identifying the number or code affixed to the application) and bases its certification upon an evaluation of the information contained in the application which is relevant to water quality considerations; or~~
 - ~~(B) Examined other information provided by the owner or its duly authorized representative sufficient to permit the director to make the statement described in paragraph (a) (3);~~
- ~~(3) A statement that there is reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards;~~
- ~~(4) A statement of any conditions which the director considers necessary or desirable with respect to the discharge resulting from an activity; and~~
- ~~(5) Other information the director determines to be appropriate.~~

~~(b) The director shall issue the certification after evaluating the complete water quality certification application, comments received during the public comment period, any record of a public hearing held pursuant to section 11-54-09.1.03, other information and data the director considers relevant, and after the director determines that there is reasonable assurance that applicable water quality standards will not be violated and the best practicable methods of control will be applied to a discharge resulting from an activity including the construction and operation of a facility~~

~~(c) The department shall process applications for permits and water quality certifications for the reconstruction, restoration, repair, or reuse of any~~

~~Hawaiian fishpond that meets the requirements of chapter 183B, HRS, before all other permits and certifications. The director shall render a decision on the completeness of any application for the permit or water quality certification within thirty days of receipt. Applications for fishpond reconstruction, restoration, or repair that are incomplete shall be denied without prejudice. The director shall render a decision on any complete application for a permit or water quality certification for any fishpond within one hundred fifty days.~~

~~(d) The director, at the director's discretion or after consideration of information presented by the owner or its duly authorized representative, the licensing or permitting agency, other government agencies, or interested parties, may modify or revoke an issued certification or waiver.~~ [Eff and comp 4/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D6.5, 342D-53) (Imp: HRS §§342D-342D-6, 342D6.5, 342D-5)

~~[§11-54-9.1.02 Water quality certification; contents of water quality certification application. (a) The owner or its duly authorized representative shall submit a complete water quality certification application for the discharge resulting from an activity. The water quality certification application shall include at a minimum:~~

- ~~(1) The legal name(s), street address, contact person's name and position title, and telephone and fax numbers of the owner and, if applicable, its duly authorized representative;~~
- ~~(2) The company or organization name, contact person's name and position title, and~~

- telephone and fax numbers of the emergency contact(s);
- (3) The name, street address, contact person's name and position title, telephone and fax numbers, island, and tax map key number(s) for the project;
- (4) Associated existing or pending federal and environmental permits and corresponding file numbers;
- (5) The name(s) of the navigable water where the discharge occurs, the latitude and longitude of the discharge point(s), the classification of the navigable water, and the associated existing recreational uses;
- (6) The scope of work or a description of the overall project including: the construction or operation of facilities which may result in discharges into navigable waters; the proposed discharge resulting from an activity; and specific biological, chemical, physical, thermal, and other pertinent characteristics of the discharge resulting from an activity;
- (7) If applicable, a description of the function and operation of equipment or facilities to control discharges, including specification of the methods of control to be used;
- (8) The estimated dates on which the activity will begin and end and the date or dates on which the discharge(s) will take place;
- (9) If applicable, a description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge and the operation of equipment or facilities employed in the control of the proposed discharges and a map showing the location(s) of the monitoring point(s);
- (10) The statement of assurance, statement of choice for publication, and if applicable, an authorization statement, with the owner's original signature. Any signatures required

~~for the water quality certification application shall be provided as described in 40 CFR Section 122.22(a);~~

- ~~(11) Supporting documentation (e.g. maps, plans, specifications, copies of associated federal permits or licenses, federal applications, Environmental Assessments or Environmental Impact Statements, as applicable, etc.);~~
- ~~(12) Additional information regarding any irregularities or unique features of the project; and~~
- ~~(13) Additional information as required by the director.~~

~~(b) The director shall notify the owner or its duly authorized representative in writing if a water quality certification application is incomplete or otherwise deficient. A description of the additional information necessary to complete the water quality certification application or to correct the deficiency shall be included in the written notice. If a water quality certification application is incomplete or otherwise deficient, processing of the water quality certification application shall not be completed until the time the owner or its duly authorized representative has supplied the information or otherwise corrected the deficiency. Failure to provide additional information or to correct a deficiency shall be sufficient grounds for denial of the certification or termination of the processing of the water quality certification application.~~

~~(c) The director shall notify the owner or its duly authorized representative in writing when a water quality certification application is considered complete. The director shall act on a request for certification within a period which shall not exceed one year from the date when the water quality certification application was considered complete.~~

~~(d) The owner or its duly authorized representative shall notify the department in writing of changes which may affect the water quality certification application and certification process.~~

~~(c) Each owner who submits a water quality certification application shall pay a filing fee of \$1,000. This filing fee shall be submitted with the water quality certification application and shall not be refunded nor applied to any subsequent water quality certification application following final action of denial or termination of the processing of the water quality certification application.~~

~~(1) Fees shall be made payable to the "State of Hawaii" in the form of a cashier's check or money order;~~

~~(2) Water quality certification application(s) submitted by the U.S. Army Corps of Engineers, Honolulu Engineer District, for the purpose of adopting regional or nationwide general permit(s), in accordance with 33 CFR Parts 325 and 330, respectively, shall be exempt from the payment of filing fees.~~

~~(f) If a project or activity requiring a federal permit or license involves or may involve the discharge of a pollutant or pollutants and is initiated or completed without a water quality certification, the director may process an after-the-fact water quality certification application as follows: after-the-fact water quality certification application.~~

~~may be accepted and processed only for the limited purpose of deeming projects or activities requiring federal permits or licenses to be properly permitted or licensed forward of the date of the water quality certification or waiver. No water quality certification or waiver shall be issued which allows the retroactive permitting or licensing of projects or activities before the date the water quality certification or waiver was issued. A water quality certification or waiver may be issued if the following criteria are met:~~

~~(1) The project or activity is not the subject of an ongoing enforcement action by the federal, state or county government;~~

~~(2) Any adverse impacts upon water quality resulting from the project or activity have been mitigated to the maximum extent feasible; and~~

~~(3) The project or activity will not cause or contribute to any lack of attainment of water quality standards set forth in this chapter.~~

~~(g) Written notification by the department under subsection (b) is complete upon mailing or sending a facsimile transmission of the document or actual receipt of the document by the owner or its duly authorized representative.]~~

[Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.03 Water quality certification; notice and hearing. The director may provide the opportunity for public comment or hearing(s) or both to consider the issuance of a water quality certification. A notice shall be published in accordance with chapters 91 and 92, HRS. The director shall inform the owner or its duly authorized representative in writing that the action has been taken. All publication and mailing costs associated with the public notification of the director's tentative determinations with respect to the water quality certification application shall be paid by the owner to the appropriate newspaper agency or agencies determined by the director. Failure to provide and pay for public notification, as considered appropriate by the director, may result in a delay in the certification process.]~~ [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp

10/21/12; comp 12/6/13; comp 11/15/14; R
] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS
 §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.04 Water quality certification; waiver. (a) If the director fails or refuses to act on a request for certification within one year after receipt of a complete water quality certification application, then the certification requirements of section 11-54-9.1 shall be waived with respect to the federal application.~~

~~(b) If the discharge resulting from an activity receives a determination to be covered under a nationwide permit authorization, thereby fulfilling specific conditions of that permit pursuant to 33 CFR sections 330.4, 330.5, and 330.6, then the director will determine, on a case-by-case basis, which projects are considered minor and non-controversial. Certification requirements of section 11-54-9.1 shall be waived for minor and non-controversial activities within one year of receipt of a complete water quality certification application.]~~

[Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/2 9/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; comp 11/15/14; R
] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.05 Water quality certification; adoption of new water quality standards. (a) The licensee or permittee shall comply with any new water quality standards as adopted by the department.~~

~~(b) In any case where:~~

~~(1) A certification or waiver was issued without applicable water quality standards;~~

~~(2) Water quality standards applicable to the waters into which the activity may discharge~~

are subsequently established before the activity is completed; or

(3) The director determines that the activity is violating new water quality standards;

The director shall then notify the licensee or permittee and the licensing or permitting agency of the violation.

(c) If the licensee or permittee fails within one hundred eighty days of the date of the notice to cease the violation, the director shall notify the licensing or permitting agency that the licensee or permittee has failed to comply with the standards. The director, at the director's discretion, shall also revoke the certification or waiver or recommend suspension of the applicable license or permit pursuant to section 401 of the Act.

(d) The director shall notify the licensing or permitting agency that, in the director's opinion, there is reasonable assurance that applicable water quality standards will not be violated because the licensee or permittee took appropriate action to comply with the applicable water quality standards after their license or permit was suspended pursuant to subsection (c).

(e) This section shall not preclude the department from taking other enforcement action authorized by law.] [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06 / 15/09; comp 10/21/12; am and comp 12/6/13; comp 11/15/14;

R] (Auth: HRS §§342D-4, 342D-5, 342D-53s) (Imp: HRS §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.06 Water quality certification; inspection of facility or activity before operation. Where any facility or activity has received certification or waiver pursuant to sections 11-54-9.1.01 to 11-54-9.1.09 in connection with the issuance of a license or permit for construction, and where the~~

~~facility or activity is not required to obtain an operating license or permit, the director, prior to the initial operation of the facility or activity, shall be afforded the opportunity to inspect the facility or activity for the purpose of determining if the manner in which the facility or activity will be operated or conducted will violate applicable water quality standards.] [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)~~

~~[§11-54-9.1.07 Water quality certification; notification to licensing or permitting agency. If the director, after an inspection pursuant to section 11-54-9.1.06 determines that operation of the proposed facility or activity will violate applicable water quality standards, the director shall so notify the owner or, if applicable, its duly authorized representative and the licensing or permitting agency.] [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)~~

~~[§11-54-9.1.08 Water quality certification; termination or suspension. Where a licensing or permitting agency, following a public hearing, suspends a license or permit after receiving the director's notice and recommendation pursuant to section 11-54-9.1.07 the owner or its duly authorized representative may submit evidence to the director, that the facility or activity has been modified so as~~

~~not to violate applicable water quality standards. If the director determines that the applicable water quality standards have not been and will not be violated, the director shall so notify the licensing or permitting agency.]~~ [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)

~~[§11-54-9.1.09 Water quality certification; review and advice. The director may, and upon request shall, provide licensing and permitting agencies with determinations, definitions, and interpretations to the meaning and content of state water quality standards. The director may, and upon request shall, also advise licensing and permitting agencies of the status of compliance by the owner(s) of a water quality certification with the conditions and requirements of applicable water quality standards.]~~
 [Eff and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; comp 12/6/13; comp 11/15/14; R] (Auth: HRS §§342D-4, 342D-5, 342D-53) (Imp: HRS §§342D-4, 342D-5, 342D-6)

Due to the repeal of the above “Water Quality Certification” sections from HAR 11-54, minor modifications are proposed for the definition of “Wetlands,” in section HAR 11-54-1, to respectively reference the HDOH requirements for water quality certifications as the new chapter 53 (HAR 11-53), and for NPDES permits as the existing chapter 55 (HAR 11-55). Amendments are also proposed for section HAR 11-54-1 to include the definitions of “pollutant” and “water quality standards.”

§11-54-1 Definitions. As used in this chapter:

"Pollutant" or "water pollutant", as defined in section 342D-1, HRS, means dredged spoil, solid refuse, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, sediment, cellar dirt and industrial, municipal, and agricultural waste.

"Water quality standards" or "WQS" means provisions of state law which consist of a designated use or designated uses for state waters and water quality criteria for such waters based upon such uses. WQS are to protect the public health or welfare, enhance the quality of state waters, and serve the purposes of the Act.

"Wetlands" means land that is transitional between terrestrial and aquatic ecosystems where the water table is usually at or near the surface or the land is covered by shallow water. A wetland shall have one or more of the following attributes:

- (1) At least periodically the land supports predominantly hydrophytic vegetation;
- (2) The substratum is predominantly undrained hydric soil; or
- (3) The substratum is nonsoil (gravel or rocks) and is at least periodically saturated with water or covered by shallow water.

Wetlands may be fresh, brackish, or saline and generally include swamps, marshes, bogs, and associated ponds and pools, mud flats, isolated seasonal ponds, littoral zones of standing water bodies, and alluvial floodplains. For the ~~[purpose]~~ purposes of applying for water quality certifications ~~[under Clean Water Act Section 401]~~, as specified in chapter 11-53, and ~~[for]~~ National Pollutant Discharge Elimination System (NPDES) ~~[permit purposes]~~ permits, as specified in chapter 11-55, the identification and delineation of wetland boundaries shall be done following the procedures described in the U.S. Army Corps of Engineers' Wetlands Delineation Manual (USACE 1987).

[Eff 11/12/82; am and comp 10/6/84; am and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/02/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; am and comp 11/15/14; am and comp] (Auth: HRS §187A-1, §§342D-1, 342D-4, 342D-5, Ch. 342E) (Imp: HRS §§342D-4, 342D-5, Ch. 342E; 40 C.F.R. §§122.2, 130.2, 131.3, 131.12; 22 U.S.C. §1362(14))

3. Repeal existing section HAR 11-54-9

~~§11-54-9 Zones of mixing. (a) As used in this section, "zones of mixing" means limited areas around outfalls and other facilities to allow for the initial dilution of waste discharges.~~

~~(b) Zones of mixing for the assimilation of domestic, agricultural, and industrial discharges which have received the best degree of treatment or control are recognized as being necessary. It is the objective of these limited zones to provide for a current realistic means of control over the placement and manner of discharges or emissions so as to achieve the highest attainable level of water quality or otherwise to achieve the minimum environmental impact considering initial dilution, dispersion, and reactions from substances which may be considered to be pollutants.~~

~~(c) Establishment, renewal, and termination.~~

~~(1) Application for establishment of a zone of mixing shall be made concurrently with any discharge permits whenever applicable and the conditions of a zone of mixing shall be incorporated as conditions of the discharge permits. Every application for a zone of mixing shall be made on forms furnished by the director and shall be accompanied by a complete and detailed description of present conditions, how present conditions do not conform to standards, and other information as the director may prescribe.~~

~~(2) Each application for a zone of mixing shall be reviewed in light of the descriptions, statements, plans, histories, and other supporting information as may be submitted upon the request of the director, and in light of the effect or probable effect upon water quality standards established pursuant to this chapter.~~

- ~~(3) Whenever an application is approved, the director shall establish the zone of mixing, taking into account the environmental impact, including but not limited to factors such as the protected uses of the body of water, existing natural conditions of the receiving water, character of the effluent, and the adequacy of the design of the outfall and diffuser system to achieve maximum dispersion and assimilation of the treated or controlled waste with a minimum of undesirable or noticeable effect on the receiving water.~~
- ~~(4) Approval of a zone of mixing shall be made either after a public hearing is held by the director in the county where the source is situated, in accordance with chapters 91 and 92, HRS and the rules of practice and procedures of the department, or after the public notification and comment process duly established for a discharge permit in the case when the zone of mixing is being considered concurrently with the discharge permit.~~
- ~~(5) No zone of mixing shall be established by the director unless the application and the supporting information clearly show that:~~
- ~~(A) The continuation of the function or operation involved in the discharge by the granting of the zone of mixing is in the public interest;~~
 - ~~(B) The discharge occurring or proposed to occur does not substantially endanger human health or safety;~~
 - ~~(C) Compliance with the existing water quality standards from which a zone of mixing is sought would produce serious hardships without equal or greater benefits to the public; and~~
 - ~~(D) The discharge occurring or proposed to occur does not violate the basic~~

standards applicable to all waters, will not unreasonably interfere with any actual or probable use of the water areas for which it is classified, and has received (or in the case of a proposed discharge will receive) the best degree of treatment or control.

(6) Any zone of mixing or renewal thereof shall be established within the requirements of this section and for time periods and under conditions consistent with the reasons therefore and within the following limitations:

(A) If the zone of mixing is established on the grounds that there is no reasonable means known or available for the adequate prevention, control, or abatement of the discharge involved, it shall be allowed only until the necessary means for prevention, control or abatement become practicable, and subject to the taking of any substitute or alternative measures that the director may prescribe. No renewal of a zone of mixing established under this subsection shall be allowed without a thorough review of known and available means of preventing, controlling, or abating the discharge involved;

(B) The director may issue a zone of mixing for a period not exceeding five years;

(C) Every zone of mixing established under this section shall include, but not be limited to, conditions requiring the applicant to perform appropriate effluent and receiving water sampling including monitoring of bottom biological communities and report the results of each sampling to the director. A program of research to develop reasonable alternatives to the

~~methods of treatment or control in use by the applicant may be required if research is deemed prudent by the director; and~~

~~(D) In order to prevent high temperature discharges from violating section 11-54-04(a)(4), no new or increased domestic, industrial, or other controllable source shall discharge at a maximum temperature which will cause temperatures to exceed three degrees Celsius above ambient, or thirty degrees Celsius, whichever is less, within one meter of the bottom within a zone of mixing. For discharges with or without submerged outfalls, the director may make a limited allowance for higher discharge temperatures if there is satisfactory demonstration that the elevated temperature will not cause damage to the local aquatic community.~~

~~(7) Any zone of mixing established pursuant to this section may be renewed from time to time on terms and conditions and for periods not exceeding five years which would be appropriate on initial establishment of a zone of mixing, provided that the applicant for renewal had met all of the conditions specified in the immediately preceding mixing, and provided further that the renewal and the zone of mixing established in pursuance thereof shall provide for the discharge not greater in quantity of mass emissions than that attained pursuant to the terms of the immediately preceding zone of mixing at its expiration. Any new zones of mixing or requests for zone of mixing renewals for wastewater treatment plants (WWTP) performing primary treatment shall comply with section 301(h) of the Federal~~

~~Water Pollution Control Act of 1972 (33 U.S.C. 1251). No renewal shall be allowed except upon application. Any renewal application shall be made at least one hundred and eighty days prior to the expiration of the zone of mixing.~~

~~(8) No zone of mixing established pursuant to this part shall be construed to prevent or limit the application of any emergency provisions and procedures provided by law.~~

~~(9) The establishment of any zone of mixing shall be subject to the concurrence of the U.S. Environmental Protection Agency.~~

~~(10) Each mixing zone may be subject to revocation, suspension, or modification if, after notice and opportunity for a hearing pursuant to chapter 91, HRS and the rules of practice and procedures of the department, the director determines that the terms specified in section 342D-6, HRS have been violated. In taking any action, the director may consider operating records, compliance investigations, or other information regarding discharge quality or impact on receiving waters. The action shall be effected by giving written notice to the permittee, which shall contain the reasons for the action.~~

~~(11) The director shall be notified within thirty days of the permanent discontinuance of a discharge. The zone of mixing shall terminate thirty days after such notification has been received.~~

~~(12) Upon expiration of the period stated in the designation, the zone of mixing shall automatically terminate and no rights shall become vested in the designee.] [Eff~~

~~11/12/82; am and comp 10/6/84; am and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/2/04; comp 06/15/09; comp 10/21/12; am~~

and comp 12/6/13; comp 11/15/14; R
] (Auth: HRS §§342D-1, 342D-4, 342D-5)
 (Imp: HRS §§342D-4, 342D-5)

Due to the repeal of section HAR 11-54-9, an amendment is proposed for section HAR 11-54-1 to include the definition of “zones of mixing.”

§11-54-1 Definitions. As used in chapter:

“Zones of mixing” means limited areas around outfalls and other facilities to allow for the initial dilution of waste discharges. Zones of mixing for the assimilation of domestic, agricultural, and industrial discharges which have received the best degree of treatment or control are recognized as being necessary. [Eff 11/12/82; am and comp 10/6/84; am and comp 04/14/88; am and comp 01/18/90; am and comp 10/29/92; am and comp 04/17/00; am and comp 10/02/04; comp 06/15/09; comp 10/21/12; am and comp 12/6/13; am and comp 11/15/14; am and comp] (Auth: HRS §187A-1, §§342D-1, 342D-4, 342D-5, Ch. 342E) (Imp: HRS §§342D-4, 342D-5, Ch. 342E; 40 C.F.R. §§122.2, 130.2, 131.3, 131.12; 22 U.S.C. §1362(14))

4. Repeal existing section HAR 11-54-12

~~§11-54-12 Intake credits. (a) An intake credit is an NPDES implementation tool that applies to the implementation of water quality standards through NPDES permits only.~~

~~(b) As used in this section:~~

~~"Background pollutant concentration means the water body concentration immediately upstream/upcurrent of a permitted discharge, regardless of whether those pollutants are natural or result from anthropogenic upstream activity.~~

~~"Intake pollutant" means the background pollutant concentration that is present in the intake water body, which must be the same water body as the receiving water for the discharge at the time it is withdrawn from such waters.~~

~~"Same body of water" means an intake pollutant is considered to be from the "same body of water" as the discharge if the department finds that the intake pollutant would have reached the vicinity of the outfall point in the receiving water within a reasonable period of time had it not been removed by the permittee. This finding may be deemed established if:~~

- ~~(1) The background pollutant concentration in the receiving water (excluding any amount of the pollutant in the facility's discharge) is similar to that in the intake water; and~~
- ~~(2) There is a direct hydrologic connection between the intake and discharge points; and~~
- ~~(3) Water quality characteristics (e.g. temperature, pH, hardness) are similar in the intake and receiving waters.~~

~~The department may consider other site specific factors relevant to the transport and fate of the pollutant in deciding whether a pollutant would or~~

would not have reached the vicinity of the outfall point in the receiving water within a reasonable period had it not been removed by the permittee.

(c) The director may, upon request of the discharger, adjust water quality based effluent limitations or standards to reflect credit for intake pollutants in the discharger's intake water only:

(1) To the extent necessary to meet the applicable limitation or standard, up to a maximum value equal to the intake pollutant value; and

(2) If there is no net increase in the concentration of the intake pollutant for which the credit is given. A discharger may add to the mass of the background pollutant concentration if an equal or greater mass is removed prior to discharge, so there is no net addition of the pollutant in the discharge compared to the intake water.

(d) Intake credit is not applicable to any pollutant for which a Total Maximum Daily Load (TMDL) and waste load allocation (WLA) have been developed and have been approved by the U.S. Environmental Protection Agency unless the TMDL and WLA provide for such an intake credit.

(e) The director shall grant credit for water quality based effluent limits only if:

(1) One hundred per cent of the intake water containing the intake pollutant is withdrawn from the same body of water into which the discharge is made;

(2) The facility does not chemically or physically alter the intake pollutant in a manner that would cause adverse water quality impacts to occur that would not occur if the pollutant was left in stream;

(3) The timing and location of the discharge would not cause adverse water quality impacts to occur that would not occur if the intake pollutant were left in stream; and,

~~(4) The director finds that the discharge of intake pollutants into the same body of water will not adversely impact narrative or numeric water quality criteria specified in this chapter.~~

~~(f) Effluent limitations must be established so that they comply with all other applicable state and federal laws and regulations including water quality-based requirements and anti-degradation policies.~~

~~(g) All requests for the establishment of credit for intake pollutants shall be made on forms furnished by the department and shall be accompanied by:~~

~~(1) Documentation showing a complete and detailed description of present conditions and how present conditions do not conform to standards; and~~

~~(2) Documentation showing that the intake and discharge waterbodies are the "same body of water;" and~~

~~(3) Documentation showing that pollutant(s) for which credits are being request actually come(s) from the intake water.~~

~~(h) Credit for intake pollutants shall be specified in the discharger's NPDES permit and shall become effective with the department's issuance of the permit for the specified permittee.~~

~~(1) All permits that include intake credits issued by the department shall include monitoring of all influent, effluent, and ambient water to demonstrate that the conditions in this section are maintained during the permit term.~~

~~(2) All credit for intake pollutants developed under this section shall be re-evaluated upon permit renewal.~~

~~(i) Credit for intake pollutants established under this section apply in the vicinity of the discharge for purposes of establishing permit limits for a specified pollutant for the specified permittee.~~

~~(j) All other water quality criteria established under this chapter continue to apply.] [Eff and~~

comp 11/15/14; R] (Auth: HRS §§342D-
4, 342D-5, 342D-53, Ch. 342E) (Imp: HRS §§342D-4,
342D-5, 342D-6, Ch. 342E)

5. Add new section HAR 11-54-9.0.5
6. Add new sections HAR 11-54-9.1.5, HAR 11-54-9.2, and HAR 11-54-9.3 (see respective rationales for rules)

§11-54-9.0.5 Site-Specific Flexibilities. As used in sections 11-54-9.1.5, 11-54-9.2, 11-54-9.3, and 11-54-9.4:

"40 C.F.R. §25" means the Code of Federal Regulations, Title 40, Protection of the Environment, Part 25, Public Participation in Programs under the Resource Conservation And Recovery Act, the Safe Drinking Water Act, and the Clean Water Act, revised as of 16 February 1979 unless otherwise noted.

"40 C.F.R. §131" means the Code of Federal Regulations, Title 40, Protection of the Environment, Part 131, Water Quality Standards, revised as of 21 August 2015 unless otherwise noted. [Eff and comp] (Auth: HRS §§342D-4, 342D-5, 342D-7) (Imp: §§342D-4, 342D-5, 342D-6, 342D-7; 40 C.F.R. §§25.5, 131.10, 131.11)

§11-54-9.1.5 Use Attainability Analysis.

§11-54-9.2 Water Quality Standards Variance.

§11-54-9.3 Site-Specific Aquatic Life Criterion.

7. Renumber existing section HAR 11-54-11 to new section HAR 11-54-9.4

Prior to the renumbering of section HAR 11-54-11, amendments are also proposed to clarify the requirements of sub-section HAR 11-54-11(d) and to replace “CFR” with “C.F.R.”.

§11-54-~~[11]~~9.4 Schedule of compliance. (a) A schedule of compliance is an NPDES implementation tool that applies to the implementation of water quality standards through NPDES permits only.

(b) The director may issue a schedule of compliance in an individual NPDES permit for the implementation of effluent limits derived from the water quality criteria in this chapter if the director makes a finding that the discharger cannot immediately comply with the water quality based effluent limitations upon the effective grant of the permit.

(c) A schedule of compliance may be included in an individual NPDES permit issued by the director pursuant to chapter 342D, HRS.

(d) A schedule of compliance in an NPDES permit is allowed only for water quality-based effluent limits based upon a new, revised, or newly interpreted water quality standard and must:

- (1) Comply with the provisions in 40 [~~CFR~~ section]C.F.R. §122.47, revised as of July 1, 2014[~~, and~~];
- (2) Include an enforceable final effluent limitation that is within the timeframe allowed as specified in sections 11-55-08(a)(2)(B), 11-55-15(d), 11-55-21, 11-55-22, 11-55-23 (10), and 11-55-34.07(3)(B) [~~and~~]; and
- (3) Require compliance as soon as possible.

(e) A schedule of compliance that exceeds one year in duration must set forth interim requirements, specific dates to meet interim requirements, and a date by which the required water quality-based effluent limitation must be achieved. [Eff and

comp 11/15/14; §11-54-11; am, ren §11-54-9.4, am and
comp] (Auth: HRS §§342D-4, 342D-5,
342D-53, Ch. 342E) (Imp: HRS §§342D-4, 342D-5, 342D-
6, Ch. 342E)

