

Clean Water Act – Vocabulary Guide

Document Description

This document goes through the definitions in HAR §11-55-01, which guides the language for the rest of the Clean Water Act in Hawai‘i. This document parses through the definitions stated there, including only the words that pertain to our proposed bill on fertilizer regulation. Additionally, commentary is provided for each term on how the term applies to our bill and how we might use each term or otherwise leverage their definitions.

Vocabulary

Action threshold

Definition: “the point at which pest populations or environmental conditions necessitate that pest control action be taken based on economic, human health, aesthetic, or other effects. An action threshold may be based on current and/or past environmental factors that are or have been demonstrated to be conducive to pest emergence and/or growth, as well as past and/or current pest presence. Action thresholds are those conditions that indicate the need for control actions and the proper timing of such actions.”

Pertinence: If we classify invasive alien algae (IAA) as a “pest”, then it is clear that IAA levels have far passed the action threshold in many areas, including Maunalua Bay. Although the exact threshold is hazy for IAA, it is clear that many areas have long since passed it, prompting action to mitigate “pest presence”. Regulating fertilizer use, thus limiting nutrient inputs into vulnerable coastal environments, is one such mitigation measure.

Annual treatment area threshold

Definition: “the additive area (in acres) or linear distance (in miles) in a calendar year to which a decision-maker is authorizing and/or performing pesticide applications in that area for activities covered under Appendix M...”

Pertinence: This term explicitly pertains to pesticides, but the stipulations will be pertinent if our fertilizer regulations will control how much fertilizer can be applied outside of the wet season.

Applicable effluent standards and limitations

Definition: “all state and federal effluent standards and limitations to which a discharge is subject under the Act; chapter 342D, HRS; and rules of the department including, but not limited to,

effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.”

Pertinence: As fertilizer contributes to effluent via leaching and runoff, our proposed fertilizer bill might be classified as an applicable effluent standard or limitation.

Applicator

Definition: “any entity who performs the application of a pesticide or who has day-to-day control of the application (i.e., they are authorized to direct workers to carry out those activities) that result in a discharge to State waters.”

Pertinence: Although this is explicitly about pesticides, we could leverage this language to talk about those who apply, or control the application of, fertilizers

Best management practices (BMPs)

Definition: “schedules of activities, prohibitions or designations of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of State waters. Best management practices also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.”

Pertinence: At a base level, this definition establishes the use of the acronym BMP as a standard practice. Additionally, as our proposed fertilizer bill would affect “schedules of activities” as well as place “prohibitions... of activities”, it could be classified as a BMP (or at the least informed by BMPs).

Department

Definition: “the state department of health.”

Pertinence: By convention, when referring to the Department of Health (DOH) in our legislation, we should simply refer to it as the department.

Effluent

Definition: “any substance discharged into State waters or publicly owned treatment works or sewerage systems, including but not limited to, sewage, waste, garbage, feculent matter, offal, filth, refuse, any animal, mineral, or vegetable matter or substance, and any liquid, gaseous, or solid substances.”

Pertinence: With such a broad definition, fertilizers caught in runoff (as well as any components from fertilizers) would undoubtedly be classified as effluent

Impaired water (also “water quality impaired water” or “water quality limited segment”)

Definition: “waters that have been identified by the state pursuant to Section 303(d) of the Clean Water Act as not meeting applicable state water quality standards (these waters are called “water quality impaired segments” under 40 CFR 130.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.”

Pertinence: If we could find examples of coastal waters in Hawai‘i that have been, or could be, classified as impaired waters because of runoff, especially cases where there is a direct link with fertilizers, that would provide greater grounds for our proposed bill.

Minimize

Definition: “to reduce and/or eliminate pollutant discharges to State waters through the use of pest management measures to the extent technologically available and economically practicable and achievable.”

Pertinence: Our proposed bill, in trying to reduce harmful runoff of fertilizers into State waters, could be classified as a minimizing effort.

Point source

Definition: “any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff, except return flows from agriculture irrigated with reclaimed water.”

Pertinence: Although this definition explicitly does not include most agricultural runoff, it is still open to potentially including fertilizer runoff from non-agricultural land.

Small entity

Definition: “any: (1) private enterprise that does not exceed the Small Business Administration size standard as identified at 13 CFR 121.201, or (2) local government that serves a population of 10,000 or less.”

Pertinence: We might want to explicitly include any non-agricultural small entities as those who our proposed bill will apply to. There may be some value in being this specific, but it might also detract, so we can discuss this later.

Standard of performance

Definition: “a standard for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the director determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants; provided that the standard shall not be less stringent than required under Section 306 of the Act, 33 U.S.C. §1316.”

Pertinence: Similar to BMPs, this can help inform our language when defining the bar for how non-agricultural applicators of fertilizers should conduct their practices.

State waters

Definition: “the same thing as defined in section 11-54-1.”

Pertinence: Most of this code (the Clean Water Act) pertains to State waters, so it’s good to be explicit about that in our proposed bill.

Storm water

Definition: “storm water runoff, snow melt runoff, and surface runoff and drainage.”

Pertinence: Under this definition of storm water, it seems that surface runoff of fertilizers due to rain would also be classified as storm water. This is especially pertinent when talking about fertilizer runoff during the rainy season.

Total maximum daily loads (TMDLs)

Definition: “a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (see section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).”

Pertinence: We can argue that during the rainy season, the TMDL for nutrient runoff is being vastly exceeded in many coastal systems, especially due to fertilizer runoff. We can also argue that establishing these fertilizers will guarantee a certain MOS currently not afforded to coastal systems with runoff and effluent originating from urban systems.