

Department of Health, Clean Water Branch  
Response to Public Comments on the Hawaii Administrative Rule  
Amendment, Published on April 30, 2012

On April 30, 2012, the State of Hawaii (State), Department of Health (DOH), Clean Water Branch (CWB) published a hearing notice for the proposed revisions to Hawaii Administrative Rules (HAR), Chapters 11-54 (Water Quality Standards) and 11-55 (Water Pollution Control) in the *Honolulu Star-Advertiser*, *Hawaii Tribune-Herald*, *West Hawaii Today*, *The Maui News*, and *The Garden Isle* newspapers, Docket No. R-1-12. The proposed revisions were available for public review between the date the hearing notice was published, April 30, 2012 and the date of the hearing, June 4, 2012. Comments were received by the Department until 4:30 pm on the day of the hearing and were accepted by email, mail, and hand delivery.

DOH received more than 90 sets of comments on the proposed revisions. Although the proposal included revisions for Concentrated Animal Feeding Operations requirements, all comments focused on the revisions to the HAR involving the Pesticide General Permit (PGP). As a result of comments received, the following were revised:

HAR, Sections 11-54-1 and 11-55-01 Definitions

1. The definition of "Declared emergency pest situation" in Section 11-54-4(e)(1) was revised to include language requiring County Mayors to obtain the concurrence of DOH regarding an emergency pest situation. The definition of "Declared emergency pest situation" in HAR, Section 11-55-01 refers to the definitions as provided in HAR, Section 11-54-4(e)(1).
2. The definition of "Pest" in HAR, Section 11-54-4(e)(1) no longer refers to the FIFRA definition, but instead includes FIFRA's current definition verbatim. The definition of "Pest" in HAR, Section 11-55-01 refers to the definitions as provided in HAR, Section 11-54-4(e)(1).
3. The definition of "Pesticide" in HAR, Section 11-54-4(e)(1) was revised to be consistent with the definition as provided in EPA's Final PGP. The definition of "Pesticide" in HAR, Section 11-55-01 refers to the definitions as provided in HAR, Section 11-54-4(e)(1).

HAR, Section 11-55, Appendix M for discharges to surface drinking water sources

4. Any pesticide may be discharged to surface drinking water sources consistent with its FIFRA label provided that the operator shall coordinate with the owner of the surface drinking water source to prevent pesticide-treated water from entering the drinking water intake and distribution system (e.g., the valve to the drinking water source is shut, or by diversion).

HAR, Section 11-54-4(e)(2)(F)

5. Deleted entire paragraph saying “Serving or would serve the public interest and are consistent with public trust rights in these waters.” DOH instead will obtain and review information from applicants about the impacts of proposed pesticide applications on public trust resources under Appendix M, Section 8, through an Appendix M Notice of Intent form.

DOH used the Environmental Protection Agency’s (EPA) Final Pesticide General Permit (PGP) as its primary basis in developing the State’s PGP. The DOH received numerous public comments in response to its proposed revisions to the water quality standards, permitting rules and PGP. These public comments raised many concerns similar to those raised during the EPA’s PGP comment period. DOH’s responses are consistent with those responses provided by the EPA.

This General Permit is the first step in a long-term iterative process towards the development of a comprehensive program and that information collected through the implementation of the General Permit will help to inform future decisions.

DOH acknowledges and appreciates all of the comments that were received. Since many commenters expressed similar concerns, we have grouped all of the comments in the thirty categories below.

1. Strengthen the public’s right to know; recordkeeping, reporting and public disclosure
2. Protect drinking water; impaired waters and Class 1 and AA waters; endangered species
3. Use the least toxic / reasonable alternative to pesticides
4. Strengthen monitoring requirements
5. Expand the range of pesticide coverage / treatment thresholds
6. Enforce BMP’s
7. Appreciate the work that CWB does
8. Pesticide use by state and county road workers and farmers
9. Independent verifications of site monitoring results
10. Ditches, state waters

11. Require individual permits or limited area/operator general permits rather than statewide general permit
12. Review pesticide usage prior to permit issuance; consult with other agencies prior to issuing permits
13. Extend comment period; working group; stakeholder consultation
14. Remedial actions
15. Compliance, corrective action, liability
16. Automatic approval
17. Improve Hawaii's waters
18. General Permit fails to protect public health, strengthen protection of Hawaii's waters
19. Declared pest emergency
20. Enforcement
21. Pesticide definition
22. All dischargers are required to comply even without NOI
23. Pesticide discharges prior to October 31, 2011
24. Proposed rules should not go beyond federally mandated requirements.
25. The proposed rule revisions should ensure that NPDES permits for pesticide applications to state waters will be required within the state of Hawaii only insofar as such permits are required under the federal Clean Water Act.
26. The proposed condition under HAR §11-54-6(e)(2)(F) requiring that pesticide applications to state waters must serve the public interest and be "consistent with public trust rights in these waters" is ambiguous, unnecessary, and should be deleted.
27. Restrictions on permit coverage for pesticide applications to class 1 inland waters, class AA marine waters, and waters restricted in accordance with the state's "No Discharge" policy should not be included in the proposed PGP.
28. Proposed limitations on permit coverage for pesticide applications to surface drinking water sources and their tributaries up-stream go beyond federal requirements and should be deleted or substantially modified.

29. The proposed PGP contains conflicting requirements relating to the "adjustment period".
30. Clarification is needed regarding the Notice of Intent requirement for eligible discharges to water quality impaired waters.

### Comment Categories

#### 1. **Strengthen the public's right to know; recordkeeping, reporting and public disclosure**

Many commenters indicated that the public should be able to access from the DOH's website all notices of intent to discharge pesticides, pesticide treatment plans and monitoring records. Many commenters also wanted to know where, when and which pesticides were being discharged so they could adapt their activities or use of that water, monitor impacts, provide comment and suggest alternatives ahead of time. They also wanted immediate notifications of all spills and accidents. One commenter stated that recordkeeping and reporting requirements should aim to inform the public of the scope, type, timing, and location of aquatic pesticide discharge in Hawaii and that recordkeeping and reporting requirements should be strengthened by requiring reports from a wider range of dischargers and requiring timely disclosure.

#### Response:

*The General Permit requires all Decision-makers and Applicators to maintain certain records to help them assess performance of Pest Management Measures and to document compliance with permit conditions. All Operators who are Applicators must maintain records that specifically document pesticide application equipment maintenance and details of the pesticide application event. Since Decision-makers who are not themselves performing pesticide applications are generally not able to record such information, the State requires different recordkeeping requirements depending on the type of Operator.*

- (1) *Documentation of equipment calibration; and*
- (2) *Information on each treatment area to which pesticides are discharged, including:*
  - (A) *Description of each treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by location, to which pesticide(s) are discharged;*
  - (B) *Pesticide use pattern(s) (i.e., mosquito and other flying insects, weed and algae, animal pest, or forest canopy);*
  - (C) *Target pest(s);*

- (D) Documentation of any assessment of weather conditions in the treatment area prior to and during application to ensure application is consistent with all applicable federal requirements;
- (E) Name of each pesticide product used including the EPA registration number;
- (F) Quantity of each pesticide product applied to each treatment area;
- (G) Pesticide application date(s); and
- (H) Whether or not visual monitoring was conducted during pesticide application and/or post-application and if not, why not and whether any unusual or unexpected effects identified to non-target organisms.

*In addition, all Operators must maintain records in the event of an adverse incident, corrective action or in the event of a discharge resulting from a spill or leak.*

*Currently, all information, including all adverse incident reports, is available to the public upon request. This information cannot be uploaded to the DOH website due to resource limitations. The DOH is in the process of developing a system that will allow the public to view NOI information online and, as resources allow, develop more tools to make more information available to be viewed online.*

One commenter stated that the public should be able to review NOIs and comment on them at least 30 days prior to discharge and that the public should not have to individually request this information.

Response:

*A general permit is an NPDES permit that covers multiple facilities within a specific category that have the same type of discharge and are located in a specific geographic area. A general permit applies the same or similar conditions to all dischargers covered under the general permit. An individual permit, in contrast, is a permit custom tailored to an individual facility and requires the facility to submit specific information regarding the type of facility, the nature of the discharge and the receiving water quality. Individual permits require considerably more steps that must be followed (specified in 40 CFR §124) and as a result, require more time to develop. As part of the process, individual permits require a public notice and are open to public comment. By issuing general permits, the permitting authority allocates resources in a more efficient manner to provide timelier permit coverage. The DOH lacks the resources to require public notice and address all public comments for each pesticide application prior to permit issuance. The DOH will develop tools to make more information available online as resources become available.*

A few commenters recommended that assessment reports of pesticide applications and their impacts include water quality monitoring.

Response:

*Please refer to 4.*

One commenter suggested publishing NOIs and changes to them in the Office of Environmental Quality Control's Environmental Notice

Response:

*DOH is looking into the possibility of publishing the Notices of Intent in the Department's Office of Environmental Quality Control's Environmental Notice.*

One commenter recommended that DOH increase the frequency of the reporting requirement to require monthly or semi-yearly reports, rather than just an "annual" report. Additionally, like the annual reports, PDMPs are required only from the same group of Decision-makers that must submit NOIs and are considered "large entities" (App. M-39-45; DOH Fact Sheet, p. 142). We request that DOH revisit the requirements for who must submit a PDMP under the General Permit and expand that category to include more Decision-makers.

Response:

*DOH acknowledges the comment.*

One commenter suggested that Hawaii review California's Vector Control Permit and expand its regulations to require a larger number of Decision-makers to submit NOIs, annual reports and PDMPs.

Response:

*DOH acknowledges the comment.*

**Public Notice and Transparency**

One commenter stated that the public notice was difficult to access and was not noted on the Hawaii eGov Calendar of Events and provided recommendations on how to improve this, including placing a pull down tab for pesticides and link that page to all relevant DOH sites. The commenter also stated that the public notice document was posted in such a way that it can't be cut and pasted and inserted in emails.

Response:

*The public notice that was supplied to the news media provided the address of the DOH-CWB website, where a PDF version of the notice of public hearing*

could be found. A link to that very document was also placed on the home page of the Clean Water Branch's website. The CWB has no authority over the contents of the eGov Calendar of Events; however, the CWB did in fact notify all the necessary DOH agencies, as required. The CWB, like majority of the DOH programs, maintains its own web pages and information on CWB activities may not appear on all DOH sites or the DOH home page. The CWB does not have the authority to determine what is placed on other DOH sites or the DOH home page; however, the CWB home page may be accessed from the DOH home page. The quickest route to the CWB home page is to type in "Clean Water Branch" in the search box on the main DOH home page. This will take you directly to the CWB home page. On that page is a link entitled "Public Notices and Update." Clicking on that link takes you to the documents that are relevant to this rule change, including the notice of public hearing, the proposed changes to the rules in Ramseyer format, the rationale for the proposed changes and the fact sheet for the General Permit. Please see 1 above regarding Notices of Intent and pesticide treatment plans and monitoring records.

The PDF public notice document is secured to deter unauthorized modification; however, the document may be downloaded in its entirety and emailed as an attachment. A direct link to that public notice document is also possible. That link may be emailed.

## **2. Protect drinking water; impaired waters and Class 1 and AA waters; endangered species**

Many commenters expressed the need for stronger protection of drinking water sources. Commenters stated that DOH's permit makes numerous exceptions to allow for discharge of pesticides into our drinking water, our most protected class 1 and AA waters, and impaired waters and that inadequate protection is provided for these waters. Many stated that it also does little to ensure the protection of waters that may be critical habitat for Hawaii's many endangered species and that DOH should apply the strictest standards when any of these waters are affected. Several commenters stated that glyphosate (Round-up), diquat or atrazine should not be used in drinking water supplies. A few commenters stated that DOH should limit pesticide discharges to surface drinking water. One commenter stated that DOH should monitor and curtail pesticide discharges into impaired waters. One commenter suggested requiring individual NPDES permits for pesticide discharges into surface drinking waters and impaired waters.

### Response:

*The proposed General Permit applies stricter standards for discharges of pesticides into drinking water sources, Class 1 and AA waters, and impaired waters. Class 1 waters include drinking water sources and both Class 1 and Class AA waters include waters which have been identified as a unique or critical*

*habitat for threatened or endangered species by the U.S. Fish and Wildlife Service. Not all discharges to these waters can be covered under this General Permit. If the discharges do not meet the eligibility requirements of the General Permit, coverage under an individual NPDES Permit will be required. Coverage is only available with this General Permit for certain discharges to impaired waters.*

*EPA recognizes, and DOH concurs, that waters receiving the highest level of protection frequently require a quick response to preserve the quality of those waters and/or to protect public health near these waters. EPA has allowed coverage of these waters in their PGP and DOH has applied the same rationale for allowing coverage under this General Permit to Class 1 and Class AA waters, provided the applications are made in response to a declared pest emergency situation or as determined by the director or to maintain or restore water quality or to protect public health or the environment and that these applications either do not degrade water quality or only degrade water quality on a short term basis. All other applications to Class 1 and Class AA waters are not covered under this General Permit.*

*Discharges to agricultural irrigation ditches and canals within Class 1, Inland waters require the submission of an NOI regardless of the area treated. (Discharges to agricultural irrigation ditches and canals within Class 2, Inland waters shall submit an NOI only if exceeding any threshold.)*

*Drinking water source protection is factored into the pesticide registration process by which pesticides are authorized for aquatic use under FIFRA. The proposed general permit does not override or conflict with FIFRA labeling requirements and as such, only pesticides labeled for such use may be applied to drinking water sources. The proposed general permit addresses additional requirements necessary for the application of pesticides to drinking water sources.*

*The DOH has decided to not restrict pesticide use in drinking water sources as long as they are FIFRA labeled and licensed by the state department of agriculture for such use; however, the pesticides treated water must be prevented from entering the drinking water intake system. Discharges to surface drinking water sources (for domestic use) and their tributaries up-stream are not eligible for coverage under this permit and require coverage under an individual NPDES permit, unless the discharge is made in response to a declared pest emergency situation or as directed by the director; or if the pesticide treated water is prevented from entering the drinking water intake and distribution system. Examples of how this may be accomplished include routing the pesticide-treated water to other (e.g. agricultural) uses; bypassing the drinking water intake or by shutting off the intake or other means of diversion. Surface drinking water sources must still comply with all applicable requirements set forth*

*by the department's Safe Drinking Water Branch. In addition to these requirements, technology-based and water quality based effluent limitations, pest management measures, monitoring, planning, corrective action, and recordkeeping and reporting requirements that are designed to provide resource protection consistent with the statutory and regulatory provisions of the CWA.*

*The General Permit will cover discharges of pesticides to waters that are impaired generally for "pesticides" where the specific pesticide causing the impairment has not been identified. DOH is not restricting other pesticide discharges from coverage under the General Permit since EPA believes, and DOH concurs, that based on existing impairments for named pesticides, that the vast majority of the "pesticides" impairments are from pesticides that are no longer registered for use under FIFRA. DOH expects that as these "pesticide" impaired waterbodies are further assessed, currently registered pesticides or classes of pesticides may be identified as the cause of the impairment, at which point, Operators will no longer be eligible to obtain permit coverage under this General Permit for discharges of those named pesticide active ingredients or degradates of such. DOH believes that where pesticide impairments are specific enough to target a narrow group of pesticide products, those specific pesticide products should not be eligible for discharge without a more detailed assessment of the potential for such discharges to contribute to the existing impairment. DOH may opt to not approve coverage under this General Permit in certain situations, impose additional requirements, and/or require an Operator to apply for coverage under an individual permit. While individual permits are more burdensome in most instances, they do enable the State to more thoroughly review discharge plans and establish permit conditions that adequately protect waters in a way that, at a minimum, does not further contribute to the existing impairment.*

*Discharges to waters which are impaired for a substance which is not an active ingredient in that pesticide or a degradate of such an active ingredient are eligible for coverage. Discharges to waters impaired for temperature or some other indicator parameter, or for physical impairments such as "habitat alteration" are also eligible for coverage, unless otherwise prohibited by the State or EPA; given these exceptions, it would not be appropriate to disallow General Permit coverage on impaired waters in general. Conversely, the permit is not available for the discharge of any pesticide to water that is impaired for a substance that is an active ingredient in that pesticide or a degradate of such an active ingredient, except if the discharges from the application of pesticides are made in response to a declared pest emergency situation; or as determined by the Director. For example, application of the pesticide copper sulfate to a waterbody impaired for either copper or sulfates would not be eligible for coverage under this permit, because copper sulfate can degrade into these two substances, unless the discharge was made in response to a declared pest emergency situation; or as determined by the Director. In this instance, if the discharge was not made in*

*response to a declared pest emergency situation or determined by the director, the Operator would have to choose between obtaining coverage under an individual permit for such a discharge or selecting some other means of pest management, e.g., using mechanical means or a different pesticide active ingredient.*

*For this permit, the State and EPA determined that it does not have information warranting a limitation for all impaired waters regardless of the impairment. In fact, the application of a pesticide to water in some instances actually improves the quality of the water, such as when used to control algae growth that can deplete oxygen levels in water. It is important to note that this permit allows the State, based on additional information, to opt not to approve coverage under this General Permit, or at a later date to require an Operator covered under this General Permit to apply for coverage under an individual permit.*

*Also, several states have listed waters as impaired for “pesticides” but have not identified the specific pesticide for which the waterbody is impaired. Without additional information suggesting that the waterbody is impaired for a specific active ingredient or degradate of that active ingredient, the State and EPA are providing coverage under their permits for discharges of pesticides to waters that are impaired generally for “pesticides.” The State and EPA expect that as these impaired waters are further assessed, specific pesticides or classes of pesticides will be identified as the cause of the impairment, at which point dischargers will no longer be eligible to obtain permit coverage under the PGP for discharges of those named pesticide active ingredients or degradates of such, except if the discharges from the application of pesticides are made in response to a declared pest emergency situation or as determined by the Director.*

*Class 1 inland waters and Class AA marine waters receive the highest level of protection in Hawaii and include waters which have been identified as a unique or critical habitat for threatened or endangered species by the U.S. Fish and Wildlife Service. Provisions are made to minimize impacts to wildlife. The General Permit requires operators to orally report adverse incidents to the department within 24 hours. Written documentation is also required within 30 days, which includes documentation of the steps taken to correct, repair, remedy, clean up or otherwise address any adverse effect. Additionally, Operators must notify the National Marine Fisheries Service (NMFS) (in the case anadromous or marine species) or the U.S. Fish and Wildlife Service (FWS) (in the case of terrestrial or fresh water species) of adverse incidents affecting federally-listed threatened or endangered species or its federally-designated critical habitat. DOH expects Operators to use their best professional judgment in determining the extent to which non-target effects appear to be abnormal or indicative of an unforeseen problem associated with an application of pesticides. The DOH believes that it is important to include adverse effects to threatened and endangered species; however, it is equally important to report adverse effects on*

*all non-targeted species. Part of the mission of the DOH-CWB is to protect State waters for all aquatic life and wildlife, regardless of whether they are endangered or not.*

*DOH believes the proposed general permit will protect the public health and environment with necessary permit requirements without unduly burdening operators.*

One commenter recommended that DOH revise this General Permit to protect endangered and threatened species and critical habitats and suggested the following language to be utilized:

This General Permit does not authorize any act that results in the taking of threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under section 9 of the federal endangered Species Act, 16 U.S.C. § 1531 et seq., and/or H.R.S. § 195D-4. This General Permit requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Operator is responsible for meeting all requirements of the applicable federal or state endangered species laws.

Response:

*DOH acknowledges the comment and appreciates the suggestion.*

### **3. Use the least toxic / reasonable alternative to pesticides**

Many commenters stated that only large applicators are asked to evaluate alternatives to pesticides, and they are given broad license to decide whether and how pesticides should be used. Many commenters stated that DOH should set objective standards raising the bar for when pesticide use is allowed, with less toxic alternatives clearly favored and best practices to minimize harm detailed. Many commenters suggested requiring applicators to select the least toxic alternatives or that only safe alternatives are used.

Response:

*Provisions have been placed into this General Permit to assure the protection of state waters. This General Permit does not require the use of the least toxic alternative or that non-pesticide methods be tried first; however, the permit does require that the Operator consider alternatives to pesticide application. Like the EPA's PGP, Part 2.b of the General Permit requires Decision-makers to evaluate pest management options, both pesticide and non-pesticide methods: no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides. These steps have been incorporated into this General*

*Permit to minimize harm. For each pest management option, Decision-makers required to submit an NOI must implement Pest Management Measures to meet the technology-based effluent limitations. Decision-makers are required to implement efficient and effective means of Pest Management Measures that most successfully minimize discharges to state waters resulting from the application of biological pesticides and chemical pesticides that leave a residue. EPA has clarified in its PGP that "minimize" means to reduce and/or eliminate pesticide discharges to waters of the U.S. through the use of Pest Management Measures to the extent technologically available and economically practicable and achievable. Combinations of various pest management options are frequently the most effective Pest Management Measures over the long term. The goal should be to emphasize long-term control rather than a temporary fix. In this General Permit, "Pest Management Measure" is defined to be any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards and recommended industry practices related to the application of pesticides, relevant legal requirements and other provisions that a prudent Operator would implement to reduce and/or eliminate pesticide discharges to state waters. In developing the Pest Management Measures for each pest management area, the Decision-maker must evaluate management options which include considering impact to water quality, impact to non-target organisms, feasibility, and cost effectiveness.*

*It is not the intent of DOH to stop the use of chemical pesticides or adversely affect Applicators' ability to treat the pests that may threaten the public health or other public interests. The goal of the General Permit is to limit to appropriate circumstances point source discharges from application of biological pesticides, and chemical pesticides that leave a residue when a pesticide is selected as the preferred pest management option.*

*DOH lacks the resources to individually review each pesticide application and ensure that it uses least toxic alternatives. DOH instead requires Operators and Decision makers to use their best professional judgment in applying pesticides to State waters. DOH retains the authority to require an individual permit or to enforce where it becomes aware that an Operator is not acting prudently or not exercising best professional judgment. Appendix M, §1(b)(5); HAR §11-55-34.05.*

Several commenters requested that DOH explore alternatives to these chemicals and join the growing national movement to designate adequate funds for native vegetation as competition to weed species, for ecologically responsible roadside and park management. One commenter suggested that products such as Neem tree extracts be used.

Response:

*The DOH has modified the definition of “pesticide” to include the full EPA PGP definition of pesticide. The following has been added:*

*The term “pesticide” applies to insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. The definition encompasses all uses of pesticides authorized under FIFRA including uses authorized under sections 3 (registration), 5 (experimental use permits), 18 (emergency exemptions), 24(c) (special local needs registrations), and 25(b) (exemptions from FIFRA).*

*Note: drugs used to control diseases of humans or animals (such as livestock, fishstock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides. Biological control agents, except for certain microorganisms, are exempted from regulation under FIFRA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests, parasitic wasps, fish, etc).*

*This provision allows the use of pesticides that have experimental use permits, emergency exemptions, special local needs registrations and exemption from FIFRA. FIFRA requirements still apply and the pesticide must be licensed by the state department of agriculture or other state agency regulating pesticides.*

One commenter suggested that decision makers be required to prove that they have tried all alternatives and that the DOH list guidelines for preferred integrated pest management strategies for each category (i.e. BAT, BADTs) for each use in Hawaii.

Response:

*DOH acknowledges the comment.*

One commenter stated that DOH should adopt the precautionary principle approach to the acceptability of specific chemicals in pesticides. Many pesticides contain carcinogenic or endocrine-disrupting chemical compounds, some of which have been detected in drinking water aquifers in Hawaii. Often times, chemical compounds are permitted until sufficient research has demonstrated harm. DOH should presume the absence of research to insufficient evidence that the chemical is not harmful. For any proposed chemical compound for which insufficient research exists, DOH should only allow coverage of such discharges under individual NPDES permits instead of the General Permit.

Response:

*DOH acknowledges the comment.*

One commenter stated that if Operators are required to apply pesticides according to label under DOH's General Permit, they should be able to read the label and suggested that DOH require that all applicators demonstrate literacy or English proficiency.

Response:

*It is the responsibility of the Operator to ensure that applicators not only read and understand the label, but to ensure that the label instructions and permit conditions are followed. Determining literacy or English proficiency is beyond the scope of this General Permit.*

*For the purpose of this permit, an Operator is defined in section 11-55-01 to mean any entity associated with the application of pesticides which results in a discharge to state waters that meets either of the following two criteria: (1) 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); or (2) any entity with control over the decision to perform pesticide applications including the ability to modify those decisions. Operators identified in (1) above are referred to in this permit as Applicators while Operators identified in (2) are referred to in this permit as Decision-makers. As defined, more than one Operator may be responsible for complying with this permit for any single discharge from the application of pesticides.*

*For purposes of this permit, all Operators are defined as either an Applicator or a Decision-Maker or both an Applicator and a Decision-maker.*

*When an Operator is both an Applicator and a Decision-maker, the Operator must comply with all applicable requirements imposed on both Applicators and Decision-makers. When the permit references all "Operators," both Applicators and Decision-makers must comply.*

#### **4. Strengthen monitoring requirements**

Many commenters stated that the DOH should strengthening site monitoring requirements and that DOH asks only that applicators do a brief visual "spot check" for impacts upon discharge, at the applicator's discretion. The commenters further state that ambient water quality monitoring should be required before and after application for *all* discharges, and is imperative for the most toxic pesticides, examining for the specific known and suspected effects of each pesticide.

Response:

*NPDES permits are required by federal regulation to include monitoring provisions (40 C.F.R. 122.41(j), 122.44(i), and 122.48(b)). These regulations do not require that ambient monitoring be the type of monitoring required, and as such, EPA has fulfilled the obligations in 40 C.F.R. § 122.48 to (a) “specify requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods” and (b) “specify required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity” using an alternate approach. Furthermore, as there are no test procedures proved under 40 CFR Part 136 or 40 C.F.R. subchapters N or O for the vast majority of pollutants authorized for discharge by this permit, 40 C.F.R. § 122.44(i)(1)(iv) requires that monitoring be conducted according to a test procedure specified in the permit. DOH concurs with EPA’s finding and specifies such requirements and procedures in Section 4 of the General Permit. Given the infeasibility of requiring ambient water quality data to demonstrate permit compliance, the studies indicating that ecological risk assessment under FIFRA has been generally protective of established water quality standards, and that the General Permit requires additional protective measures beyond FIFRA, EPA has determined and DOH concurs that for the General Permit, there are suitable alternative monitoring activities to determine permit compliance other than ambient water quality monitoring. The benefits of the monitoring provisions in the General Permit are to ensure that Operators are complying with the permit requirements. The monitoring requirement provides flexibility to be applicable to the wide range of environments, situations, and targets to which pesticides may be applied. Additionally, the monitoring requirements provide the flexibility to respond to site specific conditions to ensure proper pesticide applications and to detect any adverse incidents that may result from the discharge. Thus, monitoring for adverse incidents is required during all applications and post application efficiency surveillance is required if this is conducted by the permittee as a matter of practice.*

*The General Permit requires that any adverse incidents be noted and reported to the DOH. Adverse incident is not defined in HAR 11-55-1, but generally means any effect of a pesticide’s use that is unexpected or unintended in which there is evidence that a person or non-target organism has likely been exposed to a pesticide residue and suffered toxic or adverse effect.*

*DOH has considered and concurs with EPA’s decision on how best to apply monitoring provisions as required in 40 C.F.R. 122.41(j) and 122.48(b). The provision does not require that chemical monitoring or ambient water quality monitoring be the form of monitoring required. Like EPA, DOH has elected not to utilize ambient water quality monitoring because it was determined to be infeasible for this general permit for several reasons:*

1. *Uncertainty: Ambient water quality monitoring would generally not be able to distinguish whether the results were from the pesticide application for which monitoring is being performed, or some other source.*
2. *Lack of applicable measurable standards: Federal pesticide-specific ambient water quality criteria do not exist at this time for the vast majority of constituents in the products authorized for use under this PGP.*
3. *Safety and Accessibility: Pesticides, particularly those used for mosquito control and forestry pest control, are often applied over waterbodies in remote areas, hazardous terrain, and swamps that are either inaccessible or pose safety risks for the collection of samples.*
4. *Difficulty of residue sampling for chemical pesticides: For chemical pesticides, the “pollutant” regulated by the General Permit is the residue that remains after the pesticide has completed its activity, and it is this residue that would be the subject of any water quality monitoring requirement. However, the point at which only “residue” remains is not practically discernible at this time for all pesticides.*
5. *Usefulness of data: During EPA’s evaluation, some states have questioned the value of ambient water quality monitoring data obtained from state permitting programs. The data generally showed that water quality impacts were not occurring, and one state even discontinued the requirement in revisions of its state permit.*

*In addition, DOH expects in general that compliance with the conditions in the General Permit (e.g., the technology-based effluent limitations, corrective actions, etc.) will result in discharges that are controlled as necessary to meet applicable water quality standards based on the cumulative effect of several factors:*

1. *Under FIFRA, EPA evaluates risk associated with pesticides and mitigates unreasonable ecological risk. Under this General Permit, all pesticides must be FIFRA registered and labeled and compliance with the FIFRA labeling is required.*
2. *EPA evaluated national-scale ambient monitoring data, as well as the frequency of the identification of specific pesticides as the cause of water impairments, to assess whether pesticide residues are currently present in waters at levels that would exceed water quality standards. The monitoring data, although limited in scope, show that, in most samples, most pesticides were below ambient*

*water quality criteria or benchmarks developed by EPA's Office of Pesticide Programs (OPP). For the small number of pesticides found in monitoring data to be present above such benchmarks, the evaluation documents risk mitigation actions taken by EPA (such as cancellation of pesticide uses) that EPA expects have reduced the levels of those pesticides in water.*

- 3. Technology-based effluent limitations in the General Permit provide further protections beyond compliance with existing FIFRA requirements.*
- 4. Biological pesticides discharged to waters, by regulatory definition do not work through a toxic mode of action. For chemical pesticides, the discharges covered under the General Permit are the residues after the pesticide has performed its intended purpose. Thus, the residue will be no higher than, and in many instances, lower than, the concentration of the pesticide as applied.*
- 5. There are limitations on coverage under the General Permit. (Refer to Section 1.b.)*

Several commenters stated that they would like to see the NPDES revised rules amended, to request a closer scrutiny of what pesticides are being applied, their impact to aquatic habitats, and a more open disclosure to impacted communities, so that private citizens and communities can stay abreast about pesticide applications, and monitor their impact on sensitive aquatic habitats.

Response:

*All information regarding pesticide application under this General Permit will be available to the public upon request (see 1). The pesticide(s) to be used must be listed on the Notice of Intent (NOI).*

*All pesticides applied under this General Permit must be applied in a manner consistent with the labeling of the pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which authorizes EPA to review and register pesticides for specified uses. This General Permit does not override or conflict with existing FIFRA labeling requirements, but does have additional requirements for pesticide applications to meet technology-based effluent limitations and water quality based standards. EPA expects and DOH concurs that the General Permit will minimize discharges of pesticides to the aquatic environment. Reduced discharges of these pesticides to surface waters may be associated with a variety of benefits, including human health improvements, increase recreational opportunities and improved ecosystem functions. The evaluation of the health and environmental effects of individual pesticides have been conducted by EPA during the FIFRA registration process and are beyond the scope of this General Permit.*

*NPDES permits are required by regulation to include monitoring provisions. The benefits of monitoring provisions are to ensure that Operators are complying with the permit requirements. The monitoring requirement in the General Permit provides flexibility to be applicable to the wide range of environments, situations, and targets to which pesticides may be applied. The General Permit requires that any adverse incidents be documented and reported to the DOH-CWB. See above.*

One commenter compared monitoring requirements of other states and suggested assessing fees to cover monitoring.

Response:

*DOH acknowledges the comment and appreciates the suggestion. DOH-CWB lacks the resources to formulate, implement, oversee and enforce monitoring activities that some larger states have implemented. The assessment of fees to cover monitoring requires legislative action and is beyond the scope of this General Permit. As stated above, ambient water quality monitoring is infeasible at this time; however, this General Permit is the first step in a long-term iterative process towards the development of a comprehensive program and that information collected through the implementation of the General Permit will inform future decisions.*

A few commenters suggested incorporating provisions based on specific studies of Hawaii's waters, interrelated ecosystems, and existing apparatuses for pesticide application and regulation. The commenters further suggest ambient water quality monitoring using the existing numeric standards in HAR 11-54-4(b)(3) for toxic pollutants applicable to all waters.

Response:

*DOH is unaware of any such current, reliable studies. The numeric criteria listed in HAR 11-54 lists the active ingredients of some toxic pollutants; however, pesticide-specific ambient water quality criteria do not exist at this time for the vast majority of constituents in the products authorized under this General Permit. For chemical pesticides, the pollutant regulated by this General Permit is the residue that remains after the pesticide has completed its activity, and it is this residue that would be the subject of any water quality monitoring requirement. In general, ambient monitoring using the numeric criteria listed in HAR 11-54 would not reveal the source of the contamination. Ambient water quality monitoring would generally not be able to distinguish whether the results were from pesticide application for which monitoring is being performed or whether the results reflect applications made by an entity operating upstream or*

*whether the results reflect applications made years ago using pesticides that are no longer approved for use.*

## **5. Expand the range of pesticide coverage / treatment thresholds**

Several commenters stated that DOH's permit applies its most stringent standards to a far too limited number of potential applicators; primarily those applying pesticides over 6400 acres or 20 linear miles. These mainland scaled thresholds are too high to capture many of Hawaii's most significant pesticide dischargers.

### Response:

*DOH believes, without information that proves otherwise, that the thresholds are adequately sized. Although the threshold values are the same as the EPA's, the calculation of the annual treatment area for weed and algae and animal pest control was developed specifically for Hawaii. The 6400 acres may seem large for mosquitos and other flying insect pest control and forest canopy pest control; however, this threshold is based on the cumulative area treated over the course of a year. Additionally, the treatment area is the total area to which pesticide applications are made, when any part of those areas is a State water. Normally mosquitos and other flying insect pest control and forest canopy pest control are performed by federal, state, and county agencies, which are all required to submit NOIs regardless of the treated area. These threshold values would only apply to private or commercial operators. The threshold values for weed and algae pest control and animal pest control is the same as the EPA's PGP, however, the method in which the annual area is calculated was specifically developed based on Hawaii's unique geography where the lengths of our streams are shorter than on the mainland. In Hawaii, each pesticide application is counted in the annual treatment area, whereas EPA does not account for multiple applications to the same area.*

### *Example:*

*For Hawaii, applications four times a year to both banks of a three-mile long reach of stream will count as a total of twenty-four linear miles (three miles x two banks x four applications per year = twenty-four miles to which pesticides are applied in a calendar year).*

*For EPA, applications four times a year to both banks of a three-mile long reach of stream will count as a total of six linear miles (three miles x two banks = six miles to which pesticides are applied in a calendar year).*

*Please refer to the annual treatment area threshold definition in HAR, Section 11-55-01.*

**6. Enforce BMP's**

One commenter stated that best management practices for ground cover use, water cannon use, plowing on windy days, spraying on windy days etc. needs to be enforced on farms using chemical applications and that wind speed and direction needs to be considered when spraying will be allowed.

Response:

*The proposed General Permit covers point source discharges from pesticide applications to State waters. Terrestrial (land based) applications, spray drift and agricultural run-off into State waters are not covered and are beyond the scope of this General Permit.*

**7. Appreciate the work that CWB does**

As you know, we have been working with the Clean Water Branch for years and appreciate the good work they do, especially because they are already so understaffed. Although economic times are hard, Hawaii's water quality is too important to our tourism industry and overall economy to continue underfunding such an important agency. Thanks for your consideration.

Response:

*The DOH acknowledges and appreciates the support.*

## **8. Pesticide use by state and county road workers and farmers**

Several commenters stated: I live near Kapoho Bay on the Big Island, and pesticides are regularly sprayed by state and county road workers as well as the many papaya farms and orchid farms right up the hill. When I swim in the warm pools, I wonder if I'm swimming in a pool of pesticides. Many in our community have contracted cancer, and I also wonder if there is a relationship there. The turtles in Kapoho Bay have been found to have tumorous growths; what's in store for humans?

Response:

*Terrestrial applications are not covered by the proposed General Permit. DOH acknowledges and appreciates the information provided by the commenter. DOH believes that appropriate safeguards are provided in the General Permit and FIFRA requirements.*

## **9. Independent verifications of site monitoring results**

One commenter stated the need for routine independent verification of accuracy for all site monitoring results by an outside agency to avoid conflict of interests.

Response:

*DOH appreciates the suggestion; however, does not believe that verification of monitoring results by an outside agency will avoid conflict of interests. Operators will be required to conduct visual monitoring for adverse effects during application and during any post-application surveillance. In addition to visual monitoring, the Operator will be required to maintain written records of, among other things, whether or not visual monitoring was conducted during the pesticide application and/or post application, and if not, why not. These records must be made available, upon request, to the DOH, EPA or any other Federal, state or local regulatory agency governing pesticide applications. In addition, a summary of this information must be included in an annual report for Operators subject to the annual reporting requirement. The General Permit also requires operators to immediately notify the DOH of any adverse incident (as defined in the permit) related to the application of pesticides covered under the permit. The monitoring, reporting and record keeping formats required in the General Permit were developed with the goal of not causing undue burden upon pesticide applicators, and of not including requirements that would conflict with those already in effect under existing laws, while providing adequate protection of State waters. The*

*department lacks the resources to provide monitoring oversight for all permitted applications and it does not seem feasible either to require external agencies to provide monitoring oversight.*

## **10. Ditches, state waters**

Several commenters stated: We want “ditches” that ultimately convey water to a public water supply or waters of the US or Waters of the state of Hawaii to be themselves considered waters of the US and subject to Clean Water Act protection – e.g. protect the ditches in addition to the “streams.” One commenter stated that maintaining ditches is not more important than maintaining Hawaii’s endangered ecosystems or protecting public health.

### Response:

*The DOH believes that adequate protection is provided for ditches that ultimately convey water to public water supplies because it is requiring that treated water be prevented from entering the drinking water intake system. See Response 2 above.*

*Although Hawaii’s Water Quality Standards, HAR §11-54, generally do not apply to irrigation ditches under the definition of State waters” in HAR §11-54-1, they do apply to irrigation ditches that are also used for a purpose other than irrigation, overflow into any other State waters, or are also “waters of the United States” under federal rules. 40 CFR 122.2 defines “Waters of the United States or waters of the U.S. as:*

- (a) 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;*
- (b) All interstate waters, including interstate “wetlands;”*
- (c) 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:*
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;*
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or*
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;*

- (d) *All impoundments of waters otherwise defined as waters of the United States under this definition;*
- (e) *Tributaries of waters identified in paragraphs (a) through (d) of this definition;*
- (f) *The territorial sea; and*
- (g) *“Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.*

*Ditches that ultimately convey water to public water supplies or flow into state waters are subject to Clean Water Act protection which is implemented through HAR 11-54. Drainage ditches, ponds, and reservoirs that are required as part of a water pollution control system are excluded by statute and are beyond the scope of this revision.*

*The application of pesticides in any state water, including all ditches that are considered state waters, must conform to the use patterns stated in the General Permit. These include pesticides that are used for the purpose of controlling mosquito and other flying insect pests; controlling weed and algae pests; controlling animal pests; controlling forest canopy pests; or protecting public health or the environment in a declared pest emergency situation. Applications not conforming to these use patterns are not covered under this General Permit and individual NPDES permit coverage must be sought. In addition, all pesticides must be applied in a manner consistent with the FIFRA labeling of the pesticide and must be applied in a manner so applicable narrative and numeric state water quality criteria, as required in HAR 11-54 are met. Ditch maintenance can be an important factor in protecting Hawaii’s ecosystem and protecting public health; however, not all aspects of ditch maintenance are covered under this General Permit.*

**11. Require individual permits or limited area/operator general permits rather than state wide general permit**

Several commenters stated that the DOH should issue individual permits or limited area/operator general permits rather than a statewide general permit or that individual permits should be required for Class 1, AA and protected areas such as sanctuaries and critical habitats.

Response:

*EPA developed a general permit in part to reduce administrative burdens associated with the requirement to obtain NPDES permits for these pesticide discharges. Authorized states can also use a general permit, instead of individual permits to reduce the administrative burden of permitting if the state has general permitting program authority. Currently, DOH lacks the resources to obtain and*

*review all of the information required to issue individual or limited area or operator permits for each and every entity applying pesticides in Hawaii.*

**12. Review pesticide usage prior to permit issuance; consult with other agencies prior to issuing permits**

Several commenters stated that the DOH review pesticide usage prior to issuing any permit, where water will be directly or indirectly impacted. One commenter stated that an outside agency be contacted and consulted prior to the approval of any permits.

Response:

*The DOH lacks the resources to obtain and review all of the information required to issue individual or limited area or operator permits for each and every entity applying pesticides in Hawaii. Requiring the consultation with an external agency or requiring the review of pesticide usage prior to issuance would be much less efficient than a general permit and would essentially require the same resources as issuing an individual permit.*

*All pesticide applications allowed under this General Permit are required to comply with FIFRA labeling regulations. Pesticides that are not FIFRA registered are not covered under this permit. FIFRA authorizes EPA to review and register pesticides for specified uses. The General Permit does not override or conflict with existing FIFRA labeling requirements, but does have additional requirements for pesticide applications to meet applicable CWA regulatory and statutory requirements, such as meeting technology-based effluent limitations and water quality based standards. DOH expects that the PGP will minimize discharges of pesticides to the aquatic environment. Minimizing discharges of these pesticides to surface waters may be associated with a variety of benefits, including better human health, recreational opportunities, and ecosystem functions.*

**13. Extend comment period; working group; stakeholder consultation**

Several commenters stated that the comment period was too short and has likely left a number of organizations and individuals unable to comment and urge an extension of the comment period to gather as much input as possible. One commenter stated that the federal court ruling provides Hawaii with the opportunity to better protect its environment and public health from pesticide pollution and that industry and agency lobbyists got in on the process early and succeeded in inserting many loopholes that Hawaii's Pesticide General Permit fails to protect public health and the environment. One commenter expressed concern that the timing of the General Permit rule-making announcement, relatively short length of the comment period and unavailability of general Permit

working group consultation information has compromised the public's ability to meaningfully participate in the rule-making process.

Response:

*DOH believes that appropriate time was provided for the public to review and comment on the proposed General Permit and that all state and federal requirements were met. Federal rules require at least 30 days for public comment on any draft permit. 40 CFR 124.20(b). Hawaii law requires at least 30 days' notice for a public hearing. HRS ch. 91. A notice of public hearing regarding the proposed amendment to HAR §§11-54 and 11-55, and the proposed General Permit (HAR 11-55, Appendix M) was published on April 30, 2012 and a public hearing was held on June 4, 2012.*

*The time for DOH's action in issuing these rule changes and PGP was limited by EPA's delayed action. EPA provided draft versions of their PGP, but did not publish its final PGP until October 31, 2011. Since DOH's PGP closely followed EPA's, DOH's General Permit could not be finalized until after EPA published its PGP. As a result of the U.S. Sixth Circuit Court of Appeals decision, NPDES permit requirements must be met as of October 31, 2011. Members of Hawaii's regulated community expressed extreme urgency and requested expedited action by the DOH in order to comply with the court order. Many members expressed concern that certain agricultural irrigation systems and projects targeting the control of invasive species would be adversely impacted due to their cessation of pesticide use. DOH worked to strike a reasonable balance between the need to finalize the General Permit and the need to receive public comments after public notice.*

*It was not the intent of the DOH to exclude any interested parties in the discussions regarding this General Permit and the accompanying change to HAR 11-54, water quality standards. The DOH consulted with the Department of Agriculture, the lead agency for pesticide application in Hawaii, on which agencies should be consulted regarding this General Permit. An informal work group grew by word of mouth and participants came and went. As these meetings were informal consultations, no formal agenda was prepared and no minutes were kept. By the time DOH prepared a final draft proposed rule, just a few members of the regulated community were still continuing discussions with DOH. The DOH regrets that it was not able to identify and include all interested stake holders in the consultations. DOH did afford all parties the opportunity to comment during the public comment period from April 30, 2012 through June 4, 2012*

*This General Permit will be in effect for not more than five years and may be modified by the DOH within that timeframe. This General Permit is the first step in a long-term iterative process towards the development of a comprehensive*

*program and that information collected through the implementation of the General Permit will inform future decisions. People interested in participating in the next round of Appendix M revision should watch the CWB website and newspapers for public notices.*

**14. Remedial actions**

One commenter suggested the need to consider remedial actions in response to the cumulative health and environmental effects of pesticides

Response:

*The evaluation of the health and environmental effects of individual pesticides have been conducted by EPA during the FIFRA registration process and is not being reevaluated as part of this General Permit.*

*The proposed General Permit addresses application of pesticides to state waters only and does not cover terrestrial applications. All pesticide applications covered under this General Permit must be applied in a manner consistent with the labeling of the pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which authorizes EPA to review and register pesticides for specified uses. This General Permit does not override or conflict with existing FIFRA labeling requirements, but does have additional requirements for pesticide applications to meet technology-based effluent limitations and water quality based standards. EPA expects, and DOH concurs, that their General Permits will minimize discharges of pesticides to the aquatic environment. Reduced discharges of these pesticides to surface waters may be associated with a variety of benefits, including human health improvements, increased recreational opportunities and improved ecosystem functions.*

*The proposed General Permit requires visual monitoring of the area to and around where pesticides are applied for possible and observable adverse incidents, such as unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use (see 4). The Operator is required to orally notify the DOH within 24 hours of becoming aware of an adverse incident and provide a written report within thirty days. Remedial actions in response to an adverse incident are also required and are handled on a case-by-case basis. For the purposes of this permit, "adverse incidents" only includes toxic or adverse effects that occur as a result of point source discharge of a pesticide to state waters. Adverse incidents from operations not involving point source discharge to state waters are not covered under this General Permit and are not subject to the adverse incident reporting requirements.*

**15. Compliance, corrective action, liability**

One commenter stated that compliance, corrective action and liability are weak or almost nonexistent in the General Permit and that DOH leaves almost everything to Operators to determine and remedy including adverse incidents, PDMP violation reporting follow through corrective action, etc. The commenter stated that all of these need to be stronger or these regulations become nearly useless.

Response:

*This General Permit includes technology based and water quality based effluent limitations, monitoring, planning, corrective action, and recordkeeping and reporting requirements that are designed to provide resource protection consistent with the statutory and regulatory provisions of the CWA. All Operators, including those not required to submit NOIs, must comply with the conditions of the General Permit, which clearly defines the requirements and responsibilities. All records maintained by the Operator as well as any reports can support enforcement and all records must be made available to the DOH upon request. Operators are required to provide the DOH with oral notice of any adverse incidents within 24 hours and a written report within 30 days.*

*The requirements in this permit will result in water quality protection beyond what is already required under FIFRA label. This General Permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling. Pesticide applications in violation of certain FIFRA requirements could also be a violation of the permit and therefore a violation of the CWA.*

*DOH has included corrective action requirements in this permit to assist this new universe of NPDES permittees in effectively meeting technology-based and water-quality-based effluent limitations and implementing Pest Management Measures in this permit. Corrective action requirements apply from the time any authorized Operator begins discharging under this permit. These requirements are not tied to submission of an NOI. Corrective actions in this permit are follow-up actions an Operator must take to assess and correct problems. They require review and revision of Pest Management Measures and pesticide application activities, as necessary, to ensure that these problems are eliminated and will not be repeated in the future. The permit makes clear that the Operator is expected to assess why a specific problem has occurred and document what steps were taken to eliminate the problem. DOH believes this approach will help Operators in complying with the requirements of the permit on a consistent basis. Compliance issues with some of the permit's requirements -- for instance, those related to reporting and recordkeeping and some of those related to operation and maintenance -- may be able to be corrected immediately simply by following already established procedures, and therefore, are not considered problems that trigger the corrective action provisions of the permit.*

*DOH currently lacks the resources that would be needed to oversee every pesticide application and to monitor each application for any adverse incident. Self-policing by pesticide applicators will be an important component in achieving compliance, as it is for much of the Clean Water Act and Hawaii's Water Pollution law. The proposed general permit will protect public health and environment with necessary permit requirements without unduly burdening the operators.*

**16. Automatic approval**

One commenter questions the provision of providing automatic approvals to discharge to applicators that don't receive a response from DOH within 30 days and states that this is unacceptable. The commenter further states that if DOH needs more staff or funding to process permits it should establish fees as California did to help cover this program, or extend the time to process these permits.

Response:

*This automatic coverage provision is not unusual; other CWB general permits also grant automatic coverage to certain types of dischargers if they don't receive a response from DOH to their permit application. HAR, Section 11-55-34.09. All relevant permit conditions apply even if DOH does not respond. Fees would go to the general fund and not be available to cover program or staffing costs directly unless a special fund were established by law.*

**17. Improve Hawaii's waters**

Several commenters requested that DOH adopt changes that will improve water quality and reduce and prevent further degradation of Hawaii's reefs, streams and other water resources. One commenter expressed shock and disappointment that the DOH is not taking a strong stand to protect drinking water and agricultural waters of Hawaii and that DOH is taking a slake attitude towards regulating the misuse of pesticides and related chemicals by farmers.

Response:

*DOH believes that the proposed rules will protect and improve water quality. The General Permit goes beyond the existing environmental protections under FIFRA by imposing several distinct requirements to protect water quality (e.g., technology and water quality based effluent limitations, monitoring and reporting requirements, standard and special conditions, etc.) As explained in the Fact Sheet, the General Permit implements NPDES program requirements in a reasonable manner to address the specific pesticide applications covered. Not all discharges to Class 1 and AA waters are eligible for coverage under this General Permit. If the additional specific requirements for Class 1 (including*

surface drinking water sources) and AA waters cannot be met, an individual permit must be sought. DOH's intent is not to prohibit all pesticides in state waters. DOH believes the proposed general permit will protect the public health and environment with necessary permit requirements without unduly burdening operators.

The proposed General Permit covers point source discharges from pesticide applications to State waters only. Terrestrial (land based) applications, spray drift and agricultural run-off into State waters are not covered and are beyond the scope of this General Permit. The misuse of pesticides in general is also beyond the scope of this General Permit; however, other regulations may apply.

This General Permit is the first step in a long-term iterative process towards the development of a comprehensive program and that information collected through the implementation of the General Permit will inform future decisions.

#### **18. General Permit fails to protect public health, strengthen protection of Hawaii's waters**

Several commenters stated that this General Permit fails to protect or does not provide adequate protection of public health and the environment. One commenter stated that healthy plants can fend off pests without us spraying pesticide and that pesticides, herbicides and fungicides must be made illegal one day and classifying them as pollutants is a great start. One commenter stated that the federal court ruling establishing that pesticides be regulated as pollutants explicitly declared that FIFRA alone does not provide adequate protection of our water and that DOH should not be backpedalling to reliance on FIFRA.

#### Response:

DOH believes that this General Permit will protect public health and the environment. This General Permit was designed to allow the use of pesticides in state waters specifically for the control of:

- Mosquito and other flying insect pests
- Weed and algae pests
- Animal pests
- Forest canopy pest or
- Protecting public health or the environment.

DOH considers the control of mosquitos, aquatic weeds and other pests to be an important public health and environmental protection issue. For example, the use of pesticides is an important factor in controlling mosquitos to prevent or minimize outbreaks such as Dengue fever and West Nile virus and the application of pesticide is important to control algae growth to prevent oxygen depletion in water. The use patterns covered by the General Permit closely

*follow EPA's PGP, which has undergone significant discussion and review with the goal of protecting public health and the environment.*

*Uses other than those listed are not covered under DOH's General Permit. This General Permit does not give broad license to apply pesticides in any manner that the Operator feels fit. All pesticide applications covered under DOH's General Permit must comply with all of its provisions **in addition to** the FIFRA requirements. DOH's General Permit imposes special restrictions for discharges into surface drinking water sources (see 2).*

*This General Permit does not cover terrestrial pesticide applications, since DOH-CWB does not have the authority to regulate such use. DOH's intent with this General Permit is not to cause undue burden to Applicators, adversely affect timely applications of necessary pesticide treatments, or include redundant requirements already covered under existing laws, regulations and permits. DOH believes the proposed general permit will protect the public health and environment with necessary permit requirements without unduly burdening operators.*

*All pesticides must undergo rigorous testing with EPA oversight before becoming FIFRA registered and many restrictions are placed on the sale, storage and use of each product. DOH believes, however, that FIFRA regulations alone do not provide adequate protection of Hawaii's waters, which is why the General Permit includes provisions that go beyond FIFRA labeling requirements.*

One commenter stated that since nothing in federal regulations precludes a state from adopting or enforcing requirements that are appropriate to address discharges in their state or are more stringent or more extensive than those required under NPDES regulations, Hawaii should do so.

Response:

*DOH believes that the requirements of this General Permit will protect the public health and environment with necessary permit requirements without unduly burdening operators. DOH's intent with this General Permit is not to prevent the use of chemical pesticides or adversely affect Applicators' ability to treat the pests that threaten the economy and public health. The goal of the General Permit is to minimize point source discharges from application of biological pesticides and chemical pesticides that leave a residue when a pesticide is selected as the preferred pest management option.*

One commenter suggested that DOH incorporate General Permit provisions based on specific studies of Hawaii's waters, interrelated ecosystems, and the existing apparatuses used for pesticide application and regulation and further recommended that DOH refrain from wholesale adoption of EPA's PGP and

rather tailor the General Permit to better reflect what we know – and do not know – about pesticide application impacts on Hawaii’s state waters.

Response:

*DOH believes that more information and further studies would help it better understand the impacts to the interrelated ecosystems, but currently lacks the resources to conduct such studies. The DOH is also aware of potential public health, environmental and economic impacts that may occur with the inability to utilize pesticides in certain waterways. This General Permit is the first step in a long-term iterative process towards the development of a comprehensive program and that information collected through the implementation of the General Permit will inform future decisions.*

One commenter provided information and references for several pesticides.

Response:

*DOH acknowledges the comment and the information.*

19. **Declared pest emergency**

Several commenters stated that consultation with health professionals, environmental scientists, and entomologists or qualified Health Department staff should be required in order to validate the need to declare a pest emergency prior to any such declaration. One commenter stated that because of the potential of an abuse of authority, it appears appropriate to put in definitional language to ensure this power is used with caution.

Response:

*A declared pest emergency situation should appropriately be declared by a public agency responsible for protecting human health and the environment. The definition of “Declared pest emergency situation” will be modified to include concurrence with the director for all pest emergency situations declared by county mayors. Health professionals, environmental scientists and entomologists qualified to validate such emergency situations are under the direction of the director of health. The director may call upon these professionals to validate the need to declare a pest emergency. The DOH does not have the authority to require such consultation for the President of the United States or the Governor of Hawaii.*

One commenter suggested that the power to declare pest emergencies should not be afforded to the Governor of Hawaii, stating his “propensity for declaring

emergencies that exclude environmental review” and the “propensity of politicians particularly at the county level to bend to political pressures.”

Response:

*The DOH serves ultimately under the direction of the Governor. The Governor has the authority to declare a pest emergency situation, or order the director to do so, whether or not this language is included. For declaration of pest emergency situations on the county level, concurrence by the director was added to the permit.*

One commenter stated that it should be a violation, with clear consequences, if a declared emergency is later ruled not an emergency / invalidated and DOH should specify what those consequences are.

Response:

*This is beyond the scope of this General Permit. Any ruling that a declared emergency situation was not an actual emergency or later invalidated would most likely come from legal action, and as such, the consequences would be settled in a court of law.*

One commenter stated that the definition of what can constitute an “emergency” should be narrowed and more clearly defined; *i.e.* if something is foreseeable it cannot be called an emergency. Economic loss does not qualify as an emergency. Anyone claiming an emergency should be required to show significant risk or harm.

Response:

*Pesticide application to state waters should be available to protect public health and the environment in a declared pest emergency. The General Permit does not and should not hinder the ability to treat pests appropriately in responding to declared pest emergencies.*

**20. Enforcement**

One commenter requested the DOH to adopt measures which will ensure greater oversight and enforcement of the regulations and states that if provisions are not made to periodically inspect these operations and enforce the regulations these regulations will be for naught.

Response:

*The goal of this General Permit is to protect public health and the environment. All conditions of the General Permit must be followed and all Operators covered under this permit are responsible for any violation that may occur. This General Permit requires technology based and water quality based effluent limitations, monitoring, planning, corrective action, recordkeeping and reporting, all of which may be used to support enforcement actions. If operators do not feel that the General Permit coverage is appropriate for their pesticide applications, they may apply for individual permit coverage. Self-policing by pesticide applicators will be an important component in achieving compliance, as it is for much of the Clean Water Act and Hawaii's Water Pollution law.*

*DOH currently lacks the resources that would be needed to oversee every pesticide application and to monitor each application for any adverse incident. DOH will, however, make efforts to investigate legitimate complaints from the public and pursue appropriate actions if violations are discovered. The DOH may, as resources allow, conduct periodic inspections of some of the permitted operations. All pesticide applications covered under this General Permit are subject to FIFRA requirements and regulations, therefore, violations of certain FIFRA requirements could also be a violation of this General Permit. The DOH will work with other agencies if violations are discovered.*

*DOH believes the proposed general permit will protect the public health and environment with necessary permit requirements without unduly burdening operators.*

## **21. Pesticide definition**

One commenter stated that the term "pollutant" be used to describe toxins created by pesticides and requested that the water supply's health be improved with helpful legislation and education. One commenter stated the need for a better definition of when pesticides become pollutants.

### Response:

*The CWA requires dischargers to obtain NPDES permit coverage for point source discharges of pollutants to Waters of the United States. The term "pollutant," as defined in the CWA means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean (A) "sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces" within the meaning of section 312 of this Act; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used*

*either to facilitate production or for disposal purpose is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources. Hawaii's Water Pollution statute prohibits discharge of a "water pollutant" to State waters without a permit. HRS §342D-50(a). The statute defines "water pollutant" as 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. HRS §342D-1.*

*In 2009, the US Court of Appeals for the Sixth Circuit held that pesticides (biological pesticides and chemical pesticides with residuals) are considered "pollutants" under the CWA, therefore a NPDES permit is required for all such point source discharges. Chemical pesticides that leave no excess portion (residual) are not considered "pollutants" under this ruling; however, biological pesticides are always considered a pollutant under the CWA regardless of whether the application results in residuals or not and require NPDES permit coverage for all discharges from a point source. With certain exceptions, a NPDES permit is required in order legally to "discharge" a "pollutant" from a "point source" to "waters of the United States" – all of these terms are defined under the CWA. As a result of this decision, all point source discharges into waters of the U.S. of biological pesticides or chemical pesticides that leave a residue, regardless of whether the residue is toxic or not, will require NPDES permit coverage. The "pollutant" that is regulated by this General Permit is the residue that remains after the pesticide has completed its activity, and as such, it is the residue that would be subject to any ambient monitoring, if such monitoring were practicable (see 4); however, as stated in the fact sheet, the point at which only "residue" remains is not practically discernible at this time for all pesticides.*

*The DOH believes that the provisions of this General Permit will help to protect public health and the environment; including drinking water sources (see 2). Although the DOH tries to provide information to educate the public on water pollution related issues whenever possible, these activities are limited by resource availability. Legislative actions are beyond the scope of this General Permit.*

**22. All dischargers are required to comply even without NOI**

Several commenters stated that only large dischargers are required to submit NOIs and PDMPs and small dischargers that regularly use pesticides for the purposes defined may be excluded from the requirements of the General Permit.

Response:

*Operators that are not required to submit NOIs (i.e., small applicator, including small aquaculture businesses and small taro farmers) are still required to comply with the terms of the permit such as: minimizing discharges to state waters resulting from the application of pesticides, meeting applicable water quality standards, and monitoring for and reporting of adverse incidents.*

*All Operators (regardless of whether they are required to submit an NOI or not) must comply with NPDES permit requirements for point source discharges of biological pesticides, and of chemical pesticides that leave a residue to state waters. Similarly, Operators applying biological pesticides, and chemical pesticides that leave a residue that result in discharges to state waters consistent with any of the pesticide use patterns identified in the permit, are required to either seek coverage through an NOI, and once authorized, comply with the permit, or comply automatically with the NPDES permit. Please note that pesticide applications that do not result in point source discharges of pollutants to State waters do not require NPDES permit coverage regardless of the size of that application.*

*All discharges to State waters, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.*

### **23. Pesticide discharges prior to October 31, 2011**

Commenters stated that each of the various types of pesticide applications that are to be regulated under the Hawaii's proposed PGP have been occurring – and serving beneficial purposes – for many years without apparent adverse impacts to human health or the environment. They further stated that the DOH's inability to adopt these proposed rules in an expeditious manner is negatively affecting them. They also indicated that the inability to lawfully apply pesticides in or near waterways in Hawaii is placing in jeopardy ongoing conservation efforts and water deliveries to agriculture throughout the state, and has the potential to severely impact public health and safety through increased risks of flooding and disease if not resolved in a timely manner.

#### Response:

*In Hawaii, the NPDES individual permit is already available for discharges to State waters that meet the current WQS in HAR, Chapter 11-54. Prior to October 31, 2011, all pesticide discharges to State waters had to have complied with the WQS. If any pesticide discharge complied with the WQS in the past, the Owner/Operator may apply for an individual NPDES permit today and does not have to wait for the rule amendments.*

*It is important to note that the commenters did not provide studies and/or data to support their assertion that the pesticide applications have been occurring for many years without adverse impacts to human health or the environment. The DOH-CWB is very interested in finding out who has been applying pesticides to State waters prior to the adoption of these proposed rules. We also request copies of their water quality data which show they complied with the existing Water Quality Standards and copies of their studies showing no impact to human health and the environment.*

*The DOH-CWB decided to initiate the proposed amendments to HAR, Chapters 11-54 and 11-55 to allow discharges from specific pesticide use patterns (mosquito and other flying insect pest control, aquatic weed and algae control, aquatic nuisance animal control, and forest canopy pest control). The proposed rule amendments were initiated to assist the public that may need to apply pesticides in State waters. The DOH-CWB waited until the EPA issued their final Pesticide General Permit in October 31, 2011 to determine the pesticide use patterns EPA deemed appropriate.*

#### **24. Proposed rules should not go beyond federally mandated requirements**

Several commenters stated that the DOH-CWB, in public testimony before the Department of Business, Economic Development, and Tourism's Small Business Regulatory Review Board, stated that its proposed rules would not go beyond federally mandated requirements. The commenters recommended that the DOH-CWB adopt a permit program that, to the maximum extent possible, is consistent with the Pesticide General Permit promulgated by U.S. EPA and that does not impose additional, unnecessary, or unreasonable restrictions on pesticide use. The commenters stated that pesticide use is already highly regulated under FIFRA; Hawaii Pesticides Law, Hawaii Revised Statutes (HRS) Chapter 149A; and existing state pesticide regulations. Under these regulatory programs, all pesticides must undergo a rigorous registration process to ensure that, when used as prescribed on the pesticide label, pesticides will not pose unreasonable risks to human health or the environment. During the registration process, EPA considers the pesticide ingredients, the intended use and application sites, directions for use, and supporting scientific studies on human health and environmental effects and exposures, and imposes restrictions as necessary to ensure that the pesticide serves its intended purpose without unreasonable adverse effects. Any pesticide approved under FIFRA and HRS Chapter 149A for use in, near, or over water, has been extensively studied to assess potential impacts to human health and aquatic resources from its use and, where necessary, appropriate limitations have been incorporated into the pesticide label to mitigate any such impacts.

Response:

*DOH-CWB did not state that the “proposed rules would not go beyond federally mandated requirements.” The DOH-CWB stated that we will be consistent with federal requirements, and we need to comply with State requirements. Even non-delegated States where the U.S. EPA’s NPDES PGP is applicable must comply with State requirements. Pursuant to Section 401(a) of the Clean Water Act, the U.S. EPA will be required to obtain a Section 401 Water Quality Certification from the non-delegated States for the EPA’s NPDES PGP. This is to ensure that the discharge will be in compliance with effluent limits, the State’s water quality standards, and “any other appropriate requirement of State law.”*

*DOH does not believe that the proposed rules impose unnecessary or unreasonable restrictions on pesticide use. It is true that pesticides must undergo a rigorous registration process. However, the commenters are assuming that every pesticide user is following the pesticide label. The DOH-CWB cannot make this assumption as the 2006 State of Hawaii Water Quality Monitoring and Assessment Report shows State waters impaired for pesticides.*

*Under State law, DOH is authorized to issue permits only where the director determines that they will be in the public interest. DOH is also required to protect public natural resources, including water, in permitting and compliance. DOH believes that the requirements of this proposed General Permit will protect the public health and environment with necessary permit requirements without unduly burdening operators.*

25. **The proposed rule revisions should ensure that NPDES permits for pesticide applications to state waters will be required within the state of Hawaii only insofar as such permits are required under the federal Clean Water Act.**

Several commenters have stated that there is congressional action to bring regulatory relief from the requirement to obtain permit coverage for pesticide applications to state waters. The commenters have indicated that if permits are not required for FIFRA-compliant pesticide applications under the Clean Water Act, then permits should also not be required within the State of Hawaii, and therefore, the DOH should maintain the flexibility to quickly adapt to further national developments in the regulation of pesticide applications.

Response:

*Hawaii’s administrative rule making process does not allow the automatic adoption by reference of potential/future federal rules. Hawaii law, HRS ch. 91-3, requires a public hearing after 30 days prior public notice, before the adoption of any rule or the amendment or repeal of any rule. The purpose of the notice is to*

*afford all interested person opportunity to submit data, views, or arguments, orally or in writing.*

26. **The proposed condition under HAR §11-54-6(e)(2)(F) requiring that pesticide applications to state waters must serve the public interest and be "consistent with public trust rights in these waters" is ambiguous, unnecessary, and should be deleted.**

*Several commenters (e.g., 571, 573, 575, 580, 581, 582, 583, 584, 591 and 621) objected to the paragraph stating that pesticide applications to State waters must serve the public interest and be consistent with public trust rights in these waters. They stated that these provisions establish within the water quality standards a condition that the Department would need to consider when evaluating whether coverage under the proposed PGP should be granted for any proposed pesticide application and seem to require a higher standard of review for pesticides than other discharges. Comment 582 in particular opines that these requirements are ambiguous and unworkable and force a permit reviewer to make case-by-case public policy determinations without specific objective criteria or guidelines, inviting arbitrary decision making. The comment adds that the legal concept of "public trust rights" is a determination that judges, not State civil service employees, should make.*

#### RESPONSE

DOH agrees that the public interest and public trust requirements do not need to be set forth in its Water Quality Standards, and will delete Paragraph 2F from HAR §11-54-4(e).

The public interest standard is already included in permitting rules for individual NPDES permits. HAR §11-55-39. An "NPDES permit application" is defined as "a form used for an individual permit." In addition to individual permits, DOH is now authorizing coverage for certain pesticide applications under a Pesticide General Permit (PGP) pursuant to Chapter 11-55 Appendix M. The types of pesticide applications authorized for coverage under the PGP can be analyzed for their effect in general on the public interest and public trust resources.

Pesticide applications can have significant benefits in the specific pest control use patterns allowed—in declared pest emergencies or to control flying pests such as mosquitoes, weed and algae pests, animal pests, and forest canopy pests. Such pesticide applications have benefits, among others, in avoiding diseases, controlling invasive species and maintaining irrigation ditches for agriculture.

These rules limit potential harms to the public interest and public trust resources because the pesticide applications are restricted in several ways. Only pesticides licensed by State agencies may be applied. The pesticides may only be applied consistent with the federal label under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and in a manner that State narrative and numeric water quality criteria are met. The rules also limit the waters to which the pesticides may be applied. Receiving waters for applications may not be impaired for the pesticide's active ingredient or degradates. Pesticide discharges are allowed in Class 1, Class AA, and "no discharge areas" only for pest emergencies, short term water quality degradations, or for weed or algae control to maintain flow in agricultural irrigation ditches or in flooded agricultural fields. Discharges to surface waters that feed into drinking water sources are only allowed in pest emergencies or where restricted by several requirements to minimize impacts.

DOH finds that the public interest generally will be served by the pesticide applications authorized under the PGP because the benefits to public health and the environment outweigh the risks of adverse impacts, given the restrictions contained in the rules.

For public trust resources, the Hawaii Supreme Court directed DOH to protect them in permitting and compliance, not wait for determinations by judges, contrary to the public comment. DOH finds that the proposed rules, including the PGP, with their restrictions, will in general adequately conserve and protect public trust water resources. Certain pesticide applications under the PGP may benefit public trust water by eliminating pests such as weeds and algae and improving water quality in some ways. DOH will obtain and review information from applicants about the impacts of proposed pesticide applications on public trust resources under Appendix M, Section 8, through an Appendix M Notice of Intent form. This information should assist the DOH in conserving and protecting public natural resources. Hawaii State Constitution, Article XI, Section 1. Public complaints, inspections performed by DOH and others, and enforcement actions will help ensure that the public trust resources are protected in compliance and enforcement as well as in permitting.

**27. Restrictions on permit coverage for pesticide applications to class 1 inland waters, class AA marine waters, and waters restricted in accordance with the state's "No Discharge" policy should not be included in the proposed PGP.**

Commenters have stated that the proposed limitations on permit coverage for pesticide applications to state waters classified as "class 1 inland waters", "class AA, marine waters," and areas restricted in accordance with the state's "No Discharge" policy go beyond federal requirements. They stated that under the EPA's Pesticide General Permit, similar restrictions would apply only to so-called

"Tier 3 waters" or those waters specifically designated by the state as Outstanding Natural Resource Waters (ONRW's). They also stated that waters designated as an ONRW are subject to the highest level of protection under the water quality standards anti-degradation policy, such that any lowering of water quality is prohibited except that some limited activities which result in temporary and short-term changes in water quality may be permitted. They further stated that because Tier 3 ONRW provisions of the water quality standards are so stringent, most states, including Hawaii, have not designated any ONRW's. The commenters indicated that it is because of the strict anti-degradation requirements applicable to ONRW's that EPA's PGP imposes limitations on general permit coverage for such waters, and these anti-degradation requirements do not apply to class 1 or class AA waters. The commenters also indicated that while it is true that class 1 and class AA waters in Hawaii are generally of very high quality, they nevertheless are not classified as ONRW's and are therefore afforded a slightly lower level of protection under the state's water quality standards. The commenters indicate that there is no federal requirement to impose the limitations on permit coverage that have been proposed upon applications to waters other than ONRW's, and the restrictions on permit coverage for pesticide applications to class 1 inland waters, class AA marine waters, and waters restricted in accordance with the state's "No Discharge" policy should not be included in the proposed PGP.

Response:

*EPA has delegated to DOH the authority to administer the NPDES permit program in the State of Hawaii. The DOH-CWB has the authority to treat Class 1 and Class AA waters with a higher level of protection. DOH believes that the PGP's restrictions on pesticide applications in those waters are appropriate and consistent with DOH's obligations under Hawaii law.*

**28. Proposed limitations on permit coverage for pesticide applications to surface drinking water sources and their tributaries up-stream go beyond federal requirements and should be deleted or substantially modified.**

Commenters have stated as follows: the pesticides which may be applied to aquatic environments located up-stream of or near drinking water intakes generally have specific language on the pesticide label imposing restrictions on the use of the pesticide to the extent necessary to protect drinking water sources; such products have undergone an exhaustive registration process that includes evaluation of the various exposure pathways and potential impacts to human health, resulting in specific label requirements intended to ensure that the intended use of the product will not cause unreasonable adverse effects on human health and the environment; typical use restrictions may include limitations on application rates/concentrations or on minimum distances between drinking water intakes and application sites; any use of the product that is

inconsistent with its FIFRA label is a violation of federal law; the existing regulatory requirements for pesticide applications to tributaries of drinking water sources are already fully protective of human health; and the surface drinking water sources are subject to certain treatment technique requirements, including filtration and disinfection, which can provide an added assurance against potential pesticide residues in source water.

A commenter also recommended:

1. The proposed restriction on permit coverage applies to "tributaries up-stream" of any surface drinking water source without regard to the distance upstream. As worded, this restriction would broadly apply to any pesticide application that requires a permit and occurs anywhere within a watershed that supplies water to a drinking water source, irrespective of the distance from any drinking water intake. In some cases, "tributaries up-stream" may be located many miles from any drinking water intake, such that substantial dilution and attenuation of any residue from an application would occur prior to the water reaching a drinking water intake. In contrast, typical label requirements for pesticides applied upstream of or near a drinking water intake might impose limitations only if the application occurs within one-quarter to one-half mile of an intake. Because some ditches providing water for drinking water supplies serve a primary role of providing irrigation water, limitations on pesticide applications for drinking water sources have the potential to impede maintenance and operation of irrigation ditches, placing irrigation water deliveries at risk.

It is recommended that any restriction on permit coverage for applications to drinking water sources or their tributaries be limited to tributaries within a specified distance from a drinking water intake. Based on a review of pesticide labels for some of the commonly used aquatic herbicides approved for use in/near drinking water sources, a distance of one mile upstream of an intake should provide an adequately conservative applicability threshold for the proposed restriction.

2. The proposed §1(b)(3)(B)(iii) requires that the decision-maker provide the owner of the drinking water source certain information regarding proposed pesticide application(s) to up-stream tributaries. The commenter believes this requirement is reasonable. However, this condition also requires that the owner of the drinking water source must provide to the Department written consent to the discharge. A&B believes that this requirement is unnecessary and inappropriate, particularly for discharges which occur far upstream from any drinking water intake and are therefore even more unlikely to result in any unreasonable adverse impacts to the drinking water source. In addition, an owner of a drinking water source may be unwilling to provide such consent based on a perception of liability rather

than any real risk to the drinking water supply. The commenter believes that notification of the drinking water source owner should be adequate, and that the requirement for written consent to the discharge from the water system operator is not warranted and should be deleted.

3. The proposed §1(b)(3)(B)(v) requires that only pesticides containing glyphosate or diquat as the active ingredient may be applied under this exception. It is unclear why the Department is limiting operators to the use of these two products, as this limitation overlooks many other safe and effective pesticide products, some of which have no drinking water restrictions. A variety of other aquatic herbicides are labeled for use to control weeds and algae in irrigation ditches, including upstream of drinking water intakes, and many of these would not be permissible to use under this proposed restriction. Moreover, newer chemicals labeled for this use may be developed in the future that are safer, more efficacious, or less prone to the development of resistance; these products would be prohibited from being applied under the PGP without a revision to the regulations. More importantly, it is our understanding that neither glyphosate nor diquat is typically used for conservation pest control in Hawaii; it therefore does not appear that coverage under the PGP would be available for conservation efforts anywhere within watersheds which are tributary to drinking water sources. Similarly, applications for the purposes of forest canopy pest control, mosquito and other flying insect pest control, and animal pest control would not be eligible for PGP coverage in these areas, since neither of the listed products is likely to be applied under any of these use categories. Lastly, no biological pesticides would be eligible for PGP coverage in areas tributary to drinking water sources. Clearly, this proposed condition is overly restrictive and would impede the ability to make pesticide applications under the PGP for the majority of use categories. The commenter recommends that the proposed §1(b)(3)(B)(v) be revised to allow PGP coverage for any pesticides which are (1) registered for the intended use; (2) specifically identified in the NOI and approved for this use by the director; and (3) do not have labels that prohibit application to drinking water sources. Any restrictions on pesticide applications upstream of or near drinking water sources should be limited to those specified on the pesticide label for the product being applied.
4. The proposed §1(b)(3)(b)(vi) requires that the pesticide applicator coordinate with the owner of the drinking water source to divert "pesticide-treated water" and prevent it from entering the drinking water intake, "if feasible". Any restrictions on pesticide applications upstream of or near drinking water sources, including any requirements to divert water away from drinking water intakes, should be limited to those specified on the pesticide label for the product being applied. In the event that the

diversion requirement is retained in the final PGP, however, the commenter encourages that §1(b)(3)(b)(vi) specify who is to make the determination as to whether diversion is "feasible". Otherwise, the requirement is ambiguous and subject to interpretation by outside parties who may be unfamiliar with operation of the drinking water system. Based on the discussion in the draft PGP Fact Sheet regarding criteria to be considered when evaluating the feasibility of diverting "pesticide-treated water" (e.g., the water system's capability to divert the water, water system demand), the commenter believes that the water system operator is the appropriate party to make this determination. Accordingly, we recommend that §1(b)(3)(b)(vi) be revised to state that water is to be diverted "if determined to be feasible by the water system operator".

Response:

*Initially, the DOH proposed restrictions allowing only pesticides containing glyphosate or diquat as the active ingredient since these are the two (2) chemicals required to be tested in drinking water by the EPA that are not considered to be carcinogenic. Some commenters stated that the FIFRA label already regulates pesticide applications to State water, and the limitation on pesticides containing these two (2) active ingredients is too restrictive.*

*The DOH believes that this limitation is too restrictive and has revised the proposed rules to allow all pesticides labeled under FIFRA for use in/near drinking water sources and approved by DOA.*

*The DOH also proposed a requirement for written consent from the drinking water source owner and requirements for diverting pesticide treated water if feasible. Commenters indicated that this was too restrictive, the drinking water source owner may not want to provide written consent for legal purposes, and “if feasible” needs to be defined. Although surface drinking water sources are subject to certain treatment technique requirements, the drinking water source owner and treatment designers need to know exactly what is being treated. The type and quantity of the pollutant of concern determines the treatment and the treated effluent water quality testing. For this reason, the requirement for written consent was left in the proposed rule amendments.*

*After evaluating all of the comments received during the public hearing, the DOH-CWB has removed the “if feasible” language. Instead, all pesticide treated water is not allowed to be discharged into the drinking water source intake. Regarding upstream tributaries located many miles away from the drinking water intake, DOH may consider information demonstrating that the chemical pesticide residue and/or biological pesticide will not enter the drinking water intake.*

*DOH believes that the PGP’s restrictions on pesticide applications in those waters are appropriate and consistent with DOH’s obligations under Hawaii law.*

29. **The proposed PGP contains conflicting requirements relating to the "adjustment period".**

A commenter indicated that “Under the proposed §1(t) of Chapter 11-55 Appendix M, all operators with eligible discharges are authorized for permit coverage up until 60 calendar days from the effective date of the permit without submission of an NOI. According to the draft PGP Fact Sheet, this adjustment period is intended to provide applicants with sufficient time to read and understand the permit requirements and comply with the recordkeeping and reporting requirements of the permit prior to submittal of the NOI.

After the adjustment period, all operators with eligible discharges for which an NOI is not required remain automatically covered by the permit. As stated on page 55-M-12 of the draft permit, "By the adjustment period, all Decision-makers with eligible discharges for which an NOI is required are required to submit an NOI consistent with the earliest applicable due date identified in Table 2." Since submittal of an NOI is not required until 60 days after the effective date of the permit (i.e., at the end of the adjustment period), this statement should be changed to instead read "By the end of the adjustment period...".

The note at the beginning of Table 2 correctly states, "After the adjustment period, any eligible discharge for which an NOI is required must submit an NOI consistent with the earliest applicable due date identified below". The note goes on to state that uninterrupted coverage may continue "if the Director receives an NOI at least 30 calendar days *before the end of the adjustment period*" (emphasis added). This requirement conflicts with the earlier statement on pages 55-M-II and 12 of the draft permit, and in the draft PGP Fact Sheet, that permit coverage automatically extends to the end of the adjustment period and that the initial NOI must be submitted to the Director *by the end of the adjustment period* rather than 30 days prior to the end. Uninterrupted coverage should therefore continue if the Director receives an NOI *by the end of the adjustment period*. These inconsistencies should be corrected in the draft permit."

Response:

*The NOI needs to be submitted 30 calendar days before the end of the 60 calendar day adjustment period.*

30. **Clarification is needed regarding the Notice of Intent requirement for eligible discharges to water quality impaired waters.**

A commenter has stated: "Table 1 of the proposed PGP indicates that decision-makers with an eligible discharge to water quality impaired waters must submit a Notice of Intent regardless of whether a treatment threshold for any of the various pesticide use categories is exceeded. According to the draft PGP Fact Sheet, however, a Notice of Intent is only required for discharges to water quality impaired waters when made in response to a declared pest emergency situation or as determined by the director.

Under §1(b)(1) of Chapter 11-55 Appendix M, operators are not eligible for coverage under the PGP for any discharges from a pesticide application to state waters if the water is identified as impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient. An exception is made allowing coverage under the draft PGP for pesticide applications made in response to a declared pest emergency situation or as determined by the director. Because permit coverage for such applications is

only available under this specific exception, submittal of a Notice of Intent is appropriate.

Conversely, coverage under the draft PGP is allowed for all eligible pesticide applications to water quality impaired waters identified as impaired by a substance which is not an active ingredient in the pesticide or a degradate, including waters listed generically for "pesticides" where the specific pesticide for which the water body is impaired has not been identified. Since there are no limitations on permit coverage for discharges into these impaired waters, no Notice of Intent is required for these discharges (unless one of the other criteria for submitting an NOI is met), according to the draft PGP Fact Sheet.

Table 1 of Chapter 11-55 Appendix M should be revised to be consistent with the draft PGP Fact Sheet by requiring an NOI for discharges to water quality impaired waters only when such discharges are made in response to a declared pest emergency situation or as determined by the director."

Response:

*Table 1 already references eligible discharges. The eligible discharges are included in the Limitations on Coverage section of Chapter 11-55, Appendix M.*

The remainder of this document consists of nine comment essays (providing a combined detailed response to a large number of comments) that may provide additional information and help to further clarify the responses above. The essays may include EPA responses to comments which may not have been received during DOH's public notice period and are provided for informational purposes and help to clarify the intent of the requirements and scope of the permit.

The nine comment essays are as follows:

- Approach
- Corrective Action
- Endangered Species
- Impaired Waters
- NOI Threshold
- Recordkeeping and Reporting
- Scope
- Structure
- Waters of the United States

## PGP Comment Response Approach Essay

Following is DOH's general response to those comments addressing DOH's approach in permitting pesticide discharges using the PGP.

EPA developed its PGP under the Clean Water Act (CWA) in response to the 2009 decision by the U.S. Sixth Circuit Court of Appeals in *National Cotton Council of America v. EPA*. EPA's draft PGP was available for public review between June 4, 2010 and July 19, 2010 and received more than 770 sets of comments. EPA posted a pre-publication version of the draft final PGP on the Agency's website on April 1, 2011 to assist States in developing their own permits and for the regulated community to become familiar with the permit's requirements before it becomes effective. The State prepared its own draft based on this version. Unlike other States, Hawaii is required to have its general permit in its Hawaii Administrative Rules, which requires a lengthy approval process and Governor's signature. Therefore, to avoid having to amend its rules and repeating its approval process, the State decided to wait until EPA's permit was finalized and announced in the Federal Register (Vol. 76, No. 215 / Monday, November 7, 2011) before proceeding further. Waiting until the EPA's PGP was finalized ensured the State's permitting process was consistent with the EPA permit that had considered the intent of the CWA, the Sixth Circuit Court's decision and public comments. EPA expected its permit to be published much earlier to provide States with enough time to finish their permits; however, the EPA's PGP was delayed until the Court's October 31, 2011 deadline. Only after October 31, 2011, did the State have a copy of EPA's finalized PGP to use in developing its own permit.

The State's PGP closely followed EPA's PGP. EPA developed the PGP to implement the CWA in a manner that does not interfere with FIFRA implementation yet still meets the Court's mandate requiring NPDES permits for certain discharges of pollutants resulting from the application of pesticides to waters of the United States. EPA's PGP applies to States which have not been delegated authority to implement the NPDES permit program and applies to discharges to "waters of the United States." As an EPA delegated State, Hawaii administers the NPDES permit program through its Department of Health and applies to discharges to "State waters," which are similar to, but broader than, "waters of the United States." Refer to HAR, Chapter 11-54-1 for the definition of "state waters." DOH's goal in its PGP is to serve the public interest by protecting Hawaii's environment and public health and its public natural resources. As outlined in Section 2(b)(1) of DOH's PGP fact sheet, DOH and the EPA share the same views regarding the control of mosquitoes to be an important public health issue. Similarly, control of other pests provides important environmental protection and economic benefits. DOH, similar to the EPA, has incorporated provisions to accommodate emergency pest situations, such as allowing coverage for applications during declared pest emergencies to water quality impaired waters, Class 1, Inland waters, Class AA, Marine waters, and areas restricted in accordance with the State's "No Discharge" policy in Chapter 11-54 when required to protect public health.

The CWA and FIFRA requirements operate independently of each other. FIFRA authorizes EPA to review and register pesticides for specified uses. Pesticide users are required to comply with all applicable FIFRA requirements contained in pesticide product labels independently of what is required under the State's PGP. The NPDES pesticides general permit does not override or conflict with existing FIFRA labeling requirements, but does have additional requirements for pesticide applications to meet applicable CWA regulatory and statutory requirements, such as meeting technology-based effluent limitations and water quality-based standards. DOH and the EPA expect that the PGP will minimize discharges of pesticides to the aquatic environment. Reduced discharges of these pesticides to surface waters may be associated with a variety of benefits, including human health improvements, increased recreational opportunities, and improved ecosystem functions.

EPA conducted an analysis for the PGP titled, "Economic Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides". In this analysis, EPA assumed that compliance costs for for-hire applicators would be passed on to their clients. Therefore, EPA examined the economic impact to decision-makers. Knowing that most applicators and operators are small businesses, a small entity analysis was included within the economic analysis, which showed minimal economic impacts to these entities.

EPA understands many operators may be implementing procedures similar to those required under the PGP consistent with other regulatory programs or as part of their standard operating procedures. As noted in the EPA's response to comments, it was not EPA's intent to discourage or replace existing programs. Generally, decision-makers can refer to activities undertaken under other programs to comply with this permit.

Since the 6th Circuit Court's 2009 decision, EPA has been working closely with states (as co-regulators) and other stakeholders (e.g., numerous industry and environmental groups) to develop the PGP. This involvement provided EPA with the information necessary to develop a permit that minimizes the burden associated with implementing it, while providing the environmental protection measures required under the CWA. EPA held three meetings and regular conference calls with environmental and agricultural agencies in the states to share information and ideas regarding the most appropriate way to structure the PGP and also to assist the states with their permit development. EPA has also conducted or attended over 180 meetings with industry experts, environmental interest groups, and key agricultural associations. EPA said that these meetings proved invaluable in developing a workable permit for the application of pesticides to U.S. waters.

DOH is not identifying all specific activities that do or do not require a permit, but does state the following: agricultural runoff and irrigation return flows continue to be exempt from permitting under the CWA. Off target spray drift and discharges to waters impaired other than for the pesticide being discharged are activities that are outside the scope of

the PGP. Only point source discharges of pollutants to State waters require a permit. DOH's PGP only authorizes discharges associated with four categories of pesticide application activities: mosquito and other flying insect pest control, weed and algae pest control, animal pest control, forest canopy pest control. To the extent activities that fall within the four covered categories require a permit, they can be authorized by this general permit if all eligibility requirements are met. For example, discharges to control pests in or near areas that are State waters, even when these areas are dry for much of the year, may be covered by this permit, if one is required. This would include discharges on forest or range lands that include dry washes and ephemeral streams, to control pests that may be found in these occasionally wet areas, including pests that may also be found in upland areas. For two of the categories, weed and algae pest control and animal pest control, the permit specifies that covered activities include applications to control pests "in water and at water's edge." DOH, similar to the EPA, intends for the phrase "at water's edge" to allow coverage of activities targeting pests that are not necessarily "in" the water but are near the water such that control of the pests may unavoidably involve a point-source discharge of pesticides to State waters. The category forest canopy pest control is for applications to a forest canopy. DOH intends that this can include both mature and immature forest canopies, including canopies that may not be continuously connected, where control of pests associated with the canopy (i.e., branches and leaves of the trees) may unavoidably involve point source discharges of pesticides to State waters. To the extent that a permit is needed for discharges from pesticide applications to rangelands, forestry, park lands, rights-of-way, wetlands and other areas, and the activity falls within one of the four use categories, coverage can be granted under this general permit. Any pesticide application activities that do not fall within the four use patterns covered by this permit will require coverage under some other NPDES permit if those activities result in point source discharges to State waters.

EPA received several comments expressing concern with the requirement that Operators "use the lowest effective amount of pesticide product...consistent with reducing the potential for development of pest resistance." After considering comments received, EPA modified the language regarding effluent limitations in the final permit (Part 2 of the EPA's PGP) to ensure that, while the amount of pesticides discharged is minimized, an Operator's ability to achieve maximum efficacy in pest control is not hindered. Part 2 of their PGP now reads, "Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest [...]" EPA's intent regarding this section is to minimize pesticide application discharges to Waters of the United States while incorporating flexibility necessary for Operators to use best professional judgment to effectively manage target pests. The State's PGP uses this modified language.

Similar to the EPA, DOH believes the final permit will not impose an unreasonable burden on Operators. If Operators do not feel that permit coverage under the PGP is appropriate for their pesticide applications, they may apply for individual permit coverage.

## **PGP Comment Response Corrective Action Essay**

Section 6 of the PGP requires all Operators to take corrective action as necessary to ensure that dischargers effectively meet technology-based and water quality-based effluent limitations. The pesticide general permit only covers pesticide applications that result in point source discharges to State waters and fall within the categories stated in the permit. Section 6(d) of the PGP requires Operators to take specific actions in response to identified adverse incidents, but only those that may be related to pesticide applications that result in point source discharges to State waters.

For purposes of this permit, adverse incidents only include toxic or adverse effects that occur as a result of a point source discharge of a pesticide to State waters. Adverse incidents resulting from non-point source discharges to State waters are neither covered under the PGP nor subject to the PGP adverse incident reporting requirements. To be clear, natural occurrences of dead fish are not required to be reported as adverse incidents. However, adverse effects that occur indirectly from pesticide applications that result in a point source discharge are included in the reporting requirements under the PGP.

The PGP allows for informed decisions by Operators regarding incidents not related to pesticides. Thus, adverse incidents related to pesticide applications to waters could occur in humans or animals, including fish. However, such connection should be determined on a case-by-case basis. For example, there is not a reportable adverse incident if fish die in pools as water recedes, because such fish died for reasons other than pesticide applications. Many commenters had concerns about the definition in the EPA's PGP of adverse incidents. EPA revised the definition of "adverse incident" in their final permit to reflect that "toxic or adverse effects" include effects that, "occur either from direct contact with or as a secondary effect from a discharge (e.g., sickness from consumption of plants or animals containing pesticides) to waters of the United States that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy)," in instances where, "there is evidence that a person or non-target organism has likely been exposed to a pesticide residue." DOH uses this revised definition in the State's PGP. This revised definition clarifies EPA's interpretation of when adverse incidents are associated with activities covered under the general permit and that those incidents must be related to the discharge.

Additionally, adverse effects to people, terrestrial plants, or terrestrial animals are within the scope of this permit if they are a result of a pesticide application that results in a point source discharge to State waters; however, reportable incidents must be linked to exposure to a pesticide residue and not some other cause. To clarify this issue, the definition for "adverse incidents" in HAR, Section 11-55-01 states:

Adverse Incident – means an unusual or unexpected incident that an operator has observed upon inspection or of which the operator otherwise become aware, in which:

- (1) There is evidence that a person or non-target organism has likely been exposed to a pesticide residue, and
- (2) The person or non-target organism suffered a toxic or adverse effect.

The phrase “toxic or adverse effects” includes effects that occur within State waters on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue ...

Similar to EPA, DOH expects Operators to use their best professional judgment in determining the extent to which non-target effects appear to be abnormal or indicative of an unforeseen problem associated with an application of pesticides. DOH retains the authority to enforce where it becomes aware that an Operator is not acting prudently or not exercising best professional judgment. The PGP allows for informed decisions regarding whether adverse incidents are related to pesticide applications. In Section 6(d) of the PGP's fact sheet, DOH acknowledges that assessing and correcting adverse incidents may be complicated in certain instances. For example, symptoms associated with adverse incidents are often vague or mimic other causes, which may lead to incorrect diagnoses. Thus, it may be difficult to identify and track chronic effects resulting from pesticides discharges. It may also be difficult to observe adverse effects because of limited visibility or access such as dead fish poisoned in a wetland under dense vegetation or in sparsely populated areas or because scavengers scatter or devour carcasses before discovery. However, DOH and EPA believe that it is important to identify to the extent feasible situations where adverse effects occur where point source discharges from the application of pesticides also occur.

Immediately observable signs of distress or damage to non-target plants, animals and other macro-organisms within the treatment area may warrant concern for a possible adverse incident related to a discharge of pesticides during application. EPA disagreed with comments suggesting that all identified adverse incidents should be reported. EPA and DOH acknowledge that some degree of detrimental impact to non-target species may occur and may be acceptable during the course of normal pesticide application. Reporting of adverse incidents is not required under this permit in the following situations: (1) you are aware of facts that indicate that the adverse incident was not related to toxic effects or exposure from the pesticide application; (2) you have been notified in writing by DOH that the reporting requirement has been waived for this incident or category of incidents; (3) you receive information notifying you of an adverse incident but that information is clearly erroneous; (4) an adverse incident occurs to pests that are similar in kind to pests identified as potential targets on the FIFRA label.

However, records of all visual inspections, even for situations when adverse incident reporting is not required, must be kept onsite by those Decision-makers who are required to submit NOIs. While not a requirement of the permit, DOH recommends applicators keep records of all visual inspections and determinations, even for situations when operators determine that the adverse incident was not related to the pesticide application.

In addition to concerns about the scope of adverse incidents, some commenters believe the PGP requirements are duplicative of requirements already imposed under FIFRA. DOH does not believe corrective action requirements are unnecessary because this is duplicative of the requirements in FIFRA. The CWA and FIFRA requirements operate independently of each other. FIFRA authorizes EPA to review and register pesticides for specified uses. Pesticide users are required to comply with all applicable FIFRA requirements contained in pesticide product labels independently of what is required under the PGP. The NPDES pesticide general permit does not override or conflict with existing FIFRA labeling requirements, but does have provisions to meet CWA regulatory and statutory requirements, such as meeting technology-based effluent limitations and water quality-based standards. The purpose of including corrective action requirements in this permit is to ensure operators meet technology-based and water-quality-based effluent limitations and implementing pest management measures in this permit.

Currently, FIFRA requires pesticide registrants to report adverse incident information to the EPA consistent with section 6(a)(2) of FIFRA and 40 CFR Part 159. DOH does not consider inclusion of adverse incident reporting in the NPDES permit to be a duplicative requirement to the FIFRA section 6(a)(2) requirements for registrant reporting of adverse incidents. This is because pesticide registrants are not likely to be directly covered under the PGP (i.e., not Operators under the permit). DOH believes it is appropriate for Operators covered under the PGP to report adverse incidents to DOH, as the NPDES permitting authority, to allow DOH to assess the potential effects of discharges covered under the PGP.

EPA received comments questioning the Agency's need for adverse incident reporting and the following response was provided by the EPA.

*EPA believes such information associated with discharges from the application of pesticides is useful to the Agency because the information:*

- Provides the Agency with an indication of the effectiveness of the permit in controlling discharges to protect water quality, including data upon which the Agency may base future permit decisions (e.g., modifications to or reissuance of this permit).*
- May be considered when reviewing applications for registration of new pesticides that are chemically similar to existing pesticides;*
- May be considered in ecological risk assessments and risk management decisions;*

- *May be reviewed to determine trends that may indicate potential ecological impacts with an existing pesticide and/or to track improvements when mitigation measures are applied;*
- *Provides information on the nature, extent, and severity of incidents for decision-makers, stakeholders, and the public;*
- *Provides information to the Agency for purposes of overseeing permitted activities, including targeting monitoring activities to areas of concern; and*
- *Provides the Agency with information on which to assess compliance with regulatory requirements, including documentation and reporting.*

DOH agrees with the usefulness of the information for those applicable to its program.

Similar to the EPA, DOH acknowledges commenters' interest in developing an electronic data system for submitting and storing adverse incident information. Like the EPA, DOH has not developed such a system but may do so later. Without such a system available, interested parties can request from DOH the submitted information by completing the "Request to Access a Government Record" form available at: <http://hawaii.gov/health/environmental/water/cleanwater/forms/index.html> and submitting it to DOH. The process for access to corrective action information submitted in annual reports will be through requests to DOH. DOH may, as resources allow, develop tools to make such information easier to submit and easier to view.

The following discussion addresses comments concerning the timing for reporting of and nature of adverse incidents. Due to the wide range of pesticide products and applications covered by this permit, EPA recognizes that the nature of and timeframes for potential adverse incidents will vary depending on the site-specific situations. To address this variability, EPA and DOH have incorporated flexibility into their respective PGPs' requirements for assessing adverse incidents and implementing corrective action. For example, to address concerns that it may not be possible to notify DOH within 24 hours of identifying an adverse incident, DOH's PGP allows for notification of an adverse incident beyond 24 hours; however, the Operator must do so as soon as possible and also provide an appropriate rationale for why the Operator was unable to provide such notice within 24 hours.

The State's PGP requires operators to submit adverse incident reports within 30 calendar days of becoming aware of the situation. This timeframe is based on when the operator first observes or is otherwise made aware of an adverse incident. DOH agrees with the EPA that operators need time after identification of an adverse incident to gather the necessary information to be able to submit a written report to DOH. Along with the EPA, DOH did not specify a time beyond which an applicator is no longer a candidate for having caused an adverse incident because of the site-specific nature of adverse incident causes and the fact that, while time may be a factor in the ability to link an adverse incident to a pesticide application, it is not a factor in being able to identify such an adverse incident. So, where an operator identifies a reportable adverse

incident, an adverse incident report is still required to be submitted, regardless of when the last pesticide application that resulted in a point source discharge occurred.

When any of the listed situations are identified under Section 6(a), such as discovery that water quality standards are being exceeded, the Operator must take steps to ensure the problems causing any violation are eliminated. DOH acknowledges that an adverse incident may not be indicative of a water quality violation and has made this clear in the Fact Sheet. Whether or not water quality standards are violated by a particular permittee's application is a site-specific determination. Water quality standards vary by water body and when DOH accesses a possible water quality violation, DOH will take into account the appropriate scientific and site-specific information. Similarly, permittees can assess whether their discharges cause or contribute to an in-stream exceedance of water quality standards. This evaluation may require ambient water quality monitoring to make such a determination or could be based on other known information regarding the nature of the State waters and the nature of the discharge. As drafted, EPA and DOH believe that in general, Operators that comply with the terms of the PGP will not cause such water quality exceedances.

The State's PGP language is consistent with the EPA's final permit language that addresses concerns with its the "lowest amount" concept in its draft permit. The EPA received several comments expressing concern with language in Part 6.1 of their draft permit requiring evaluation and modification of control measures when monitoring indicated failure of Operators to use the "lowest amount of pesticide produce per application and optimum frequency of pesticide applications necessary to control the target pest." This language was consistent with Part 2.1.1 of the EPA's draft permit. Therefore, EPA modified Part 2.1.1 in their final permit to reflect language that addresses commenters' concerns with this "lowest amount" concept. Part 6.1 of the EPA's final permit requires Operators to take corrective action when they become aware that they are not meeting applicable technology-based effluent limitations in Part 2 of their permit (which includes the revised standard to "use only the amount of pesticide and frequency of pesticide application necessary to control the target pest." DOH incorporated the revised language in its proposed permit.

The permit requires that corrective action be completed "before or, if not practicable, as soon as possible after the next pesticide application that results in a discharge." DOH emphasizes that this timeframe is not a grace period within which an Operator is relieved of any liability for a permit violation. A timeframe, albeit flexible, is included specifically so that problems are not allowed to persist indefinitely. Failure to take the necessary corrective action within the stipulated timeframe constitutes an additional and independent permit violation. DOH is adopting this flexible deadline to account for the variation in types of responses (e.g., evaluate situation and select, design, install, and implement new or modified pest management measures) that may be necessary to address any identified situations of concern. DOH assumes that Operators will need less time to make minor repairs or change practices than to make substantial operational changes or equipment repair. DOH recognizes that in rare cases a

corrective action review may identify the need for substantial improvements to the Operator's pest management measures, and does not want to limit the selection and implementation of such controls with an infeasible deadline. Another possibility is that DOH or the Operator may determine that further monitoring is needed to pinpoint the source of the problem (if one is identified), and this monitoring may need to be conducted during future pesticide application activities. However, DOH believes that in the vast majority of cases, corrective action reviews will identify responses that can be taken quickly, either before the next pesticide application that results in a discharge or shortly thereafter. DOH expects Operators to document and justify any schedules for response (e.g., selecting, designing, installing, and implementing new or modified pest management measures) that may be necessary to address any identified situations of concern. In addition, if the original inadequacy constitutes a permit violation, then that violation is not excused by response within the timeframe DOH has allotted for corrective action, though DOH may consider this when determining the appropriate enforcement response to a violation.

DOH believes it is appropriate to require notification of spills, leaks, or other unpermitted discharges only if such discharge is in a reportable quantity according to existing spill control regulations (i.e., 40 CFR Parts 110, 117, 302). DOH acknowledges the requirement in Section 6(e)(1) is not a new requirement; rather, DOH sees the NPDES permit as an opportunity to notify Operators of these longstanding regulatory requirements as they apply to NPDES discharges. Section 6(e)(2) in the permit draws a link between the requirement to notify the Clean Water Branch or Hawaii State Hospital (outside of regular working hours) and the National Response Center of a spill and the need for permittees to respond to any adverse incidents that may result from such a spill. EPA received and does not believe that a wider range of spills be required to be reported under the PGP. DOH agrees with the EPA belief that the approach in the permit strikes a practical balance of resources and environmental protection.

EPA received comments expressing concern that adverse incident reporting would be overly burdensome to small businesses. EPA disagreed after conducting an analysis in 2010 titled, "Economic Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides." In this analysis, EPA assumed that compliance costs for for-hire applicators would be passed on to their clients. Therefore, EPA examined the economic impact to decision-makers. Knowing that most applicators and operators are small businesses, a small entity analysis was included within the economic analysis, which showed minimal economic impacts to these entities. DOH agrees with EPA that adverse incident reporting would not be overly burdensome to small businesses.

## **PGP Comment Response Endangered Species Essay**

DOH received several comments suggesting the strictest standards be required when State waters may be critical habitat for Hawaii's endangered species. CWB's mission includes the protection of all marine life and wildlife and does not differentiate between endangered species or not.

Results of EPA's Endangered Species Act (ESA) Consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (together, the "Services") apply where EPA is the NPDES permitting authority to Operators who discharge to Waters of the United States containing NMFS Listed Resources of Concern as identified at [www.epa.gov/npdes/pesticides](http://www.epa.gov/npdes/pesticides). Hawaii is one of the 44 states authorized to administer its own NPDES programs, and so is not bound by the ESA consultation requirements that bind the EPA and does not have to adopt those requirements.

The PGP does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling. (See Section 1(h) of the permit). For informational purposes, the EPA provided citations to four NMFS Biological Opinions pursuant to FIFRA actions on the use of 24 pesticides in Part I.12 of their Factsheet. The EPA's Factsheet is available at: [http://www.epa.gov/npdes/pubs/pgp\\_final\\_factsheet.pdf](http://www.epa.gov/npdes/pubs/pgp_final_factsheet.pdf).

## **PGP Comment Response Impaired Waters Essay**

DOH received comments expressing concern that the permit makes numerous exceptions to allow for the discharge of pesticides into impaired waters. DOH believes that the referenced exceptions are appropriate. Coverage under the permit for discharges to impaired waters is allowed only if the discharge is in response to a declared pest emergency situation. As outlined in Sections 2(b)(1) – 2(b)(4) of the PGP fact sheet, DOH views the control of mosquitoes, aquatic weeds, and other pests to be an important public health and environmental protection issue.

DOH incorporated provisions in the permit to accommodate pesticide applications for urgent public health and environmental protection needs, including allowing coverage for applications to impaired waters where the waterbody is impaired for something other than the specific pesticide active ingredient or degradate of such. Similar to the EPA's PGP, the State's PGP will cover discharges of pesticides to waters that are impaired generally for "pesticides" where the specific pesticide causing the impairment has not been identified. DOH is not restricting other pesticide discharges from coverage under the PGP since the EPA and DOH believe, based on existing impairments for named pesticides, that the vast majority of the "pesticides" impairments are from pesticides that are no longer registered for use under FIFRA. DOH expects that as these "pesticide" impaired waterbodies are further assessed, currently registered pesticides or classes of pesticides may be identified as the cause of the impairment, at which point discharges, operators will no longer be eligible to obtain permit coverage under the PGP for discharges of those named pesticide active ingredients or degradates of such.

DOH is not specifying substances that are excluded from coverage under the PGP for impaired waters beyond referring to the substances listed as causes of impairment for 303(d) listed waters that are active ingredients (or degradates of active ingredients) in a pesticide that results in a discharge to an impaired water when applied.

DOH is allowing coverage under the general permit where appropriate and requiring individual permits only for those pesticide applications that need detailed review. DOH may opt to not approve coverage under the PGP in certain situations, impose additional requirements, and/or require an Operator to apply for coverage under an individual permit.

## **PGP Comment Response NOI Threshold Essay**

Similar to the EPA, DOH received comments on its approach for determining which Operators are required to submit NOIs when seeking coverage under the PGP. Commenters suggested expanding the range of pesticides users covered. DOH clarifies that all point source discharges of biological pesticides, and chemical pesticides that leave a residue that result in discharges to State waters consistent with any of the four use patterns identified in the permit are required to either seek coverage through an NOI, and once authorized, comply with the permit, or comply automatically with the NPDES permit. For those not eligible for coverage under the PGP, Operators must apply for an Individual NPDES Permit. If eligible for coverage under the PGP and not required to submit an NOI, operators must still comply with terms of the permit such as: minimizing discharges to State waters resulting from the application of pesticides, meeting applicable State's water quality standards, and monitoring for and reporting adverse incidents. Under the PGP, these Operators have fewer requirements than Operators that are required to submit NOIs. DOH bases this decision on EPA's evaluation of applicable technology-based requirements for the universe of dischargers and the use of EPA's best professional judgment (33 U.S.C. 1342(a)(1); 40 CFR § 125.3(c)) when establishing many of the other permit terms and conditions. Although state programs need not implement NPDES provisions that are identical to the corresponding federal provisions, DOH chose to incorporate the same requirements as EPA, since the requirements implemented by the State must at least be as stringent as the corresponding federal provision [refer to 40 CFR 123.25(a)]. Pesticide applications that do not result in point source discharges of pollutants to State waters do not require NPDES permit coverage regardless of the size of that application.

DOH received comments suggesting that the thresholds are too high to capture Hawaii's most significant pesticide discharges and target a far too limited number of potential applicators (i.e., those applying pesticides over 6,400 acres or 20 linear miles). DOH believes, without information that proves otherwise, that DOH's thresholds will capture those discharges for which the permit was intended. In fact, DOH's thresholds for weed and algae and animal pest control are lower than EPA's because DOH's reflect cumulative applications. Commenters also suggested requiring a larger number of Decision-makers to submit NOIs, annual reports, and PDMPs. DOH based its approach on who shall submit NOIs on the EPA's work with states and other stakeholders throughout its multi-year process of developing EPA's PGP. EPA's work evaluated different approaches and selected an appropriate one for identifying the types of dischargers that should be required to submit NOIs. The approach represents EPA's best professional judgment regarding which Operators should submit NOIs and when those NOIs should be submitted and is based on communication with states and stakeholders and public comments. EPA has acknowledged that the other suggestions for establishing thresholds to identify who should submit NOIs generally have some merit; however, the EPA opted for the approach used in their final permit based on the discussion which follows. EPA expects to consider many of these other alternatives during this permit cycle and may revise its approach for the next PGP based on any

additional information gathered and analyzed over the next five years. Similarly, DOH will consider these alternatives during this permit cycle and revise its next PGP based on any additional information gathered and analyzed.

EPA and DOH acknowledge that Operators who are not required to submit NOIs will be more difficult to identify/evaluate than those that do submit NOIs; however, DOH believes that this approach will protect the public health and environment with necessary permit requirements without unduly burdening operators. EPA (and similarly DOH) has the discretion to authorize discharges under a general permit without submission of a NOI where it finds an NOI would be inappropriate. 40 CFR 122.28(b)(2)(v).

The following was provided from EPA as background information for the development of the EPA's final PGP and ultimately for the State's PGP, although some information may not be applicable to the State.

*EPA revised its approach for NOI requirements in the final permit based on comments received on the draft. These changes include:*

1. *NOIs are now required based on three criteria: operator type, nature of receiving stream, and size of area treated (i.e., annual treatment area threshold). The (EPA) draft permit based NOI obligations only on the size of area treated.*
2. *For-hire applicators no longer are required to submit NOIs. Rather NOIs are to be submitted only by certain Decision-makers.*
3. *Research and development activities no longer require submission of an NOI.*
4. *All Decision-makers (regardless of annual treatment area threshold) with discharges to Tier 3 waters or to waters of the United States with any NMFS Listed Resources of Concern now must submit an NOI for those discharges.*
5. *EPA revised its use of annual treatment area thresholds to include:*
  - *Standardized the use of the term "annual treatment area threshold" throughout the permit and added a definition of this term in Appendix A of the (EPA's) permit.*
  - *Annual treatment area threshold for two pesticide use categories (i.e., mosquitoes and other flying insects and forest canopy pests) increased by an order of magnitude (from 640 acres in the proposed permit to 6,400 acres in the final permit). The annual treatment area threshold for two categories (i.e., aquatic weeds and algae and aquatic animal pests) increased from 20 acres of water to 80 acres of water (or a linear distance of 20 miles, a threshold that remains the same in the final permit).*

- *Annual treatment area threshold calculations are now based on discharges directly to waters of the United States and does not include discharges to conveyances.*
  - *Areas treated for the both aquatic weeds and algae and aquatic animal pests categories are now to be calculated based on the size of area treated in a calendar year regardless of the number of applications to that area. (The State's PGP differs from the EPA's PGP in calculating this area. The State's PGP calculates this area by counting each treatment area separately.) Area treated for both the Mosquito Control and Other Flying Insect Pest Control and Forest Canopy Pest Control use patterns are still based on accumulation of multiple treatments to calculate a total annual treatment area. (Note: the treatment area is the total area to which pesticide applications are made when any part of the area includes a State water.)*
  - *Calculation of annual treatment area for mosquito control now only counts areas treated with adulticide. Larviciding is not to be used in the calculations.*
6. *No NOIs are required for any discharges between the effective date of this permit and January 12, 2012 to allow time for Decision-makers to provide an opportunity for Decision-makers to take necessary actions as required by the permit prior to NOI submission. The State's PGP allows for an adjustment period of 60 calendar days from the effective date of the permit where the submittal of an NOI is not required.*

*A discussion of these changes and the final (EPA) PGP NOI approach are provided below.*

*As noted above, regulations at §122.28(b)(2)(v) provide that at the discretion of the Director (which, for EPA's PGP, is EPA), certain discharges can be authorized under a general permit without submitting an NOI where EPA finds that an NOI would be inappropriate for such discharges. In making such a finding, the regulations require the Director to consider the following criteria: the type of discharge; the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. As described below, EPA is requiring submission of an NOI for certain discharges and is providing automatic coverage for certain other discharges for which EPA determined it would be inappropriate to require an NOI. Similarly the State also provides the same automatic coverage for discharges for which the EPA determined it would be inappropriate to require an NOI.*

*EPA expects a large number of discharges from the application of pesticides spanning a wide range of Operators and activities will require compliance with NPDES requirements. EPA's consideration of the regulatory criteria in §122.28(b)(2)(v) for providing general permit coverage to certain Operators without submission of an NOI is as follows:*

*Type and expected nature of discharge*

*All discharges authorized by this general permit involve discharges resulting from the application of biological pesticides, or chemical pesticides that leave a residue into Waters of the United States (replace with State waters). The general permit is structured by pesticide use patterns. These use patterns were developed to include discharges that are similar in type and nature, and therefore represent the type of discharges and expected nature of the discharges covered under this permit. EPA evaluated each use pattern independently with the goal of identifying the significant activities resulting in discharges that should be covered under this PGP. As described below (see section entitled, "NOIs for Decision- Makers Exceeding an Annual Treatment Area Threshold"), EPA evaluated pesticide application practices of each of these four use patterns to identify the most significant applications, for which NOIs would be most appropriate. In general, annual treatment area thresholds are larger for mosquito and other flying insect pests and forest canopy pests than for aquatic weeds and algae and aquatic animals applications.*

*Potential for toxic and conventional pollutants in the discharge*

*EPA (and DOH) does not expect the potential for toxic and conventional pollutants in the discharges from pesticides to vary among use patterns. EPA would expect, however, that the potential for impacts from high concentrations of toxic or conventional pollutants in the discharge would be smaller when fewer acres or linear feet are treated or when pesticide applications are targeting pests not directly in the water.*

*Expected volume of discharge*

*EPA also considered the expected volume of discharges from each use pattern. It is difficult to estimate the expected volume of discharges for each use pattern because Pest Management Measures used by Operators to meet the permit's technology based effluent limitations may vary based on site-specific conditions. For example, the volume of the discharge may vary depending on the specific pesticide being used, the intensity of the pest pressure based on the specific pest problem, and the pest management strategy deemed to be most effective for the pest problem. Moreover, minimizing the discharge of pesticide product necessary to manage pests successfully will vary among Operators depending*

*on which Pest Management Measures the Operator uses. Nonetheless, EPA (and DOH) expects that, in general, the volume of the discharge will vary proportionally with the number of acres and linear miles treated. Therefore, for all use patterns, EPA (and DOH) expects that the volume of the discharge for a given pesticide application will be lower when fewer acres or linear feet are treated over a calendar year. Moreover, while there may be significantly more small Operators treating small areas than large Operators treating large areas, EPA (and DOH) believes the volume of discharges from large Operators to be substantially greater than those smaller Operators.*

#### *Other means to identify discharges*

*EPA also considered other means of identifying types of discharges covered by this permit. EPA may be able to identify pesticide discharges from Operator-submitted data, ambient water sampling data (e.g., federal agencies' data), and other information submitted by pesticide dischargers pursuant to other federal or state laws. However, EPA (and DOH) recognizes that the availability and quality of these data may be limited and highly variable across the scope of activities and areas covered under the PGP. Also, many pesticide applications consist of two entities involved in the decision-making and application of the pesticide. As such, EPA considered the appropriateness of requiring NOIs from more than one Operator for any given pesticide application. EPA's final PGP, which is the basis for the State's PGP reflects this decision to require NOIs only from certain Decision-makers and no longer require NOIs from For-Hire Applicators. EPA (and DOH) believes the Decision-maker is the appropriate Operator to submit the NOI in that the Decision-maker generally will be aware of the need for pesticide application before the For-Hire Applicator and as such is able to submit an NOI further in advance of the application activities than is a For-Hire Applicator, who may not be aware of the decision to apply a pesticide until well-after the decision is made and application is imminent. In addition, not every application will have a For-Hire Applicator (e.g. a Decision-maker may also apply the pesticide). Thus, by focusing just on the Decision-maker, EPA (and DOH) believes it is able to focus on the most appropriate Operators covered under the permit. Also, EPA received many comments that indicated For-Hire Applicators apply to many small areas throughout different pest management areas, and requiring an NOI from them for certain activities would be duplicative of Decision-maker requirements. This would likely confuse For-Hire Applicators who are generally very small businesses, and would not provide meaningful information on identification of pest management areas. Also, requiring NOIs for For- Hire Applicators based on the cumulative area treated may lead to Decision-makers selecting For-Hire Applicators based on whether that applicator was above or below the annual treatment area threshold (with an understanding that applicators below the annual treatment area threshold would have fewer permit requirements and thus would be less expensive). Several commenters (on the EPA's draft permit) suggested that this approach would promote use of less experienced For-Hire*

*Applicators and thus create a higher probability of improper application of pesticides.*

### *Number of discharges*

*Lastly, while the exact number of entities and thus the number of discharges which may be covered by the permit is unknown, EPA estimates that the PGP covers more than 35,000 dischargers per year in the states for which EPA is the permitting authority. For the State this information is unknown. Of this total, a large majority represent small pesticide applications with very little discharge to waters of the United States, and that occur over very short periods of time over the course of a year, and that EPA considers to have relatively low potential for impact (such as herbicide applications to short sections of ditches or canal banks). Similarly, the State also expects that a large majority of pesticide dischargers represent application with very little discharge to State waters and that occur over a very short period of time over the course of a year, and that the State considers to have relatively low potential for impact. Thus, requiring an NOI from all dischargers would be a large burden of little value for permitting authorities, permittees, and interested stakeholders.*

*In analyzing these regulatory criteria, the EPA gave particular weight to the expected volume of the discharges, and the estimated number of discharges to be covered by the permit. After considering the universe of entities to be covered under the permit, EPA found a logical break between entities applying pesticides to larger areas versus smaller areas, a difference between the types of entities generally responsible for performing such pest control activities, and who controls such discharges. EPA received a number of comments suggesting the Agency implement a two-tiered approach for identifying Operators required to submit NOIs. Those commenters suggested that EPA establish criteria for large government jurisdictions that control the decision to perform pest control activities on large areas of public lands and a second category of smaller Operators (e.g., small government jurisdictions, small organizations). EPA considered these approaches and the final (EPA) permit reflects a multi-tier approach.*

*As a result, NOI requirements are based on the size of areas treated and the entity making the decision to perform pesticide applications. In addition, EPA received comments suggesting that NOIs be required for discharges to sensitive waters and to waters with ESA-listed species. EPA agrees with commenters and has added an NOI requirement for any discharges to:*

- outstanding national resource waters (Tier 3 waters) and,*
- waters of the United States that contain NMFS Listed Resources of Concern, as defined in Appendix A of the permit (this requirement was added based on ESA consultation with NMFS). To date, FWS has not identified similar concerns with*

*the need for NOIs for all such discharges to waters with FWS listed resources. Should FWS and EPA later consider requiring submission of NOIs based on discharges contributing to Waters of the United States with FWS listed species or critical habitat, EPA will notice any proposed changes for public comment.*

For the State, consideration was provided for Class 1, Inland waters; Class AA, Marine waters; and areas restricted in accordance with the State's "No Discharge" policy in Chapter 11-54, Water Quality Standards. To clarify, the State has no obligation to include provisions in its PGP as a result of EPA's ESA consultation with NMFS.

*Table 1-1 in Part 1.2.2 of the (EPA's) permit identifies which Decision-makers are required to submit an NOI. This information is available in Table 1, Section 1(f) of the State's PGP. Based on the analysis outlined in Part 1.2.1 of the EPA's permit, EPA has determined and DOH agrees that it is inappropriate to require For-Hire Applicators, who are not Decision-makers as defined in Appendix A of the EPA's permit and in HAR, Section 11-55-01, to submit NOIs. EPA has further determined and DOH agrees that most Decision-makers who apply pesticides to relatively small areas should not be required to submit NOIs. Therefore, EPA (and DOH) is exercising its discretion and not requiring these Operators to submit NOIs (except for certain Operators that the Agency (and DOH) believes have a significant role in land resource stewardship for public health and environmental protection and should be expected to provide the Agency and DOH notice of such activities). Nonetheless, EPA (and DOH) emphasizes that even if NOIs are not required Operators that are covered automatically under this permit are subject to and must comply with all applicable requirements contained within the permit.*

*In summary, EPA (and DOH) is requiring NOIs from the following types of Decision-makers:*

- *Decision-makers exceeding an annual treatment area threshold;*
- *Other Decision-makers specifically with land resource stewardship responsibilities;*
- *Decision-makers discharging to Tier 3 waters (for Hawaii - Class 1, Inland waters; Class AA, Marine waters; and areas restricted in accordance with the State's "No Discharge" policy in Chapter 11-54, Water Quality Standards) and to NMFS Listed Resources of Concern (for Hawaii - not applicable), as defined in Appendix A of the EPA's permit.*

*A more detailed discussion of EPA's rationale for requiring NOIs for these three categories of Decision-makers follows. Differences in the State's PGP are noted within EPA's discussion.*

#### *NOIs for Decision-Makers Exceeding an Annual Treatment Area Threshold*

*EPA developed annual treatment area thresholds for each use pattern that will require Decision-makers applying pesticides to larger areas to submit an NOI. To determine the appropriate annual treatment area thresholds that would trigger the NOI requirement, EPA's Office of Water, Office of Chemical Safety and Pollution Prevention (formerly the Office of Pesticides, Pollution, and Toxic Substances) and the ten EPA Regional Offices engaged in discussions with USDA, states as co-regulators, and representatives from industry including pesticide registrants, applicators, and land managers. EPA also solicited and received some comments on the draft PGP on appropriate annual treatment area threshold values to use for NOI submission. Based on these discussions, the comments received, and EPA's best professional judgment, EPA developed annual treatment area thresholds that establish NOI requirements for applications to larger areas, which are believed to have the greatest potential for impact to Waters of the United States. EPA recognizes there are many unknowns concerning the size, organization, and activities of the permitted universe. Considerable variation in the availability of data and in the consistency of requirements across regions and states resulted in EPA relying heavily on its best professional judgment in setting the NOI annual treatment area thresholds for each of the use patterns. If a Decision-maker, otherwise not required to submit an NOI, anticipates it will exceed an applicable annual treatment area threshold during any time in a given calendar year of the permit cycle that Decision-maker must then submit an NOI consistent with the due dates described in Part 1.2.3 of the (EPA's) PGP [for the State's PGP, refer to Section 1(f)].*

*To avoid duplication of submissions for the same treatment area, EPA is requiring that the Decision-maker responsible for such applications be the Operator required to submit the NOI. So, where a Decision-maker hires an Applicator to perform the pest control activities, the NOI is to be submitted by the Decision-maker.*

*EPA's rationale for the annual treatment area thresholds for the four pesticide use patterns included in the PGP are described below. The selection of thresholds was performed separately from the other criteria for determining who should be required to submit NOIs. So, for example, EPA established thresholds for mosquito control yet later determined that all mosquito control districts would be required to submit NOIs based on their land resource stewardship responsibilities. With that in mind, following is EPA's rationale for the annual treatment area thresholds for each of the four pesticide use patterns:*

#### *Mosquito Control and Other Flying Insect Pest Control*

*For Mosquitoes and Other Flying Insect Pests, the annual treatment area threshold is set at 6,400 acres. EPA believes that the vast majority of mosquito*

*control and abatement districts in the United States manages areas significantly larger than this annual treatment area threshold and may reasonably expect to exceed it during any given year. For instance, information from the state of Florida on 49 independent mosquito control districts shows that 48 of the 49 districts annually apply to more than 6,400 acres, which indicates that applications exceeding this area are quite typical. Similarly, data provided in EPA's draft Economic Achievability Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides and included in the administrative record for this permit show similar findings as for Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates applications that approach or exceed this annual treatment area threshold. Therefore, EPA believes the annual treatment area threshold appropriately captures most Decision-makers engaging in this use pattern. EPA also believes too that even those mosquito control districts that treat areas below the annual treatment area threshold should be required to submit NOIs, as these entities were created specifically for the control of pests and should provide notice to the Agency of their activities. As such, the permit requires all mosquito control districts or similar pest control districts, as well as any other Decision-makers treating over the annual treatment area threshold, to submit an NOI. The Agency believes this appropriately captures those two classes of entities that either (1) are established with a specific purpose of pest control or that (2) treat large enough areas to warrant notice to the Agency.*

#### *Forest Canopy Pest Control*

*Forest canopy pest suppression programs are designed to blanket large tracts of terrain, throughout which Operators may not be able to see Waters of the United States beneath the canopy. EPA has set the annual treatment area threshold at 6,400 acres for this use pattern with the understanding that this will exclude only the smallest applications from the NOI requirement. These smaller applications generally occur on private lands<sup>1</sup>. Therefore, EPA believes the annual treatment area threshold appropriately captures most Decision-makers engaging in this use pattern, particularly public agencies managing large tracts of land.*

#### *Weed and Algae Control*

*For Weeds and Algae, the annual treatment area threshold has been set at 80 acres or 20 linear miles of pesticide application to canals and other Waters of the United States. This annual treatment area threshold has been set to capture*

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<sup>1</sup> *Butler, Brett J. and Leatherberry, Earl C., America's Family Forest Owners, Journal of Forestry, October/November 2004.*

*Decision-makers treating relatively large portions of surface waters and watersheds, such as water management districts, wildlife and game departments, and some homeowner and lake associations. For example, Florida's South Florida Water Management District usually applies pesticides to 60 acres at a time hundreds of times per year for various invasive plants on Florida's Lake Okeechobee. After reviewing the operations of major irrigation and flood control systems, EPA expects that generally, relatively large entities such as South Florida Water Management District, California Department of Water Resources, or organizations with comparable resources are the types of entities that manage 20 or more miles of engineered irrigation systems, and that this is a reasonable limit to trigger the NOI requirement. The same rationale is applied to managers of ditch and canal banks. Therefore, EPA believes the annual treatment area threshold appropriately captures the relatively large applications but excludes a significant number of small applications. Similar to mosquito control, EPA believes that weed control districts, or similar pest control districts created specifically for the control of pests that treat areas below the annual treatment area threshold should be required to submit NOIs based on their formation as an entity specifically established for land resource stewardship that relies on pest control as a key aspect of the organization. As such, the permit requires all weed control districts or similar pest control districts as well as any other Decision-makers treating over the annual treatment area threshold to submit an NOI. The Agency believes this appropriately captures those two classes of entities that either (1) are established with a specific purpose of pest control or that (2) treat large enough areas to warrant notice to the Agency. Unlike the EPA's PGP, the State chose to calculate the annual area treatment threshold by treating each treatment area as a separate area. This method was first proposed in the EPA's draft permit, however, was revised in their final permit. Without the CWB having any existing information on these types of pesticide activities and assuming Hawaii has smaller scale activities than on the continental United States, DOH's thought was that for pesticide uses involved with the control of weed and algae; and animal pests, the threshold should be based on an annual cumulative calculation consistent with the EPA's draft permit. Also, having only one method to calculate annual treatment thresholds for the four use patterns helps to avoid confusion. DOH during the permit cycle will determine if the threshold values are appropriate and may revise them in the future as more information becomes available.*

### *Animal Pest Control*

*Invasive and nuisance aquatic animals are most commonly treated by public agencies such as departments of fish and game, or utilities such as water management districts that manage areas of surface water in excess of 80 acres or 20 linear miles. The high mobility and prolific breeding abilities that necessitate control of aquatic animals usually means that pesticide applications most often occurs in the entirety or large portions of the water bodies they*

*inhabit. For example, fishery management applications using rotenone often occur in the entire lake and thus, any similar application to a lake of more than 80 acres in area will trigger the annual treatment area threshold. EPA expects that for this reason, only spot applications to eradicate small emergent populations of sessile animals or applications to very small water bodies might be excluded from an NOI requirement. Therefore, EPA believes the annual treatment area threshold appropriately captures the relatively large Decision-makers engaging in this use pattern. Similar to aquatic weeds, EPA is also requiring organizations with a specific land resource stewardship responsibility to submit NOIs regardless of the area treated.*

*Based on comments received on the proposed permit, EPA adjusted the annual treatment area thresholds at which NOI submission is required. Specifically, for the Mosquito and Other Flying Insect Pest Control and Forest Canopy Pest Control categories, EPA increased the annual treatment area threshold from 640 acres per year to 6,400 acres per year based on an abundance of comments suggesting that 640 acres represented an area that could be treated in a very short period of time and a wide range of applicators are likely to rise above that threshold. EPA does not have detailed national information on the universe of Operators that would meet a 640 or 6,400 acre annual treatment area threshold in any given year, but based on comments received, the Agency believes that the lower annual treatment area thresholds would have encompassed many small Operators who may apply pesticides only one or two days a year yet still exceed the 640 acre threshold (and are Operators that generally are not in the business of controlling pests). In addition, for mosquito control, the final (EPA) permit reflects a change that now excludes larviciding from any annual treatment area threshold calculation. The agency is removing larvicides from these calculations in that generally, use of larvicide for mosquito control is preferred from an environmental protection standpoint.<sup>2</sup> To be clear, while not included in annual treatment area threshold calculations, discharges from larviciding activities are still required to be covered under an NPDES permit and are, strictly speaking, in fact covered by the PGP without the need to submit an NOI.*

#### *Approach for Calculating Thresholds*

*Also, when calculating the size of a treatment area for aerial applications, EPA agrees with commenters who suggest that Operators should use the labeled effective swath width for the specific application to determine area treated; off-target pesticide drift is not to be figured into treatment area determinations. EPA acknowledges that the entire area treated may not result in discharges to waters of the United States; however, EPA is using this treatment area calculation*

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*2 Insecticides for Mosquito Control in Maryland 2007 Recommendations, published online at: [http://www.mda.state.md.us/plants-pests/mosquito\\_control/insecticides\\_for\\_mosquito\\_control\\_md.php](http://www.mda.state.md.us/plants-pests/mosquito_control/insecticides_for_mosquito_control_md.php)*

*approach merely as a tool for identifying more significant Operators based on the size of areas treated. EPA expects Operators treating larger areas to be more able to implement more comprehensive practices and documentation of those activities regardless of whether those applications result in discharges to waters or not. That being said, only those applications that result in discharges to Waters of the United States requiring NPDES permit coverage.*

*EPA did not set a linear threshold for mosquito control or forest canopy pest control. EPA believes total area treated is more representative of significant discharges and also, importantly, eliminates the need for the Operator to have to delineate all Waters of the United States for purposes of determining applicable permit requirements. In these instances, while permit requirements only apply to those pesticide applications that result in discharges to waters of the United States, EPA believes that many Operators will manage pest control similarly in both waters of the United States and other areas (including non-waters of the United States) thus alleviating the need for Operators having to delineate each and every waterbody within the treatment area.*

#### *NOIs for Certain Entities Regardless of the Annual Treatment Area Threshold*

*In addition to NOIs from Decision-makers treating the largest areas, EPA is also requiring NOIs from certain other types of entities with land resource stewardship responsibilities that involve the routine control of pests. For these entities, the permit requires NOIs regardless of the size of the area treated. In general, EPA expects that in many instances these entities will exceed one or more of the annual treatment area thresholds. Nonetheless, the Agency believes that regardless of the size of the treatment area, land resource stewardship entities (typically public or quasi-public, though not exclusively so) for whom pest control is central to the organizational land stewardship purpose should also be required to submit NOIs. EPA's rationale for imposing the NOI requirement is premised on these entities (public, quasipublic, and private) organizational purpose, though EPA recognizes that incidentally many of these entities are governmental. The specific entities required to submit NOIs regardless of whether an annual treatment area threshold is exceeded are as follows:*

*Agencies for which pest management for land resource stewardship is an integral part of the organization's operations – Any agency that has, as one of its functions, or primary responsibilities, land resource management (such that pest control is integral to the organizational purpose), is required to submit an NOI. EPA believes that most pest control activities performed by agencies will meet the requirement to submit an NOI. EPA recognizes, however, that many such public entities may perform ad-hoc pest control on a small-scale that is not central to its organizational purpose, but rather incidental, for example, to its occupancy of a building. As an example, the U.S. Social Security Administration may maintain a building or group of buildings where weeds have overtaken a*

*parking lot, and the local office determines its intention to control those weeds with an herbicide. That weed control would not be considered central to that agency's organizational purpose but rather the weed control would be incidental to operation of the facility. By contrast, a transportation agency controlling weeds in flowing waters adjacent to roads would be considered to be performing a function that is central to its land resource management purposes and as such would be required to submit an NOI. To be clear, in both instances described above, discharges would require permit coverage; however, only in the second instance is an NOI required to be submitted.*

*Mosquito control districts (or similar pest control districts, such as vector control districts) – In many parts of the country, state and territories governments have established special districts for the purpose of mosquito control. Generally, these districts treat large areas that would exceed EPA's annual treatment area thresholds; however EPA is requiring any such district, regardless of the area treated, to submit an NOI based on the Agency's understanding that these districts were established specifically for pest control and should be expected to meet the highest standards established in the permit.*

*Weed control districts (or other similar special purpose districts created with a responsibility of pest control) – EPA is aware of some weed control districts created across the country with the specific responsibility to control pests. The Agency believes these types of entities, who perform pest management and control, as the primary function of their organization, should provide notice to the Agency of such activities regardless of the size of the area treated, similar to requirements for mosquito control districts.*

*Irrigation control districts (or other similar public or private entities supplying irrigation waters) – In many parts of the country, special districts have been established for the purpose of maintaining irrigation canals and ditches. Generally, these districts treat large areas that exceed EPA's annual treatment area thresholds; however EPA is requiring any such district, regardless of the area treated, to submit an NOI. Similar to pest control districts described above, the Agency believes weed control is a critical component of irrigation control district operation and should also be expected to meet the highest standards established in the permit.*

*NOIs for Discharges to Tier 3 Waters (for Hawaii - the following applies to Class 1, Inland waters; Class AA, Marine waters; and areas restricted in accordance with the State's "No Discharge" policy in Chapter 11-54 entitled "Water Quality Standards")*

*Any Decision-maker requesting to discharge to these waters may seek coverage under the PGP provided that the discharge is short-term or temporarily lowers water quality due to pesticide applications that are necessary to protect the water*

quality, environment, or public health. Any Decision-maker wanting coverage under the PGP for such a discharge will be required to identify the water by name with authorization to discharge to these waters limited to only such named waters.

Also, EPA is not requiring Operators of pesticide research and development activities from the need to submit an NOI for coverage because these activities are typically smaller and in many instances, operating under a FIFRA Section 5 experimental use permit. Note that these Operators are still required to comply with PGP requirements to the extent those requirements do not conflict with the research plan.

Many commenters misunderstood the concept of annual treatment area thresholds and the method for calculating the treatment area to determine whether the Decision-maker will exceed the annual treatment area threshold and is therefore required to submit an NOI. In response to these comments, EPA added a definition of "annual treatment area threshold" to the final permit that includes a more concise explanation of how to calculate annual treatment area (for Hawaii - refer to HAR, Section 11-55-01). The Agency believes the definition and explanation will make the annual treatment area threshold calculation clearer and more understandable for Decision-makers. For comparison the EPA's and State's definitions are provided below:

EPA's definition (see EPA's PGP, Appendix A)

**Annual Treatment Area Threshold** – an 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 this permit.

For calculating annual treatment areas for Mosquitoes and Other Flying Insect Pest Control and Forest Canopy Pest for comparing with any threshold in Table 1-1, count each pesticide application activity to a treatment area (i.e., that area where a pesticide application is intended to provide pesticidal benefits within the pest management area) as a separate area treated. For example, applying pesticides three times a year to the same 3,000 acre site should be counted as 9,000 acres of treatment area for purposes of determining if such an application exceeds an annual treatment area threshold. The treatment area for these two pesticide use patterns is additive over the calendar year.

**For calculating annual treatment areas for Weed and Algae Control and Animal Pest Control for comparing with any threshold in Table 1-1, calculations should include either the linear extent of or the surface area of waters for applications made to Waters of the United States or at water's edge adjacent to Waters of the United States. For calculating the annual treatment area, count each treatment area only once, regardless of the number of pesticide application activities performed on that area in a given**

year. Also, for linear features (e.g., a canal or ditch), use the length of the linear feature whether treating in or adjacent to the feature, regardless of the number of applications made to that feature during the calendar year. For example, whether treating the bank on one side of a ten-mile long ditch, banks on both sides of the ditch, and/or water in that ditch, the total treatment area is ten miles for purposes of determining if an NOI is required to be submitted. Additionally, if the same 10 miles area is treated more than once in a calendar year, the total area treated is still 10 miles for purposes of comparing with any threshold in Table 1-1. The treatment area for these two pesticide use patterns is not additive over the calendar year.

DOH's definition (see HAR, Section 11-55-01):

**“Annual treatment area threshold”** means 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. For calculating annual treatment areas for mosquitoes and other flying insect pest control and forest canopy pest for comparing with any threshold in table 1 of Appendix M, count each pesticide application activity to a treatment area (i.e., that area where a pesticide application is intended to provide pesticidal benefits within the pest management area) as a separate area treated. For example, applying pesticides three times a year to the same three thousand acre site should be counted as nine thousand acres of treatment area for purposes of determining if such an application exceeds an annual treatment area threshold. **Similarly, for calculating annual treatment areas for weed and algae control and animal pest control for comparing with any threshold in table 1 of Appendix M, calculations should include either the linear extent of or the surface area of waters for each application made to state waters or at water's edge adjacent to state waters. For calculating the annual treatment area, count each treatment area as a separate area treated. Also, for linear features (e.g., a canal or ditch), count the length of the linear feature each time an application is made to that feature during the calendar year, including counting separately applications made to each bank of the water feature if pesticides are applied to both banks. For example, applications four times a year to both banks of a three-mile long reach of stream will count as a total of twenty four linear miles (three miles \* two banks \* four applications per year = twenty four miles to which pesticides are applied in a calendar year).**

The calculation of annual treatment area threshold also now only includes those applications made to waters of the United States or at water's edge of waters of the United States. This is different than the draft permit that specified calculations should include the area of the applications made to: (1) waters of the United States and (2) conveyances with a hydrologic surface connection to waters of the United States at the time of pesticide application.

*A number of commenters questioned EPA's authority to require NPDES permits for pesticide applications that do not discharge to waters of the United States. To be clear, the draft permit was not intended to require permits for pesticide applications that do not discharge into waters of the United States. Rather, it allowed Operators to determine appropriate requirements without having to delineate each waterbody into which they discharge (since delineation of Waters of the United States has not been performed for many waters). EPA agrees with commenters that it is clearer to focus permit requirements on treatments to waters of the United States; thus, the final permit specifies that calculations are only for pesticide discharges to waters of the United States or to the water's edge of waters of the United States. Application of pesticides to conveyances that are not waters of the United States, including waters that are hydrologically connected to waters of the United States but are not themselves waters of the United States, should not be included in the calculation of annual treatment area thresholds. Similarly, applications to dry lands should not be included in calculations for aquatic animal and aquatic weed and algae applications.*

*Only those applications to waters of the United States should be included in the calculations. The approach for mosquitoes and other flying insect pests and forest canopy pests is slightly different because annual treatment area thresholds are based on total area treated, assuming that some portion of the area treated includes waters of the United States. EPA is using a different approach for these two use patterns since generally, pesticide applications for these use patterns are not made directly to waters of the United States. EPA believes this approach will capture the largest pesticide applicators and pesticide applications with discharges to waters of the United States.*

*Several commenters also raised questions about how to calculate areas treated for wetlands. The annual treatment area thresholds apply either to:*

- Total area treated (for which a determination of whether or not an area is a wetland is not relevant to the threshold calculation) or*
- Total area of water treated or area treated at water's edge (for which the Operator will have to determine whether a waterbody/wetland is a water of the United States.*

*The issuance of the PGP does not affect whether waterbodies are waters of the United States or not and as such questions about how to delineate such waters are outside the scope of this action. Additional information on waters of the United States is available on EPA's website at:  
<http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>.*

*Several other commenters asked how to calculate areas treated when using spot treatment for pests. The approach for determining an annual treatment area*

*threshold does not differentiate between blanket treatment and spot treatment. EPA expects Operators will be able to estimate area treated based on typical application rates and quantities of pesticide products used to perform such treatments.*

*EPA estimates 365,000 pesticide applicators and more than 5 million pesticide applications annually will require NPDES permit coverage as a result of the Sixth Circuit Court decision. EPA developed its PGP, in response to the Sixth Circuit case, applicable in most areas where EPA remains the NPDES permitting authority for such discharges, to allow Operators to combine applications as appropriate to minimize duplication of activities. For examples, Operators can include multiple locations, applications, use patterns, etc. in a single NOI and may develop a single PDMP and annual report for those combined areas. Conversely, some Operators may prefer to track activities separately and may opt to submit separate NOIs for separate treatment areas and likewise develop individualized PDMPs and annual reports. For purposes of calculating area treated to compare with a threshold, a Decision-maker should combine all treatments, regardless of whether those treatments are in one waterbody or multiple waters; or whether the treatments are contained in one or multiple NOIs. While this NOI approach provides flexibility for Operators in how to comply with these permit terms, Operators are required to submit NOI updates (i.e., modifications) for any activities or locations not covered by other NOIs. Similar authorization timeframes apply to those updates as for original NOI submissions (e.g., modifications for discharges to Waters of the United States containing NMFS Listed Resources of Concern are due at least 30 days prior to discharging).*

*Several commenters expressed confusion at the term “at water’s edge” while other commenters suggested deleting this term from the permit. EPA intends for the phrase “at water’s edge” to allow coverage of activities targeting pests that are not necessarily “in” the water but are near the water such that control of the pests may unavoidably involve a point-source discharge of pesticides to Waters of the United States. EPA is retaining this term in the permit to reflect these activities for which permit coverage is required. Also, commenters questioned how to estimate the length of the water’s edge for lakes and streams, acknowledging that the water’s edge for a ditch is relatively straight. EPA expects Decision-makers to use best professional judgment in determining linear distances based on their approach for the application of pesticides. For an irregularly-shaped water body, where the pesticide application follows a similar irregular pattern, the length of this irregular edge should be used for calculating area treated. If the pesticide application is performed in a relatively straight line despite the irregular nature of the water’s edge, that straight line distance is a more appropriate measure.*

## **PGP Comment Response Recordkeeping and Reporting Essay**

Similar to the EPA, DOH received comments on the reporting and recordkeeping section of the PGP (Section 7 of the State's PGP) with commenters wanting either more or less information included in the final permit. Following is DOH's response to those comments.

DOH's PGP requires a basic set of records to be maintained by all operators (decision-makers and applicators), as well as separate requirements depending on the type of operator (i.e., applicator, for-hire applicators, NOI submitting decision-maker that is a small entity and NOI submitting decision-maker that is a large entity). These provisions are consistent with NPDES program requirements found at 40 CFR 122.41(j), as applied to eligible pesticide discharges under the PGP while balancing the need to record and collect specific information documenting implementation of permit requirements with the desire to not unduly interfere with the ability of operators to perform their responsibilities. They also provide for on-site records to document implementation and for reporting key information to DOH. For example, under the PGP only a decision-maker required to submit an NOI and who is a Large Entity is subject to annual reporting and PDMP requirements and must retain a copy of the PDMP and of annual reports submitted to DOH. DOH believes the PGP provides a streamlined recordkeeping and reporting approach that better assigns responsibility to the appropriate operators while meeting its regulatory obligations. For-hire applicators are required to retain records of the items listed in Sections 7(a) and 7(b) of the PGP because for-hire applicators are uniquely positioned to have access to this range of information.

DOH believes the annual reporting, recordkeeping and adverse incident notification and reporting requirements in the permit are sufficient for the Department to protect water quality from such discharges in compliance with the Clean Water Act.

Recordkeeping and reporting provides useful information that ultimately can serve the interests of the regulated community and the public. Similar to the EPA, DOH is requiring decision-makers who must submit an NOI to file annual reports. The annual report will help the agency identify where pesticide discharges are occurring and the types of pesticides being discharged. The annual report provides specific information concerning the scope and nature of discharges permitted under the PGP. EPA believes annual reports (as opposed to a more or less frequent submission) are appropriate for this universe of dischargers based on EPA's best professional judgment. Similar to the EPA, DOH is requiring large entities to assess permit compliance and to determine whether additional controls on pesticide discharges are necessary to protect water quality.

Similar to the EPA, DOH requires for-hire applicators to keep basic information on each treatment area to which pesticides are applied for which there is a discharge to Waters of the United States and covered under the PGP, namely:

- Description of each treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by location, to which pesticide(s) are discharged;
- Pesticide use pattern(s) (i.e., mosquito and other flying insects, weed and algae, animal pest, or forest canopy);
- Target pest(s);
- Name of each pesticide product used including the EPA registration number;
- Quantity of each pesticide product applied to each treatment area;
- Pesticide application date(s); and
- Whether or not visual monitoring was conducted during pesticide application and/or post-application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides;

EPA has determined that this information is commonly kept by for-hire applicators (be it for managing their business or complying with other existing federal, state, and local laws) and projects minimal burden associated with the recordkeeping requirement. DOH expects operators covered under the PGP to be familiar with any other applicable laws that may apply to their pesticide applications and discharges from those applications. DOH does not believe it is appropriate to include other requirements in the PGP that may apply to an operator but for which DOH does not have any control over such requirement. For example, if DOH were to include another Department's requirement in the PGP, that requirement would remain an enforceable condition of the permit even if the other Department then changed that requirement. DOH would then have to continuously modify the PGP to reflect these types of changes. Similarly, if federal NPDES permit coverage for the application of pesticides to Water of the U.S. is no longer required, DOH would then have to modify its rules (*i.e.*, HAR, Chapter 11-55) to reflect the change.

Operators can rely on records and documents developed for other programs, such as requirements under FIFRA, provided all requirements of the final permit are satisfied. Compliance with the PGP does not replace other requirements, such as compliance with pesticide use requirements under FIFRA or NEPA.

The following is provided for informational purposes; DOH agrees with many of the positions expressed by EPA. Explanations have been included where the State's PGP differs from the EPA's or where additional information specific to the State was required:

*EPA received a number of comments on the draft permit requirement for certain operators to retain records of maintenance activities. Commenters agreed with the draft permit not requiring maintenance records be included in annual reports. The final permit retains this approach. Several commenters disagreed with the requirement for all applicators to document all equipment cleaning, calibration,*

*and repair. Commenters suggested that this could be overly burdensome, for example, having to document every nozzle replacement and every equipment-cleaning activity, that may happen several times a day for each piece of equipment. EPA agrees that this full range of documentation is unnecessary for the Agency to ensure water quality protection. While the permit still requires such activities be performed (i.e., maintaining equipment in proper operating condition, including cleaning, calibration, and repair and preventing leaks, spills, and other unintended discharges), the Agency has focused on requiring documentation of calibration records only. The final permit requires applicators to retain documentation of any equipment calibration activities since this is one of the more critical aspects of ensuring proper pesticide application rates.*

*A number of commenters expressed concern with reporting information on a treatment area basis because it could result in operators having to document and report thousands of different areas. Commenters suggested information should be reported by management area. EPA agrees with commenters. The final permit requires annual reports provide information on the treatment area to which pesticides are discharged. The final permit still requires records be collected and retained on a treatment area basis, although the Agency believes this is the way operators generally track pesticide applications. To be clear, a treatment area may be comprised of many discontinuous individual locations where pesticides are being applied within a pest management area or may be one specific area. The annual report does not require addresses for treatment areas. EPA does not expect operators to have to document each specific spot on a map where pesticide has been applied. Rather, for any given pest control project, EPA generally expects operators to consolidate records within the bounds of that project. Similarly, EPA acknowledges that reporting pesticide usage within a treatment area may not be indicative of the amount of pesticide actually discharged to Waters of the United States but that operators should report their total pesticide use in a treatment area where contact with Waters of the United States is unavoidable. Pesticide application activities that do not result in discharges of pesticides to Waters of the United States should not be included in the annual report since those discharges do not require NPDES permit coverage.*

*A number of commenters indicated that the draft permit required operators to provide more information on the specifics of waterbodies than was needed or possible. EPA acknowledges commenters' concerns; however, the Agency believes the draft permit and final permit both reflect how waters are to be addressed. First, commenters suggested that locations of waters should not be included in NOIs. EPA disagrees. Aside from this being a required element of NOIs (see 40 CFR 122.28(b)(2)(ii)), EPA believes it is vital for the Agency to know to which waters operators are discharging. The PGP is developed specifically to protect water quality and the location of discharges is one of the most important pieces of information for the Agency to evaluate potential effects of discharges on these waters. EPA needs this information to ensure*

accountability and verify compliance with permit terms. To be clear, EPA is only requiring information on discharges to “Waters of the United States.” One commenter questioned whether EPA wanted information on abandoned swimming pools, tire piles, and tire ruts to which pesticides are applied. EPA does not. EPA acknowledges that in many instances, delineation of Waters of the United States may not be clear or may require further investigation by experts to make such a determination. Thus, EPA is providing flexibility in NOIs and annual reports for operators to identify waters either by name or by location. In lieu of providing the name of each waters of the United States to which an Operator discharges, the PGP does allow Operators to identify an area where discharges will occur. **(For the State’s PGP both the name and location of the waterbody are required, however, if the waterbody does not have a name, the name of the State water in the NOI shall be provided as “Unnamed.”)** This provides the Operator with flexibility in not having to delineate every geographical feature that contains water. **(The State’s PGP does not allow for this flexibility, all State waters to which pesticide applications will be made are required to be provided in the NOI.)** To clarify, EPA is requiring operators to list/document locations/names of waters of the United States as described above; operators do not have to list/document applicable water quality standards for each of those waterbodies. EPA acknowledges that in many instances, only a small portion of an operator’s pesticide application may be discharged to Waters of the United States, such as for the application of pesticides to rights-of-way. Even in these instances, EPA expects operators to document Waters of the United States in one of the three ways described above. EPA received a number of comments on how pesticide information should be reported. Some requested that pesticide use be reported generically while others ask for very specific information on pesticide products used, product names, active ingredients, concentrations, etc. EPA retained the same format for reporting pesticides as proposed; namely, total amount of pesticide product by EPA registration number. EPA believes this approach provides the Agency with useful information in assessing potential impacts to water quality for specific pesticides as applied. The Agency believes that gathering more specific information on pesticide applications, such as providing concentrations of ingredients as applied, will likely lead to unreliable information at a significant burden to operators to compile such information. EPA believes obtaining information on quantities and EPA registration numbers will provide the Agency with sufficient information to begin to assess potential effects to water quality of pesticide discharges covered under NPDES permits.

EPA received a number of comments suggesting that annual reports should include more information on monitoring, including a requirement for ambient water quality monitoring, and on pest management measures considered in addition to any pesticides applied. EPA disagrees with commenters on requiring this level of information be submitted for these applications. EPA expects hundreds of thousands of pesticide applications will be covered under this permit.

*Although all Operators are required to monitor, requiring reporting of monitoring information, be it visual or ambient water quality, would inundate the Agency with information that does not seem warranted based on a review of existing water quality monitoring data that does not suggest that the activities covered under this permit contribute significantly to water quality problems. For a further discussion about monitoring please see Section III.4 of the (EPA's) Factsheet. Several commenters also suggested additional information that should be included in annual or other routine monitoring, including pre- and post-application plant surveys for any multi-year applications, deviations from any plans, or corrective actions. Other operators suggested that annual reports should contain less information than identified in the draft permit and that information should focus just on deviations from the plan, adverse incidents, corrective actions, and products applied and quantities. EPA disagrees with commenters suggesting more or less than that required in the final permit. Based on available information, EPA believes the final permit reflects a reasonable compilation of information that will allow the Agency to assess the adequacy and compliance with the permit in protecting water quality while not causing undue burden on permittees to have to gather and report detailed information on pest control practices.*

*A number of commenters noted that identifying action thresholds can be difficult when multiple pests exist on a site. Also, commenters questioned how pest densities are to be measured and how these could be compared to other sites and how operators could justify different treatment practices for similar pest densities. EPA agrees with commenters and the final permit now requires Operators to establish any pest- or site-specific thresholds (which may, for example, be based on comparisons with other sites or based on the existence of multiple pests on site). This allows operators to establish criteria for pest control different than relying solely on pest densities. So, for example, a threshold may be based on a water temperature (for which the state has information demonstrating the proliferation of a pest once the water reaches a certain temperature). Those thresholds are to be documented in the PDMP, if required, and those large entities that are required to submit NOIs are required to submit threshold information in the annual report. EPA believes this information is useful to demonstrate that the most significant applications are discharging to waters of the United States based on a demonstrated need for pest control. A number of commenters suggested that requiring operators to document activities within 14 days does not provide an adequate amount of time since in many instances applicators are applying continuously for many days in a row and may not have the time to make such documentation. EPA disagrees with commenters and notes that the permit is written such that activities are to be documented as soon as possible but not later than 14 days following completion of each pesticide application. Thus, if the application is an activity occurring over many days, "completion" would occur at the end of that multi-day process and as such, documentation of the application would only have to be completed one*

time. In a case where different treatments are occurring every day, the Operator would be expected to document each of those activities, although the Agency believes the vast majority of pesticide applications are already documented to the extent required under the final PGP.

A number of commenters offered suggestions on what types of operators should be required to submit annual reports and retain different types of records. EPA has determined that it is most appropriate for operators who must submit an NOI to maintain records of acres and linear miles treated for the same reasons that such operators are required to submit NOIs initially. EPA evaluated the type and expected nature of discharges, the potential for toxic and conventional pollutants in discharges, the expected volume of discharges, other means of identifying discharges, and number of discharges, and determined that according to these factors, agencies with a land resource stewardship responsibility to control pests, mosquito and similar pest control districts, irrigation districts, Decision-makers discharging to Tier 3 waters (**For Hawaii – Class 1, Inland waters; Class AA, Marine waters; and areas restricted in accordance with the State’s “No Discharge” policy in Chapter 11-54 entitled “Water Quality Standards,”**), as well as any Decision-maker responsible for a discharge that exceeds the NOI thresholds perform significant pest control activities resulting in discharges to Waters of the United States, the details of which should be documented by such operators and submitted to EPA. Accordingly, EPA has determined that NOIs and related pesticide usage records for operators outside of these groups and that are not discharging in excess of the permit-established thresholds would not provide meaningful information on identification of pest management areas or volume of pollutants discharged. Annual reports are due February 15th (**same as for the State**) for the prior calendar year activities. One commenter suggested the Agency move the due date to the front of the section to make it clearer to operators. EPA disagrees with commenter that the due date should be moved. The due date is identified twice in Part 7.6 (**Section 7(f) of the State’s PGP**) of the permit and should provide adequate notice to operators of this requirement. Also, the Agency disagrees with a commenter who suggested the permit should provide 60 days (i.e., until March 1) for submission of an annual report. EPA believes 45 days is an adequate amount of time for operators to compile information for purposes of submission of this report to the Agency.

A number of commenters suggested permittee data (e.g., annual reports, NOIs, and adverse incident reports) should be publicly available and reported to the respective states. In addition, commenters stated that the public should also have access to pesticide planning documents. One commenter clarified that plans, reports, etc. should be submitted to EPA rather than retained on-site since information that is not submitted to EPA is more difficult to obtain through a Freedom of Information Act (FOIA) request than for information submitted directly to EPA. The Agency acknowledges commenters’ concerns; however, the Agency believes the final permit requires the correct amount of information to be

*submitted and the correct amount that is required to be maintained on-site but not required to be submitted to EPA.*

*A number of commenters expressed concern about confidentiality of information required to be submitted in annual reports. Specifically, for-hire applicators expressed concerns that the information required in annual reports would divulge client lists that were critical to the success of their business. Several commenters suggested that EPA should require that applicators retain records on-site but not submit those records to EPA so that confidentiality of records is protected while still allowing EPA inspectors to review those records. Other commenters expressed concern that records not submitted to EPA were more difficult for the public to obtain copies, including through FOIA requests and as such, would prefer that all records be submitted to EPA. EPA acknowledges commenters' concerns and as structured, the EPA's final permit no longer requires for-hire applicators to submit annual reports. For-hire applicators are required to retain, but not submit, detailed records, which are reviewable by EPA. Decision-makers are required to submit NOIs and those decision-makers that are large entities also are required to submit annual reports with details of pesticide applications (which are available to the public). EPA believes it is reasonable for the public to be able to access information on these particular pesticide application activities discharging to waters of the United States and as such, is requiring those decision-makers to submit such information in the form of an annual report. Certain NPDES information, including permits, permit application data and effluent data, is generally considered public information, consistent with the public participation provisions of the CWA. Permittees can claim information they believe to be confidential business information pursuant to 40 CFR Part 2. Under the PGP, NOIs will be publicly available once submitted through the eNOI system or in paper form. **(For Hawaii – NOIs are available through a Request to Access a Government Record form.)** In addition, interested persons can request a copy of the PDMP through EPA **(for Hawaii – requests can be made through DOH)**, at which point EPA (or DOH) may request the Operator to provide a copy of the PDMP (a copy of the current PDMP, along with all supporting maps and documents, must be kept at the address provided on the NOI). EPA disagrees with commenters who suggest removing the PDMP requirement in order to maintain confidentiality of CBI. The PDMP and all supporting documents must be immediately available to representatives of EPA, a State, Tribal, or local agency governing pesticide applications, as well as representatives of the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an on-site inspection or upon request). By requiring members of the public to request a copy of the PDMP through EPA, the Agency is able to provide the Operators with assurance that any CBI that may be contained within its PDMP is not released to the public. Any CBI submitted to EPA will be withheld from the public consistent with 40 CFR Part 2.*

*EPA also received comments stating that the potential for third party lawsuits would force some entities to stop applying pesticides. EPA does not believe this to be a credible reason for applicators to not apply pesticides consistent with this permit and other applicable requirements.*

*EPA also received comments on the permit provision requiring that records be retained for at least three years after termination of permit coverage. Some commenters were concerned that this means retention of records for up to eight years, an activity that could incur significant additional burden merely to store and manage such records. Other commenters suggested that EPA should extend record retention for five years beyond termination of permit coverage. EPA disagrees with these commenters suggesting different timeframes for record retention. The final PGP requires records be retained for three years following expiration or termination of coverage (which may mean some records are retained for 8 years) consistent with recordkeeping requirements established for several other EPA-issued general permits. **(For Hawaii – records shall be maintained for a period of five years following the expiration or termination of coverage.)** EPA believes this requirement is consistent with the regulatory requirement at 40 CFR 122.41(j)(2) that require records to be retained for at least three years from the date of the sample, measurement, report or application.*

*Several commenters suggested that EPA could simplify annual reporting by providing a template and an example for how to report information. Commenters also requested that EPA provide education and outreach on the permit in general. EPA agrees with commenter that a template would simplify reporting for operators and as such, the Agency has included an annual report template in the final permit. **(For Hawaii – the annual report shall follow the format as in its rule or the EPA's template.)** EPA has also developed an NOI, NOT, and Discharge Evaluation Worksheet to facilitate submission and management of data required under the permit. **(Hawaii has its own NOI and Notice of Cessation forms. Recordkeeping for any decision-maker required to submit an NOI and who is a small entity may use the EPA's Discharge Evaluation Worksheet.)***

## PGP Comment Response Scope Essay

The following essay was developed by the EPA in response to comments received on their draft permit. DOH agrees with many of the positions expressed by EPA. Some explanations have been included where the State's PGP differs from the EPA's or where additional information specific to the State was required.

EPA received numerous comments and questions on the activities covered or not covered under the PGP as well as questions of whether certain activities require coverage under an NPDES permit even if not eligible for coverage under the PGP. Following is a discussion of the activities covered under the PGP and considerations for selecting the four pesticide use patterns included in the final permit. We received comments requesting that we clarify these four use patterns. **(The State's PGP, following EPA's final PGP, clarifies the scope of the use patterns.)** EPA's companion Economic Analysis, a copy of which is available in the administrative record for the PGP, has been updated to reflect these minor changes (see Part 1.1 of that document).

The Sixth Circuit *National Cotton Council* decision stated that chemical pesticides that leave a residue and biological pesticides are required to obtain NPDES coverage; the PGP merely provides one option for obtaining NPDES coverage for the discharges. Questions about whether activities not included in the final PGP require NPDES permit coverage are outside the scope of this action. Only Operators meeting the eligibility requirements outlined in the PGP may be covered under the permit. If an Operator does not meet the eligibility provisions described in Part 1.1 of the EPA's PGP (Section 1(a) of the State's PGP), the Operator's point source discharges to Waters of the United States **(for Hawaii – State waters)** from the application of pesticides will be in violation of the CWA and HAR, Chapters 11-54 and 11-55, unless the Operator has obtained coverage under another permit or the Clean Water Act exempts these discharges from NPDES permit requirements and the State amend its rules. Activities not eligible for coverage under the PGP may be eligible for coverage under an individual permit within the terms or conditions of the NPDES regulations. EPA (and DOH) expects that the vast majority of discharges from the application of pesticides will be eligible for coverage under either the EPA's or State's PGP (i.e., few individual permits will be required). Also, the PGP does not prohibit any type of pesticide application; it merely provides a mechanism for discharges from certain types of activities to be covered under an NPDES general permit. So, comments submitted on the draft PGP stating that EPA's issuance of the PGP will prohibit pesticide spraying for mosquitoes are incorrect.

We received comments concerning how flexible unauthorized states could be with their NPDES permits. States that are authorized to issue NPDES permits for the control of discharges to Waters of the United States from the application of pesticides will be developing their own NPDES permits to cover such discharges. Nothing in the federal regulations precludes a state from adopting or enforcing requirements that are

appropriate to address discharges in their state or are more stringent or more extensive than those required under the NPDES regulations. In fact, the Clean Water Act is meant to serve as a baseline for state environmental protection. The Clean Water Act and corresponding NPDES regulations require that permits, at a minimum, include the requirements detailed in Part 122.44 (but not necessarily in the same way as in EPA's permit). States are free to incorporate additional or different requirements that they feel are necessary to adequately protect water quality. Similarly, how EPA and States interpret information from which permit requirements are developed may differ. For example, the regulations, as written at 122.44(i) specify that monitoring requirements be included to assure compliance with permit limitations. One permit writer may make a best professional judgment (BPJ) determination that monitoring of discharges reasonably should occur during pesticide application while a second permit writer may make a BPJ determination that monitoring of discharges should reasonably be performed after pesticide application. It is reasonable that the two different permit writers may come to different conclusions about how best to incorporate this requirement into the permit.

As noted above, the CWA requires dischargers to obtain NPDES permit coverage for point source discharge of pollutants to Waters of the United States. Except when specifically exempted in the Act, any such discharge requires NPDES permit coverage. EPA does not have the authority to exclude certain types of discharges from the need to obtain permit coverage such as small "*de minimus*" or short-term discharges, discharges from emergency situations (except in very limited circumstances as described in 40 CFR 122.3), hand applications of pesticides, or discharges to "small" Waters of the United States. Also, permit coverage is required for discharges of pollutants; pollutants may or may not be toxic and these pollutants may or may not be found to be causing water quality impairments. Regardless, NPDES permit coverage is required for point source discharges of pollutants to Waters of the United States.

An operator is ineligible for coverage under this permit because of coverage under another permit. These include discharges currently covered under an NPDES permit and discharges from activities where the associated NPDES permit has been or is in the process of being denied, terminated, or revoked by EPA (although this last provision does not apply to the routine reissuance of permits every five years). Coverage under another permit should include any technology-based or water-quality based effluent limitations (and associated monitoring, reporting, and recordkeeping) as deemed appropriate by the NPDES permit writer.

Generally, pesticide discharges from industrial operations where those pesticides are applied within a facility/structure rather than to the environment, were not part of the National Cotton Council lawsuit or Sixth Circuit Court decision. Those types of pesticide discharges have been required to obtain NPDES permit coverage since the inception of the permitting program. For example, prior to the Court's decision, discharges to Waters of the United States from the application of pesticides for the control of zebra mussels within a piped cooling system required NPDES permit coverage. Such is still

the case. EPA notes that discharges from anti-foulant hull coatings, biofouling prevention, and residuals from ballast water treatment technologies are already covered under the Vessels General Permit and do not require coverage under this general permit (see EPA NPDES Vessels General Permit at <http://www.epa.gov/NPDES/vessels>).

Other non-pesticidal activities that result in discharges to waters of the United States are not eligible for coverage under the PGP and as such, are outside the scope of this action. This includes various products (e.g., fertilizer, alum and flocculating agents) identified by commenters that are used for maintaining the health of the water and not for the purpose of controlling pests. For example, alum can be used as an algaestat, not an algaecide, to control phosphorus levels in the water as a way to inhibit algae growth. This non-pesticidal activity is not eligible for coverage under the PGP. Similarly, non-point source discharges of pollutants to waters of the United States do not require permit coverage.

This permit does not cover, nor is permit coverage required, for pesticides applications for the purpose of controlling pests on agricultural crops, forest floors, or range lands where there will be no point source discharge of pollutants into Waters of the United States resulting from that pesticide application. However, the application of herbicides in Waters of the United States and the control of pests on plants grown in Waters of the United States, such as perennial obligate hydrophytes, is within the scope of coverage of this permit. The fact sheet does not identify every activity which may involve a point source discharge of pesticides to Waters of the United States that would require a permit; rather, the fact sheet focuses on the activities for which coverage under the PGP is available. The existence of this general permit does not alter the requirement that discharges of pesticides to Waters of the United States that are not covered by this permit be covered by an individual permit or another general permit.

EPA (and DOH) may require an individual permit (in accordance with 40 CFR 122.28(b)(3)(ii)) or coverage under an alternative NPDES general permit instead of the PGP. The regulations also provide that any interested party may petition EPA to take such an action. The issuance of the individual permit or alternative NPDES general permit is in accordance with 40 CFR Part 124 and provides for public comment and appeal of any final permit decision. The circumstances in which such an action would be taken are set forth at 40 CFR 122.28(b)(3). The Permit also includes a number of statements limiting eligibility for permit coverage under specific circumstances. In some cases, the Operator considering permit coverage may need to seek an individual pesticide permit under this program (e.g., for discharges to certain impaired waters). In other cases, the Operator will not need to be covered under any type of NPDES pesticide permit.

Additionally, discharges from anti-foulant hull coatings, biofouling prevention, and residuals from ballast water treatment technologies are already covered under the

Vessels General Permit and do not require coverage under this general permit (see EPA NPDES Vessels General Permit at <http://www.epa.gov/NPDES/vessels>).

Coverage under the PGP is only available with this general permit for certain discharges to impaired waters. Discharges to waters which are impaired for a substance which is not an active ingredient in that pesticide or a degradate of such an active ingredient are eligible for coverage. Discharges to waters impaired for temperature or some other indicator parameter, or for physical impairments such as “habitat alteration” are also eligible for PGP coverage, unless otherwise notified by EPA or DOH. Conversely, the permit is not available for the discharge of any pesticide to water that is impaired for a substance that is an active ingredient in that pesticide or a degradate of such an active ingredient. For example, application of the pesticide copper sulfate to a waterbody impaired for either copper or sulfates would not be eligible for coverage under this permit, because copper sulfate can degrade into these two substances. In this instance, the Operator would have to choose between obtaining coverage under an individual permit for such a discharge or selecting some other means of pest management, e.g., using mechanical means or a different pesticide active ingredient.

For this permit, EPA determined that it does not have information warranting a limitation for all impaired waters regardless of the impairment. In fact, the application of a pesticide to water in some instances actually improves the quality of the water, such as when used to control algae growth that can deplete oxygen levels in water. It is important to note that this permit allows EPA (or DOH), based on additional information, to opt not to approve coverage under the PGP, or at a later date to require an Operator covered under the PGP to apply for coverage under an individual permit.

For purposes of this permit, impaired waters are those that have been identified by a State, Territory, Tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting applicable water quality standards. Impaired waters for purposes of this permit include both waters with EPA-approved and EPA-established Total Maximum Daily Loads (TMDLs), and those for which EPA has not yet approved or established a TMDL. (A list of impaired waters, along with the pollutants or pollution identified as the cause of the impairment is available at [www.epa.gov/owow/tmdl](http://www.epa.gov/owow/tmdl)). **(For Hawaii - please refer to: <http://hawaii.gov/health/environmental/water/cleanwater/integrated/index.html>.)** While, it is EPA’s opinion that the 303(d) list is not a final determination of impairments, it is the best available information and Operators should use it when deciding whether their discharges meet the eligibility requirements regarding waterbodies impaired for specific pesticides. Thus, these requirements will further ensure protection of water quality.

Also, several states have listed waters as impaired for “pesticides” but have not identified the specific pesticide for which the waterbody is impaired. Without additional information suggesting that the waterbody is impaired for a specific active ingredient or degradate of that active ingredient, EPA (and DOH) is providing coverage under this permit for discharges of pesticides to waters that are impaired generally for “pesticides.”

The Agency (and DOH) expects that as these impaired waters are further assessed, specific pesticides or classes of pesticides will be identified as the cause of the impairment, at which point dischargers will no longer be eligible to obtain permit coverage under the PGP for discharges of those named pesticide active ingredients or degradates of such.

States and tribes provide the most stringent level of antidegradation protection, i.e., Tier 3 protection, to outstanding national resource waters. These waters are often regarded as the highest quality Waters of the United States, but the Tier 3 designation also provides special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Except for certain temporary changes, Tier 3 protection means that water quality cannot be lowered in such waters. In broad terms, EPA's view of "temporary" is weeks and months, not years. States and tribes make the decision of which water bodies to designate as Tier 3. A list of Tier 3 waters in areas where the PGP is available can be accessed on the Internet at [www.epa.gov/npdes/pesticides](http://www.epa.gov/npdes/pesticides). EPA proposed in the draft PGP that Tier 3 waters not be eligible for coverage; rather, such discharges would be required to obtain coverage under an individual permit. As explained in DOH's fact sheet, "The State does not have any designed Tier 3 waters, but for the purposes of this permit, has interpreted this rationale to allow for coverage under this permit for limited discharges to "Class 1, Inland waters," "Class AA, Marine waters," and areas restricted in accordance with the State's "No Discharge" policy. The State considers these waters as requiring the highest level of protection and similar to Tier 3 waters."

Irrigation return flow (which includes runoff from a crop field due to irrigation of that field) and agricultural stormwater runoff do not require NPDES permits, as exempted by the CWA. Nothing in this permit changes the effect of those statutory exemptions. For example, runoff into engineered conservation measures on a crop field such as grassy swales and other land management structures that direct flow from the crop field is considered either irrigation return flow or agricultural stormwater. However, discharges from the application of pesticides, which includes applications of herbicides, into irrigation ditches, canals, and other waterbodies that are themselves Waters of the United States, are not exempt as irrigation return flows or agricultural stormwater, and do require NPDES permit coverage. This is because such pesticide discharges are not only point sources, but also that these pesticides are now defined as "pollutants" under the CWA due to the Sixth Circuit Court's decision. Some irrigation systems may not be Waters of the United States and thus discharges to those waters would not require NPDES permit coverage.

Neither the 2006 NPDES Pesticides Rule, the Sixth Circuit Court vacatur of that rule, nor this PGP have changed in any way the determination of whether certain types of stormwater runoff are required to obtain permit coverage, or under which permit coverage is required. This is true whether the runoff contains pesticides or pesticide residuals resulting from the application of pesticides. In particular, non-agricultural stormwater runoff that may contain pesticides would not be eligible for coverage under

this permit, and is not required to obtain NPDES permit coverage (unless it was already required to do so prior to the Sixth Circuit decision or EPA designates it as a type of discharge for future stormwater permitting). Existing stormwater permits for construction, industry, and municipalities already address pesticides in stormwater. Thus, stormwater runoff is either: (a) already required to obtain NPDES permit coverage as established in section 402(p) of the CWA or (b) classified as a discharge for which NPDES permit coverage is not currently required. Thus, unless previously required to obtain NPDES permit coverage, any pesticide application that would not result in a discharge to Waters of the United States but for the action of stormwater, are not required to obtain NPDES permit coverage. The regulations that specify what types of stormwater require NPDES permits can be found in 40 CFR §122.26.

The four pesticide use patterns covered under the PGP are summarized below:

#### Mosquito and Other Flying Insect Pest Control

This use pattern includes the application, by any means, of chemical and biological insecticides and larvicides into or over water to control insects that breed or live in, over, or near State waters. Applications of this nature usually involve the use of ultra low volume sprays or granular larvicides discharged over large swaths of mosquito breeding habitat and often are performed several times per year.

#### Weed and Algae Pest Control

This use pattern includes the application, by any means, of pesticides to control vegetation and algae (and plant pathogens such as fungi) in State waters and at water's edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in or near waters. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem. Pests being treated may or may not be "aquatic" pests (e.g. may be present in water or at water's edge, including near the water) but to control the pest, pesticides will unavoidably be discharged to Waters of the United States.

#### Animal Pest Control

This use pattern includes the application, by any means, of pesticides into State waters to control a range of animal pests for purposes such as fisheries management, invasive species eradication or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a waterbody as typically the target pests are mobile. Multiple pesticide applications to a waterbody for animal pest control are often made several years apart. Similar to the weed category, pests being treated may or may not be "aquatic" pests (e.g. may be present in water or at water's edge, including near the water) but to control the pest, pesticides will unavoidably be discharged to State waters.

## Forest Canopy Pest Control

This use pattern includes pest control projects in, over, or to forest canopies (aerially or from the ground) to control pests in the forest canopy where State waters exist below the canopy. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific pest outbreaks. DOH understands that for this use pattern pesticides will be unavoidably discharged into State waters in the course of controlling pests over a forest canopy as a result of pesticide application. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Control of pests under a forest canopy (e.g., to control competing ground vegetation) that results in a discharge to State waters is not included in this use pattern but are addressed under another PGP use pattern (e.g., weed and algae pest control). Note: DOH recognizes that mosquito adulticides are applied to forest canopies, and this application is covered under the “Mosquito and Other Flying Insect Pest Control” use pattern. DOH intends that this can include both mature and immature forest canopies, including canopies that may not be continuously connected, where control of pests associated with the canopy (i.e., branches and leaves of the trees) may unavoidably involve point source discharges of pesticides to State waters.

Prior to initiating the 2006 NPDES Pesticides Rule, the Agency had interpreted the Clean Water Act and its implementing regulations as not requiring an NPDES permit for forest pest control activities. The rule stated that pesticides applied consistently with FIFRA do not require an NPDES permit in certain circumstances, including the application of insecticides to a forest canopy. 71 Fed. Reg. at 68,482. In vacating the 2006 NPDES Pesticides Rule, the Sixth Circuit Court of Appeals held that “dischargers of pesticide pollutants are subject to the NPDES permitting program in the Clean Water Act.” National Cotton Council, 553 F.3d 927, 940. Therefore, the holding of National Cotton Council has overtaken the 2003 General Counsel Memorandum as well as the 2006 rule. Other Courts have issued decisions consistent with National Cotton Council. Northwest Env’tl Def. Ctr. v. Brown, 617 F.3d 1176, 1191 (9th Cir. 2010) (“the [silviculture] exemption ceases to exist as soon as the natural runoff is channeled and controlled in some systematic way through a ‘discernible, confined and discrete conveyance’ and discharged into Waters of the United States”); Peconic Baykeeper v. Suffolk Cty., 600 F.3d 180, 189 (2nd Cir. 2010) (holding that trucks and helicopters that spray pesticides are point sources under the CWA.) Thus, point source discharges to Waters of the United States from pesticides applied for forest pest control activities need to obtain an NPDES permit.

EPA reasoned in its 2006 NPDES Pesticides Rule that pesticide products were not “pollutants” because they served the beneficial purpose of controlling pests. In promulgating that rule, EPA expressly noted that the rule did not cover either “spray drift” – the airborne movement of pesticide sprays away from the target application site into Waters of the United States – or applications of pesticides to terrestrial agricultural

crops where runoff from the crop, either as irrigation return flow or from stormwater, discharges into Waters of the United States.

Consistent with the 2006 NPDES Pesticides Rule, this PGP does not cover spray drift resulting from pesticide applications. Instead, to address spray drift, EPA established a multistakeholder workgroup under the Pesticides Program Dialogue Committee (PPDC), an advisory committee chartered under the Federal Advisory Committee Act (FACA) to explore policy issues relating to spray drift. The goals of the workgroup are to: (1) improve the understanding of the perspectives of all stakeholders regarding pesticide spray drift; (2) find common ground for further work toward minimizing both the occurrence and potential adverse effects of pesticide spray drift; (3) develop options for undertaking work where common ground exists; and (4) explore the extent of drift, even with proper usage, and the range and effectiveness of potential responses to unacceptable levels of off-target drift. On November 4, 2009, EPA issued a draft Pesticide Registration Notice (PR Notice) for public comment. The actions detailed in the PR Notice focus on improving the clarity and consistency of pesticide labels to reduce spray drift and prevent harm to human health and the environment. The draft PR Notice and related documents are available in Docket EPA-HQ-OPP-2009-0628 at [www.regulations.gov](http://www.regulations.gov) and on EPA's website at [www.epa.gov/pesticides/factsheets/spraydrift.htm](http://www.epa.gov/pesticides/factsheets/spraydrift.htm).

The Sixth Circuit found that if a chemical pesticide leaves any excess or residue after performing its intended purpose, such excess or residue would be considered a pollutant under the CWA. The Court also found that, unlike chemical pesticides, not only would the residue and excess quantities of a biological pesticide be considered a pollutant, but so too would the biological pesticide itself under the CWA. For purposes of this permit, EPA identifies biological pesticides (also called "biopesticides" under FIFRA regulations) to include microbial pesticides [40 CFR 158.2100(b)], biochemical pesticides [40 CFR 158.2000(a)(1)] and plant-incorporated protectants [40 CFR 174.3]. EPA defines chemical pesticides to include all pesticides not otherwise classified as biological pesticides.

When using the term "pesticide" in the context of this PGP, EPA (and DOH) is referring to the pesticide as applied, including any degradates of that application. When referring to the pesticide as sold/purchased, EPA (and DOH) uses the term "pesticide product." When referring to the chemical in the pesticide product with pesticidal qualities, EPA (and DOH) uses the term "active ingredient." In addition to active ingredients, pesticides and pesticide products may contain inert ingredients which play a key role in the effectiveness of a pesticide, such as serving as a solvent, a preservative, or an adjuvant.

EPA (and DOH) offers the following guidance with respect to the use patterns of chemical pesticides covered by this general permit.

1. If the application of a chemical pesticide is made over Waters of the United States (**for Hawaii – State waters**) to control pests over the water, any amount of the pesticide that falls into Waters of the United States is “excess” pesticide and would require coverage by an NPDES permit. Based on field studies of pesticide applications, the Agency expects that some portion of every application of a pesticide made over Waters of the United States will fall directly into such waters and thus assumes that applications will trigger the requirement for an NPDES permit. A permit is not necessary if no portion of a chemical pesticide applied over Waters of the United States will fall into those waters.
2. If the application of a chemical pesticide is made into Waters of the United States to control a pest in such waters, once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide that remains in those waters is a “residual” and would require coverage by an NPDES permit. Additionally, as the Sixth Circuit reasoned, the residual is discharged at the time of a pesticides initial application. Based on field studies of pesticides applied into water, the Agency expects that some portion of every application of a pesticide made into Waters of the United States will leave a residual in those waters and thus assumes every application will trigger the requirement for an NPDES permit. EPA expects that an entity applying pesticides with a discharge to Waters of the United States who wishes to dispute this assumption would be expected to provide scientific data supporting such a determination. Such data should show what level of the pesticide can be detected in water using the most sensitive analytical testing methods available to the public, and at what level in water the pesticide provides a pesticidal benefit. Such data should address the properties of the chemical pesticide under different water conditions (e.g., different pH, organic content, temperature, depth, etc.) that might affect the pesticide’s properties. A permit would not be necessary if it is determined that a residual did not enter Waters of the United States.
3. To the extent that activities that fall within the four use patterns require a permit, they can be authorized by this general permit if all eligibility requirements are met. For example, discharges to control pests in or near areas that are Waters of the United States, even when these areas are dry for much of the year, may be covered by this permit, if one is required. This would include discharges on forest or range lands to jurisdictional waters such as dry washes and ephemeral streams, to control pests that may be found in these occasionally wet areas, including pests that may also be found in upland areas. As such, these pesticide applications may be performed using pesticides labeled for terrestrial, seasonally dry, or aquatic use. Similarly, discharges of pesticides to Waters of the United States resulting from the control of pests along a right-of-way or similar linear feature (e.g., railroad, roadway, utility line) would be eligible for coverage for those portions of the pest control activities that result in discharges to said waters. So, for example, permit coverage is available for weed control along a right-of-way for those unavoidable discharges from controlling the pest. For two

of the categories, weed and algae pest control and animal pest control, the permit specifies that covered activities include applications to control pests “in water and at water’s edge.” EPA (and DOH) intends for the phrase “at water’s edge” to allow coverage of activities targeting pests that are not necessarily “in” the water but are near the water such that control of the pests may unavoidably involve a point-source discharge of pesticides to Waters of the United States.

Several commenters identified specific pesticide products (e.g., the “most dangerous pesticides”) that should not be eligible for coverage under the PGP, citing various information sources about the effects of these pesticides on the environment. EPA disagrees with these commenters’ recommendation to prohibit coverage of these pesticides under the PGP. The Agency believes that the permit, as written, is protective of water quality and the environment. The permit does require permittees to monitor and report any adverse effects of discharges covered under the PGP. In addition, many operators covered under the PGP will be required to submit annual report data on the nature and location of pesticide applications to waters that will provide useful data for EPA, states, and others to use to better assess whether these pesticide applications are causing water quality problems. Where problems are identified (either through this permit or other means, such as through EPA’s regular review and re-registration of pesticides), future EPA (and DOH) permit actions will address these concerns to ensure water quality is adequately protected.

EPA recognizes that there are many site-specific situations which will determine whether a pesticide application operation needs permit coverage. EPA (and DOH) is not attempting to define all such situations. Similarly, EPA (and DOH) is not defining “near” as this term does not dictate whether permit coverage is required. Rather, any application that results in an unavoidable discharge of a pesticide to Waters of the United States requires permit coverage. This includes the control of pests in water or near water (e.g., at water’s edge) such that in order to control the pest in that treatment area, discharges of pesticides to Waters of the United States are unavoidable. Additionally, any pesticide application activities that do not fall within the four use patterns covered by this permit will require coverage under some other NPDES permit if those activities result in point source discharges to Waters of the United States. However, the Agency (and DOH) does want to make it clear that to the extent pesticide application operations need permit coverage, this permit is available for the four pesticide use categories. Thus, to the extent that a permit is needed for discharges from pesticide applications to areas such as drinking water sources, rangelands, forestry, park lands, mine sites, golf courses, rights-of-way, wetlands and other areas, and the activity falls within one of the four use categories, coverage may be granted under this general permit. EPA expects to provide additional guidance for stakeholders to assess whether permit coverage is necessary for the different pesticide application activities. Stakeholders can

check EPA's NPDES Pesticides website periodically for updates at [www.epa.gov/npdes/pesticides](http://www.epa.gov/npdes/pesticides).

## PGP Comment Response Structure Essay

The following essay prepared by EPA is provided for informational purposes; DOH agrees with many of the positions expressed by EPA. Explanations have been included where the State's PGP differs from the EPA's or where additional information specific to the State was required:

This essay has been drafted to respond to comments we have received on the structure of the PGP. A number of commenters expressed concern with how EPA's draft PGP defined Operators that were eligible for coverage under the permit and the requirements that applied to the different types of Operators. Specifically, many commenters questioned whether the definition of "Operator" appropriately identified those entities that would choose to seek coverage under the permit and whether "Operator" requirements were appropriately assigned in the permit. Namely, commenters believed that certain types of Operators are best suited to perform certain activities identified in the permit while other types of Operators were suited for other activities. Commenters believed it would be more appropriate for the PGP to identify which types of Operators were responsible for which permit requirements. EPA agrees with commenters that the draft permit approach could be improved by specifically identifying the types of Operators responsible for the different requirements within the permit. As a result, EPA has modified the permit to delineate those responsibilities for "Operators," "Decision-makers," "Applicators," and "For-Hire Applicators" (Please see Appendix A). Although, any and all Operators covered under this permit are still responsible, jointly and severally, for any violation that may occur, EPA may consider this written division of responsibilities when determining the appropriate enforcement response to a violation. However, EPA retains the discretion, as circumstances dictate, to bring an enforcement action against all Operators involved with a specific discharge. EPA believes this approach should minimize concerns raised by some commenters that shared liability will cause many small jurisdictions, small organizations, or private landowners to delay or postpone treatment to avoid the CWA liability.

Based on the comments above, EPA also modified the permit such that now only certain Decision-makers are required to submit NOIs. This is a change from the draft permit that required certain For-Hire Applicators to also submit NOIs. See response to Comment ID 296.1.001.008 for EPA's rationale for that change. Also, the final permit conditions rely less on whether or not an Operator is required to submit an NOI and more on the type of Operator and EPA's expectations of those types of Operators. For example, the final permit now includes technology-based effluent limitations that identify specific responsibilities for three types of Operators: Applicators, Decision-makers, and Decision-makers required to submit NOIs. The draft permit simply identified responsibilities for Operators required to submit NOIs and Operators not required to submit NOIs. The final permit includes a similar approach for monitoring, reporting, and recordkeeping where specific responsibilities are identified for the different types of Operators. The final permit retains the approach used in the draft permit for complying

with water quality standards and corrective action because the Agency believes all Operators have the responsibility to ensure that discharges do not negatively affect water quality and where adverse incidents or other problems are identified that appropriate corrective action must be taken, documented, and reported. EPA believes the approach provided in the final PGP is more appropriate than the draft PGP in identifying the Operator best suited to perform the different activities required in the final permit and should minimize duplication of effort on the part of the different Operators.

A number of commenters also questioned whether For-Hire Applicators should be considered Operators since they have little or no control over the pest control activities. EPA disagrees with this assertion noting that For-Hire Applicators do have significant control over the pesticide as it is being applied. EPA does acknowledge that in many instances, For-Hire Applicators may have little or no control over the pesticide to be applied, where it is to be applied, and how much is to be applied. Similarly, For-Hire Applicators may have no control over whether or not a Decision-maker appropriately considered all pest control options prior to making a determination to apply a pesticide. However, For-Hire Applicators do have direct control over which pesticide application procedures are followed. For example, a Decisionmaker may make a determination that pesticide A is to be applied in location B at a rate of C but the For-Hire Applicator may actually apply pesticide A to a slightly different location and at a different rate than agreed upon. Or, the For-Hire Applicator may formulate a pesticide with a different makeup than that requested by the Decision-maker. Thus, EPA believes For-Hire Applicators are in fact Operators of point source discharges to Waters of the United States and thus are required to be covered under an NPDES permit (i.e., the PGP). To clarify this interpretation, EPA modified the definition of Operator in the final permit to reflect that Operators include those entities that perform the application of a pesticide or who have day-to-day control of the application.

## **PGP Comment Response Waters of the United States Essay**

**The following essay was provided by the EPA in response to comments on their draft PGP and is provided for information purposes.**

EPA received a number of comments questioning how the discharges covered under the PGP relate to the definition of “Waters of the United States.” Several commenters questioned whether EPA should permit discharges to “navigable waters” rather than to Waters of the United States. The CWA regulates discharges to navigable waters. CWA section 502(7) defines navigable waters as “waters of the United States, including the territorial seas.” NPDES regulations define “Waters of the United States” and the regulations use that term to identify those waters for which NPDES permit coverage is required for point source discharges into such waters. Therefore, consistent with historical NPDES permitting, EPA is using the term Waters of the United States rather than navigable waters.

In addition, EPA’s pesticide general permit only covers discharges to Waters of the United States, not discharges to “waters of the state” that are not also “Waters of the United States.” (“Waters of the State” are also referred to as “State waters” for Hawaii’s PGP where DOH is the NPDES permitting authority.) Discussion of the scope or contents of state-issued NPDES permits, such as whether state-issued NPDES permits address “waters of the state” or “Waters of the United States,” is outside the scope of EPA’s permit.

A number of commenters requested that EPA define the term “near” since it is a term used to identify those activities for which permit coverage may be required. EPA is not defining “near” as that term is not applicable to determine whether permit coverage is necessary (or available) under the PGP. The PGP is available for discharges to Waters of the United States from the four use patterns in the permit. EPA used the phrase “to or over, including near,” in the 2006 Rule to identify the locations of activities where a pesticide application may result in a discharge to Waters of the United States. For the permit, however, the term “near” has little meaning. If a pesticide application is performed “near” a Water of the United States but that application does not result in a point source discharge to Waters of the United States, permit coverage is not necessary. Conversely, if a pesticide application is performed a distance from Waters of the United States but that application results in a point source discharge to such waters, permit coverage is necessary. To be clear, when the permit uses the term “water” or “waters” it is referring only to Waters of the United States unless otherwise stated that the term is not referring only to Waters of the United States. Part 1.1.1 of the EPA’s final permit identifies the four specific pest use patterns (Mosquito and Other Flying Insect Pest Control, Weed and Algae Pest Control, Animal Pest Control, and Forest Canopy Pest Control) for which discharges to Waters of the United States from these activities are eligible for coverage under the permit. These categories, in essence, identify those activities the EPA determined are performed to or over,

including near, waters. So, for example, application of a pesticide in a floodplain, in and of itself, is not indicative of the need for a permit. A permit would only be needed in this example if the pesticide application resulted in a direct discharge to Waters of the United States. EPA indicated in the draft permit that it may expand the universe of pesticide use patterns to include additional pesticide application activities performed to or over, including near, Waters of the United States. Upon further evaluation and based on public comments, EPA opted not to expand beyond the four pesticide use patterns included in the draft permit (although the Agency did clarify the scope of each of these four use patterns in the final permit). Additional discussion of permit scope is provided in the PGP Comment Response Scope Essay.

Commenters also requested that EPA define the term “in close proximity” which was used in the draft permit to identify those pesticide application activities that occurred close enough to a water such that in applying pesticides to control a pest near water, the pesticide is unavoidably deposited to waters of the United States such that NPDES permit coverage is necessary. The final permit uses the term “at water’s edge adjacent to” when defining how to calculate annual treatment areas rather than “in close proximity” to highlight the areas treated that must be included in the calculation. EPA believes the term “at water’s edge adjacent to” provides a clearer description of the area to which permit coverage is available, that being the area immediately next to Waters of the United States where the control of pests in those areas results in unavoidable discharges to Waters of the United States.

Commenters also questioned whether it was appropriate to permit pesticide applications below a certain size or that had minimal discharges to Waters of the United States. An NPDES permit is required for discharges to Waters of the United States from the application of pesticides. Conversely, applications of pesticides that do not result in a discharge to Waters of the United States do not require NPDES permit coverage. The Clean Water Act does not provide an exemption from the need to obtain an NPDES permit for discharges to Waters of the United States that are below a certain size; thus, a permit is required, and the PGP is available, for discharges to any Waters of the United States for those areas where this permit is available. Thus, permit coverage is required for any discharges to Waters of the United States; thresholds are used merely to determine which Decision-makers are required to submit NOIs and implement more comprehensive recordkeeping and reporting requirements. EPA acknowledges that the total area treated may be different than the total area treated that has a discharge to Waters of the United States; however, the Agency is basing enhanced permit requirements on those pesticide application activities performed on the largest areas to provide an approach that is easier to understand and implement and that meets EPA's best professional judgment permit development goal of targeting the largest potential dischargers of pollutants to Waters of the United States.

A number of commenter’s asked how conveyances are to be addressed in the permit and why discharges to conveyances are to be included in calculating annual treatment areas. EPA removed any reference to conveyances in the final PGP. The final PGP is

available for discharges to Waters of the United States. To be clear, while conveyances can be Waters of the United States depending on the circumstances, discharges to conveyances which are not Waters of the United States are not covered by the PGP. Issues regarding discharge to conveyances that are not themselves Waters of the United States are outside the scope of the permit. Also, when calculating applicability of annual treatment area thresholds for weeds and animals, Operators need only include discharges from pesticide applications made to Waters of the United States (not to conveyances to such waters) in those calculations, since discharges to conveyances are not covered under the PGP. For calculating applicability of annual treatment area thresholds for mosquitoes and other flying insects and forest canopy, Operators must include the total treatment area (provided a discharge to Waters of the United States exists for at least some of that treatment area). Also, EPA removed any reference to “hydrologic surface connection” that is no longer a term for which a definition is needed to identify whether or not an annual treatment area threshold may be exceeded. In response to commenter’s questions about whether or not stormwater discharges that contain pesticides are covered under the PGP. While the PGP is not available for stormwater discharges, in some instances, a constructed stormwater treatment pond may be considered Waters of the United States and as such, certain discharges from the application of pesticides may be eligible under the PGP. This is a site-specific determination that must be made for each waterbody.

EPA disagrees with commenters’ assertion that EPA expects to expand permit coverage into terrestrial applications to agricultural crops for discharges historically exempt from permitting under the Clean Water Act. As is provided for in the Clean Water Act, agricultural stormwater runoff and irrigation return flow are both exempt from the requirement to obtain NPDES permits. EPA interprets these exemptions to include stormwater runoff and irrigation return flow from fields that may have received terrestrial application of pesticides. Those exemptions still apply.

Also, a number of commenters offered suggestions on how to define Waters of the United States, including wetlands. This permit does not change the existing NPDES definition of “Waters of the United States” or the meaning of “wetlands” that are currently in place (see 40 CFR 122.3) and as have been previously interpreted by EPA and the Courts. Entities involved in either the decision to apply pesticides or in actually applying pesticides are responsible for determining if those activities result in a discharge to Waters of the United States. This often requires a site-specific determination as to whether a topographic feature is Waters of the United States and if so, NPDES permit coverage is required. The need for a permit applies whether the Waters of the United States are wet or dry at the time of the discharge. The approach used for this permit is identical to other EPA-issued NPDES permits. The burden is on the Operator to determine if their activities will result in a point source discharge to Waters of the United States and if so, the Operator must obtain an NPDES permit for that discharge. EPA has not developed, nor is aware of a map of all Waters of the United States; however, additional information on the Agency’s interpretation and

implementation of these terms is available on the Agency's webpage at <http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>.

Regarding the relationship of OPP's use of the term "wetlands" on its labels and the CWA use of the same term, the Agency is relying on OPP's labels for determining where pesticides can be applied legally under FIFRA; however, EPA must rely on the CWA definition of this term to identify which discharges (that may be to Waters of the United States when no surface water is present) are required to be covered under the NPDES program.

EPA agrees with commenter's statement that jurisdictional wetlands are subject to the NPDES permit; however the Agency disagrees with the suggestion to add a notation to the permit clarifying such. EPA provides the regulatory definition of the term "Waters of the United States" in Appendix A of the permit and uses this term countless times throughout the permit and fact sheet. Guidance on the regulatory definition is also available at <http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>. Providing additional notations regarding these waters in the context of this permit is more likely to cause additional confusion.

Several commenters asked whether the method of application of pesticides affects the determination of whether or not those discharges are eligible for coverage under the PGP. The PGP covers point source discharges of pollutants to waters of the United States regardless of whether the pesticide applications are made by hand sprayers, vehicle-mounted tanks with sprayer nozzles, or fixed-wing or rotary aircrafts.