

Response to Comments Received on December 24, 2012

**Draft Statewide General National Pollutant Discharge Elimination
System (NPDES) Permit for Residual Pesticide Discharges to Waters
of the United States from Algae and Aquatic Weed Control
Applications**

**State Water Resources Control Board
January 16, 2013**

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A. Comment Letters Received

Letter No.	Affiliation	Representative
1	Association of California Water Agencies (ACWA)	David Bolland
2	Department of Public Works, the City of Los Angeles	Katherine Rubin

B. Responses to Comments

1. Comment Letter 1 – Association of California Water Agencies (ACWA)

ACWA provided comments in a cover letter and in the draft General Permit itself. The comments noted in the draft permit itself are shown in bracketed numbers such as [Note on page XX in Section XXX.XX].

Comment 1.1

Page 10 under “Aquatic Pesticides Application Plan (APAP)”: Please add language that states that the Permittee will be notified within 30 days of any deficiencies in the APAP submittal.

Response 1.1

The draft General Permit states, “*If comments are received, staff will work with Regional Water Board staff and the Discharger to address the comments to allow the Deputy Director to issue an NOA as expeditiously as possible.*” Thus, no change is necessary.

Comment 1.2

Page 12 under “Aquatic Pesticides Application Plan (APAP)” (as well as on Page 17 b.iii.b) and d) under “Corrective Action” and in several other locations as noted): Please replace the terms “minimum” or “lowest amounts” or “minimum quantity” with the phrase “appropriate rate of application consistent with product label requirements”. Please replace the term “less toxic” with the term “alternative (less mobile, more efficacious, etc)”. It is incorrect and potentially harmful to apply a pesticide at a lower rate than indicated on the product label.

Response 1.2

Staff modified the language as shown below:

“If there are no alternatives to algaecides and aquatic herbicides, Dischargers shall use the minimum amount of algaecides and aquatic herbicides that is necessary to have an effective control program and consistent with the algaecide and aquatic herbicide product label requirements.”

Comment 1.3

Page 12 under “Description of the BMPs to be Implemented.” Please indicate that the intent of this section is to prevent fish kills *outside the treatment area*. It may be that when a product is used according to label direction a fish kill may result in the treated water body

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Response 1.3

As stated in Response 1.16 in the Response to Comments received on August 21, 2012, the requirement to provide a description of measures that will be used to prevent fish kills when using algaecides and aquatic herbicides applies to all algaecides and aquatic herbicides, not just to acrolein. Since acrolein is highly toxic to fish and wildlife, it is not allowed for use in drainage areas that discharge to ponds, lakes, streams, tidal marshes, and estuaries. However, other aquatic herbicides are allowed for direct applications to these water bodies. Thus, the requirement is appropriately worded

Comment 1.4

Page C-6 in Table C-1: The table needs to include a footnote that nonylphenol only needs to be analyzed when a surfactant is mixed with the active ingredient.

Response 1.4

Staff added Note 8: "*It is required only when a surfactant is used.*"

Comment 1.5

Page D-10. It should be noted that Nonylphenol is not an aquatic herbicide or algaecide, it is a surfactant surrogate. We suggest change sentence to: "...discharge to WOUS of residues from the application of products containing [list of herbicides and nonylphenol] for the control of aquatic weeds and algae."

Response 1.5

Staff revised Section II.A on page 4 and Section III on page D-10 as indicated in red below:

"Except for discharges on tribal lands that are regulated by a federal permit, this General Permit covers the point source discharge to waters of the United States of residues resulting from pesticide applications using products containing 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, imazamox, imazapyr, ~~nonylphenol~~, penoxsulam, sodium carbonate peroxyhydrate, and triclopyr-based algaecides and aquatic herbicides and nonylphenol. This General Permit covers only discharges of algaecide and aquatic herbicide products that are currently registered for use in California, or that become registered for use and contain the above-listed active ingredients."*

Comment 1.6

Page D-26. Please correct this section to state that Imazamox is registered for "application to water."

Response 1.6

Staff made the suggested change shown in red below:

"Imazamox is a derivative of the active ingredient, ammonium salt of imazamox for the aquatic herbicide Clearcast, which DPR registered for use in California in October 2012. It is labeled for direct use in application to water for the control of submerged aquatic plants species and some emergent and floating species."

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Comment 1.7 [Note on page 10 in Section VIII.B]

What is a public agency if it is not a governmental agency? Suggest delete "public and."

"Every calendar year, at least 15 days prior to the first application of algaecide or aquatic herbicide, the Discharger shall notify potentially affected public and governmental agencies. The Discharger shall post the notification on its website if available. The notification shall include the following information:"

Response 1.7

Concur. Staff made the recommended change.

Comment 1.8 [Noted on page 10 in Section C]

Add language that states that the Permittee will be notified within 30 days of any deficiencies]

Response 1.8

See Response 1.1.

Comment 1.9 [Noted on page 12 Section VIII.C.10.e]

Suggestion: Add "outside the treatment area" after "fish kill."

"A description of measures that will be used for preventing fish kill when algaecides and aquatic herbicides will be used for algae and aquatic weed controls."

Response 1.9

See Response 1.3.

Comment 1.10 [Noted on page 12 Section VIII.C.11.a]

Suggestion: Change minimum to "appropriate rate of application consistent with product label requirements"

"If there are no alternatives to algaecides and aquatic herbicides, Dischargers shall use the minimum amount of algaecides and aquatic herbicides necessary to control the pest."

Response 1.10

See Response 1.2.

Comment 1.11 [Noted on page 16 Section IX.C.4.a]:

Suggestion: replace "less toxic" with "different (i.e., less mobile, more efficacious, etc)" or "alternative".

Comment: The toxicity of an herbicide may have nothing to do with its detection in the receiving water. Further, the selection of less toxic herbicide doesn't mean it will not be detected, and if detected, still not toxic to some degree.

"Each Discharger must conduct additional investigations when the chemical monitoring shows exceedance of any receiving water limitation or monitoring trigger. The additional investigations shall identify corrective actions to eliminate

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exceedance of receiving water limitations or monitoring triggers caused by the algaecide and aquatic herbicide application. The investigation shall include, but not be limited to evaluating the need to implement one or more of the following actions: revising and improving the existing BMPs, revising the mode of application, using less toxic algaecide and aquatic herbicide products, or selecting alternative methods for algae and aquatic weed control."

Response 1.11

As stated in Response 1.23 in the Response to Comments received on August 21, 2012, the intent of the investigation is to determine the cause of exceedance and to evaluate alternatives including using less toxic algaecides and aquatic herbicides that would not result in exceedance of receiving water limitations or triggers. The General Permit does not mandate the use of "less toxic" pesticides; it only requires that their use as alternatives to the pesticides that cause the exceedance be evaluated.

Comment 1.12 [Noted on page 17 Section IX.C.5.b.iii.b)]

Suggested change: Replace "lowest amounts" with "appropriate rate of application consistent with product label requirements"

"Use the lowest amount of algaecide and aquatic herbicide product per application and optimum frequency of algaecide and aquatic herbicide applications necessary for algae and aquatic weed controls, consistent with reducing the potential for development of resistance;"

Response 1.12

See Response 1.2.

Comment 1.13 [Noted on page 17 Section IX.C.5.b.iii.d) last sentence]

Suggestion: Replace "precise minimum quantity" with "appropriate rate of application consistent with product label requirements"

"The Discharger must ensure that the equipment's rate of algaecide and aquatic herbicide application is calibrated to deliver the precise minimum quantity of algaecides and aquatic herbicides needed to achieve greatest efficacy against pests."

Response 1.13

See Response 1.2.

Comment 1.14 [Noted on page A-1 definition for Adjuvants]

Poor syntax. "mixed to." Suggested change: "are mixed with herbicides prior to an"

"Adjuvants are ingredients that are mixed to pesticides prior to an application event and are often trade secrets. These ingredients are chosen by the Discharger, based on site characteristics, and typically increase the effectiveness of pesticides on target organisms."

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Response 1.14

Staff made the suggested change.

Comment 1.15 [Noted on page A-1 definition for Adverse or Toxic Effect]

This is not accurate. Suggest deleting entire yellow highlight.

“An “adverse or toxic effect” includes any impact that occurs within waters of the United States on non-target organisms as a result of algaecide or aquatic herbicide residue discharge. Per pesticide labels, these effects are unusual or unexpected. Examples of these effects may include:”

Response 1.15

Staff deleted the sentence, “Per pesticide labels, these effects are unusual or unexpected.”

Comment 1.16 [Noted on page A-2 definition for Application Area]

Include a diagram of flowing water "application area" if including a static water diagram. Or, omit diagram.

Response 1.16

As stated in Response 1.30 in the Response to Comments received on August 21, 2012, the sampling locations for both flowing and static waters are described in Attachment C, Section II.B.

Comment 1.17 [Noted on page A-1]

Beneficial Uses - should be defined since it is used throughout the document, and specific beneficial use definitions have been deleted.

Response 1.17

Staff added the definition for Beneficial Uses from Porter-Cologne Water quality Control Act section 13050 to the Attachment A.

Comment 1.18 [Noted on page A-3 definition for Insecticide]

Not applicable to applications made under this permit. Only used in the background section of appendix D on page D-6. Delete.

Response 1.18

Staff deleted the definition for insecticide.

Comment 1.19 [Noted on page A-5 definition for Residual Algaecide and Aquatic Herbicide]

This is not correct. The intended purpose may include injury and non-lethal effects. Suggest adding "injury or" before elimination.

“Residual algaecide and aquatic herbicide are those portions of the pesticides that remain in the water after the application and its intended purpose (elimination of targeted pests) have been completed.”

Response 1.19

Staff made the suggested change.

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Comment 1.20 [Noted on page C-5 in Section III.A.]

Suggest replacing the first sentence with: "During event and post event sampling, a log shall be kept of the water conditions within the treatment area.

"In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by the treatment area. Attention shall be given to the presence or absence of:"

Response 1.20

Staff believes that it is especially important to know and record receiving water conditions before the pesticide application. Thus, the Draft General Permit requires logs on receiving water conditions during all three sampling events including background, event, and post-event samplings. This is consistent with the requirements in Table C-1 Monitoring Requirements. So, no change is necessary.

Comment 1.21 [Noted on page C-6 for Table C-1]

Need to add a footnote that nonylphenol only needs to be analyzed when a surfactant is mixed with the active ingredient.

Response 1.21

See Response 1.4.

Comment 1.22 [Noted on page C-6 on note 4 for Table C-6]

This is inconsistent with USGS recommendations. Recommend that "or at mid water column depth if the depth is greater than approximately 3 ft."

Response 1.22

Staff made the suggested change:

Comment 1.23 [Noted on page C-6 on note 7 for Table C-6]

Triethylamine has been deleted from most other locations referring to triclopyr in the permit. Suggest deleting "triethylamine."

⁷ 2,4-D, acrolein, dissolved copper, diquat, endothall, fluridone, glyphosate, nonylphenol, imazamox, imazapyr, penoxsulam, and triclopyr triethylamine.

Response 1.23

Staff deleted the word "triethylamine" in the note.

Comment 1.24 [Noted on page C-6 for Table C-6]

Clarify that no sampling for sodium carbonate peroxyhydrate is required.

Response 1.24

As stated in Response 1.44 in the Response to Comments received on August 21, 2012, only the parameters requiring sampling are listed. Sodium carbonate peroxyhydrate is not listed as one of the parameters. Therefore, no sampling is required for this constituent.

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Comment 1.25 [Noted on page C-7 Section IV.B.e]

Change to "A map or table describing the location of each treatment area;"
"e. A map showing the location of each treatment area;"

Response 1.25

As stated in Response 1.46 in the Response to Comments received on August 21, 2012, it will be difficult to identify the treatment areas with only narrative descriptions. Thus, a map is necessary to show the location of each treatment area.

Comment 1.26 [Noted on page C-7 Section IV.B.g]

Poor syntax "... quantity of each algaecides..."

"g. Information on surface area and/or volume of treatment areas and any other information used to calculate dosage, concentration, and quantity of each algaecides and aquatic herbicides used;"

Response 1.26

Staff made the corrections.

Comment 1.27 [Noted on page C-8 in Section IV.B.i]

This is the same information requested/required by e., f. and g. above. Suggest deleting this section.

"i. Summary of algaecide and aquatic herbicide application log."

Response 1.27

Only item f in the Annual Report requirements and item 4 in the Application Log are duplicated. Thus, staff deleted item f from the Annual Report requirements.

Comment 1.28 [Noted on page D-9 in Section II.A.2]

Add same language as in Permit: "A fee is required only for new Dischargers. Dischargers enrolled under Order No. 2004-0009-DWQ and applying for coverage under this Permit will be billed during the regular billing cycle;"

"2. An application fee; and"

Response 1.28

Staff added the suggested language.

Comment 1.29 [Noted on page D-10 Section III]

Nonylphenol is not an aquatic herbicide or algaecide, it is a surfactant surrogate. Suggest change sentence to: "...discharge to WOUS of residues from the application of products containing [list of herbicides and nonylphenol] for the control of aquatic weeds and algae."

Response 1.29

See Response 1.5.

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Comment 1.30 [Noted on page D-14 in Section IV.C.4]

Suggested Change: Add a sentence that sodium carbonate peroxyhydrate does not have defined receiving water limitations, and monitoring is not required.

“The permitted discharge must be consistent with the antidegradation provision of 40 C.F.R. section 131.12 and Resolution No. 68-16. The conditions of this General Permit require residual algaecide and aquatic herbicide discharges to meet applicable water quality objectives. Specifically, the General Permit sets receiving water limitations for 2,4-D, acrolein, copper, diquat, endothall, fluridone and glyphosate, and nonylphenol. and It also sets receiving water monitoring triggers for imazapyr and triclopyr triethylamine (TEA).”

Response 1.30

See Response 1.24.

Comment 1.31 [Noted on page D-23 in the last paragraph of Section VI.B]

Delete asterisk; ag supply was removed from App A - Definitions

Response 1.31

Staff deleted the asterisk.

Comment 1.32 [Noted on page D-27 in Section VI.B.2.a]

Say “application to water,” “not direct use in.”

“Imazamox is a derivative of the active ingredient, ammonium salt of imazamox for the aquatic herbicide Clearcast, which DPR registered for use in California in October 2012. It is labeled for direct use in water for the control of submerged aquatic plants species and some emergent and floating species.”

Response 1.32

See Response 1.6.

Comment 1.34 [Noted on page D-27 in Section VI.B.2.a]

Suggest deleting this sentence; this is a relative term. Clearly, enough data exist for EPA and DPR to grant a registration.

“Imazamox is an herbicide that inhibits an enzyme in aquatic plants that is essential for the synthesis of three-branched chain amino acids. There is not much information available from government agencies, environmental groups, or literature about this ingredient.”

Response 1.34

Staff deleted the sentence.

Comment 1.35 [Noted on Page D-30 in Section VI.B.2.e]

Suggest indicating that TEA is an abbreviation for triethylamine.

“Triclopyr TEA Salt”

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Response 1.35

Staff has added TEA as an abbreviation for triethylamine.

Comment 1.36 [Noted on page E-1 in Section I]

Do re-applying agencies fit under Change of Info? If not: Need a category for Dischargers that currently have a permit, but are required to revise and resubmit an APAP.

Response 1.36

Staff revised the instruction for Section I of the Notice of Intent on Page E-4 as shown in red below:

“Indicate whether this request is for the first time coverage under this General Permit or a change of information for the discharge already covered under this General Permit. Dischargers that are covered under Order No. 2004-0009-DWQ before the effective date of this General Permit should check the box for change of information. For a change of information or ownership, please supply the eleven-digit Waste Discharge Identification (WDID) number for the discharge.”

2. Comment Letter 2 – Department of Public Works, the City of Los Angeles (LADWP)

Comment 2.1

LADWP supports the recommendations in its comment letter from the ACWA.

Response 1.37

Comment noted.