

**STATE WATER RESOURCES CONTROL BOARD  
BOARD MEETING SESSION – DIVISION OF WATER QUALITY  
JUNE 4, 2013**

**ITEM 5**

**SUBJECT**

PUBLIC HEARING TO CONSIDER ADOPTION OF AMENDMENTS TO STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER 2004-0009-DWQ, STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR THE DISCHARGE OF AQUATIC PESTICIDES FOR AQUATIC WEED CONTROL IN WATERS OF THE UNITED STATES, GENERAL PERMIT NO. CAG990005

**DISCUSSION**

Finding 33 of [Water Quality Order 2004-0009-DWQ](#) states that it may be reopened if additional aquatic pesticides are registered by the California Department of Pesticide Regulation (DPR). On October 23, 2012, DPR registered the aquatic herbicide, Clearcast, which can be applied directly into water to control emergent, submerged, and floating aquatic plants. Clearcast contains the active ingredient, ammonium salt of imazamox of which imazamox is a derivative. This amendment proposes to add imazamox to the list of active ingredients regulated by Order 2004-0009-DWQ, so that the permit will authorize products containing imazamox.

Imazamox is an herbicide that inhibits an enzyme in aquatic plants that is essential for the synthesis of three-branched chain amino acids.

Staff obtained toxicity data for imazamox from the United States Environmental Protection Agency (U.S. EPA) Ecotoxicity Database to assess its toxicity to freshwater aquatic life. However, the U.S. EPA Ecotoxicity Database contains toxicity data only for imazamox, but not for its salt. The table below summarizes the toxicity data for imazamox.

Type of Organism	Study Length	Study Date	LC50* (mg/L)
Mysid	96 hours	1998	> 100
		1998	> 94.3
Bluegill sunfish	96 hours	1994	> 119
Rainbow trout	96 hours	1994	> 122
Sheephead minnow	96 hours	1998	> 94.2
		1998	> 94.2

\* Lethal concentration at 50 percent of the test species.

Due to the absence of ambient water quality criteria for imazamox and its low toxicity to aquatic life as indicated in the U.S. EPA Ecotoxicity Database, this order does not include a receiving water limitation, receiving water monitoring trigger, or a monitoring requirement for imazamox.

**POLICY ISSUE**

Should the State Water Board adopt the proposed amendments to Water Quality Order 2004-0009-DWQ?

**FISCAL IMPACT**

State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

**REGIONAL BOARD IMPACT**

The Regional Water Quality Control Boards have the responsibility to implement the proposed amendments to the existing Aquatic Weed Control Permit.

**STAFF RECOMMENDATION**

The State Water Board should adopt the proposed amendments to Water Quality Order 2004-0009-DWQ.

State Water Board action on this item will assist the Water Boards in reaching Goal 6 of the Strategic Plan Update: 2008-2012 to enhance consistency across the Water Boards, on an ongoing basis, to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of laws, regulations, policies, and procedures. In particular, approval of this item will assist in fulfilling Objective 6.2 to target consistency improvements in program delivery identified through past input, and solicit input to identify consistency issues as they arise.

STATE WATER RESOURCES CONTROL BOARD  
WATER QUALITY ORDER NO. 2013-XXXX-DWQ

AMENDING  
STATE WATER RESOURCES CONTROL BOARD  
WATER QUALITY ORDER 2004-0009-DWQ, STATEWIDE GENERAL NATIONAL  
POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR THE DISCHARGE OF  
AQUATIC PESTICIDES FOR AQUATIC WEED CONTROL IN WATERS OF THE UNITED  
STATES, GENERAL PERMIT NO. CAG990005

Order 2004-0009-DWQ was adopted by the State Water Board on:	May 20, 2004
This Order, which amends Order 2004-0009-DWQ, was adopted by the State Water Board on:	June 4, 2013
This Order became effective on:	June 4, 2013

IT IS HEREBY ORDERED that this Order amends Order 2004-0009-DWQ. Additions to Order 2004-0009-DWQ are reflected in **bold-underline** text. Removal of the text is reflected in **~~bold strike-out~~** text.

IT IS FURTHER ORDERED that staff is directed to post a conformed copy of Order 2004-0009-DWQ incorporating the amendments made by this Order.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board (State Water Board), on **June 4, 2013**.

AYE:  
NAY:  
ABSENT:  
ABSTAIN:

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Jeanine Townsend  
Clerk to the Board

**Fact Sheet, page 7, Permit Coverage/Notification Requirements, first and second paragraphs:**

This General Permit addresses the discharge of aquatic pesticides related to the application of 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, **imazamox**, imazapyr, sodium carbonate peroxyhydrate, and triclopyr-based aquatic pesticides to surface waters for the control of aquatic weeds. Aquatic pesticides that are applied to application areas<sup>FN</sup> within waters of the United States in accordance with FIFRA label requirements and Use Permit restrictions are not considered pollutants. However, pollutants associated with aquatic pesticide application require coverage under this General Permit. These include over-applied or misdirected pesticide products and pesticide residues. Residues are any pesticide byproduct, or breakdown product, or pesticide product that is present after the use of the pesticide to kill or control the target weed.

This General Permit does not cover agricultural storm water discharges or return flows from irrigated agriculture because these discharges are not defined as “point sources” and do not require coverage under an NPDES permit. This General Permit also does not cover other indirect or nonpoint source discharges from applications of pesticides, including discharges of pesticides to land that may be conveyed in storm water or irrigation runoff. This General Permit does not cover the discharge of pollutants related to applications of pesticides other than 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, **imazamox**, imazapyr, sodium carbonate peroxyhydrate, and triclopyr based pesticides; however, this General Permit includes a re-opener statement specifying that the permit may be reopened for the specific purpose of modifying the list of pesticides whose associated discharge is authorized by this General Permit.

**Fact Sheet, page 15, insert the following paragraphs between “Glyphosate” and “Imazapyr”:**

**Imazamox**

**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 application to water to control emergent, submerged and floating aquatic plants.**

**Imazamox is an herbicide that inhibits an enzyme in aquatic plants that is essential for the synthesis of three-branched chain amino acids.**

**Staff obtained toxicity data for imazamox from the United States Environmental Protection Agency (U.S. EPA) Ecotoxicity Database to assess its toxicity to freshwater aquatic life. However, the U.S. EPA Ecotoxicity Database contains toxicity data only for imazamox, but not for its salt. The table below summarizes the toxicity data for imazamox.**

<u>Type of Organism</u>	<u>Study Length</u>	<u>Study Date</u>	<u>LC50* (mg/L)</u>
<u>Mysid</u>	<u>96 hours</u>	<u>1998</u>	<u>&gt; 100</u>
		<u>1998</u>	<u>&gt; 94.3</u>
<u>Bluegill sunfish</u>	<u>96 hours</u>	<u>1994</u>	<u>&gt; 119</u>
<u>Rainbow trout</u>	<u>96 hours</u>	<u>1994</u>	<u>&gt; 122</u>
<u>Sheephead minnow</u>	<u>96 hours</u>	<u>1998</u>	<u>&gt; 94.2</u>
		<u>1998</u>	<u>&gt; 94.2</u>

\* Lethal Concentration at 50 percent of the test species

**Due to the absence of ambient water quality criteria for imazamox and its low toxicity to aquatic life as indicated in the U.S. EPA Ecotoxicity Database, this order does not include a receiving water limitation, receiving water monitoring trigger, or a monitoring requirement for imazamox.**

Permit page 2, add new Finding 15 and renumber subsequent paragraphs:

**On October 23, 2012, DPR registered imazamox for aquatic application. On June 4, 2013, this General Permit was modified to allow the discharge of pollutants associated with the application of imazamox-based aquatic pesticides to surface waters for aquatic weed control.**

Permit page 7, Section A. Application Requirements:

In order to obtain coverage, the discharger must submit the following to the appropriate Regional Water Board(s)<sup>FN</sup>. Dischargers that apply 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, **imazamox**, imazapyr, sodium carbonate peroxyhydrate, and triclopyr – based aquatic pesticides to waters of the United States are eligible for coverage under this General Permit provided: