

Aquatic Animal Invasive Species Control General Permit



State Water Resources Control Board
November 2, 2010



Federal Water Pollution Control Act Amendments - 1972

- **NPDES Program**

Began with the 1972 amendments to the FWPCA or Clean Water Act (CWA).

- **CWA Section 101(a) sets:**

- **Objective:**

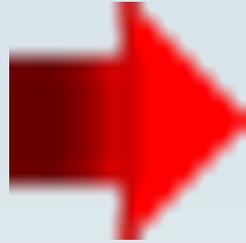
Restore and maintain the chemical, physical, and biological integrity of the nation's waters.

- **National Goals:**

- By 1983, achieve as an interim goal, fishable and swimmable waters;
- Eliminate the discharge of pollutants by 1985;
- Prohibits the discharge of toxic pollutants in toxic amounts.

NPDES Program Framework

- “Discharging pollutants”
- All “point” sources
- Into “waters of the US”



- Must obtain an NPDES permit from EPA or an authorized* State

*California was the first State to be authorized for NPDES permitting.

NPDES Permit Nuts and Bolts

Components of a Permit :

- Cover Page
- Effluent Limits
 - Technology Based Effluent Limits
 - 40 CFR 405-499
 - Water Quality Based Effluent Limits
 - WQ Criteria/Objectives (Beneficial Uses)
- Monitoring & Reporting Requirements
- Special Conditions
 - (BMPs, additional monitoring, special studies)
- Standard Conditions
 - Duty to Comply, Duty to Mitigate, Etc.



Why Regulate Pesticides?



- The courts require it:
 - 9th Circuit: Talent, Fairhurst v. Hagner
 - 6th Circuit: National Cotton Council
- Pesticides – #1 cause of impairment in California's surface waters



Drafting of the Aquatic Animal Invasive Species Control Permit

- Ensure permit coverage to address unanticipated invasion of exotic species events
- **June 2010**
 - USEPA Pesticide General Permit covers:
 - Aquatic Nuisance Animal Control
 - Aquatic Weed and Algae Control
 - Forest Canopy Pest Control
 - Mosquito and Other Flying Insect Pest Control
- **July 2010**
 - Contacted several agencies
 - Searched for pesticide products used for aquatic animal invasive species control

Drafting of the Aquatic Animal Invasive Species Control Permit

Agencies Contacted:

- California Department of Fish and Game
- California Department of Pesticide Regulation
- California Department of Water Resources
- Metropolitan Water District
- Regional Water Boards
- U.S. Fish and Wildlife Services



Drafting of the Aquatic Animal Invasive Species Control Permit

- **Preliminary Draft Permit**
Sent to agencies, California Sportfishing Protection Alliance (CSPA), and Regional Water Boards
- **Comments**
 - Received from Association of Clean Water Agencies, Metropolitan Water District, and Regional Water Board 6
 - No comment from CSPA

Permit Requirements (Summary)

- Prohibitions
- Narrative Effluent Limitations
- Narrative and Numeric Receiving Water Limitations
- Aquatic Pesticide Application Plan
- Monitoring and Reporting Program

Permit Requirements

Narrative Effluent Limitations

- Cannot set limits on pesticide products since there is no effluent per se
- Only residual pesticides constitute pollutants
- When a pesticide becomes a residue is not easily determined

Narrative Receiving Water Limitations

- Floating Materials
- Settleable Substances
- Suspended Material
- Taste and Odors
- Toxic Pollutants
- Temperature
- Color
- Aquatic Communities



Numeric Receiving Water Limitations

Constituent	Limitation	Basis
Chlorine	10 µg/L Monthly Average	USEPA's Ambient Water Quality Criteria for Freshwater Aquatic Life Protection
Chlorine	20 µg/L Daily Maximum	USEPA's Ambient Water Quality Criteria for Freshwater Aquatic Life Protection
Chlorine	<10 µg/L Daily Maximum	California Ocean Plan

Monitoring and Reporting Program

- **CWA Section 101(a) Objective:**
Restore and maintain the chemical, physical, and biological integrity of the nation's waters.
- **Water Boards' Water Quality Objectives:**
Must comply with CWA Section 101(a); consists of:
 - Chemical-specific numeric objectives
 - Narrative objective - "No toxics in toxic amounts"
- **Aquatic Animal Invasive Species Permit**
Monitoring and reporting program must show compliance with Water Boards' water quality objectives.

Monitoring and Reporting Program

- Permittees' monitoring and reporting program (MRP) must show compliance with the Water Boards' water quality objectives.
- **MRP Objective:** provide data to ensure that water quality is protected and maintained.
- **Answer the following questions:**
 1. Does the pesticide residue from aquatic animal invasive species control applications cause an exceedance of receiving water limits?
 2. Does the pesticide residue, including active ingredients, inert ingredients, breakdown by-products, in any combination cause or contribute to an exceedance of the "no toxics in toxic amount" narrative toxicity objective?

Monitoring and Reporting Program

- **Chemical Monitoring**

- Evaluates compliance of individual ACTIVE INGREDIENTS with chemical-specific numeric criteria
- Answers Question 1

- **Toxicity Monitoring**

- Evaluates synergistic and additive effects of individual ACTIVE INGREDIENTS, INERTS, degradation by-products, and existing pesticides in all combination in receiving water
- Answers Question 2





Contact Information



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