STATE WATER RESOURCES CONTROL BOARD

FACT SHEET

WATER QUALITY ORDER NO. 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

BACKGROUND

On March 12, 2001, the Ninth Circuit Court of Appeals held that discharges of pollutants from the use of aquatic pesticides to waters of the United States require coverage under a National Pollutant Discharge Elimination System (NPDES) permit (Headwaters, Inc. v. Talent Irrigation District[1]). The Talent decision was issued just prior to the major season for applying aquatic pesticides. Because of the serious public health, safety, and economic implications of delaying applications of aquatic pesticides, the State Water Resources Control Board (State Water Board) adopted an interim NPDES permit, Water Quality Order (Order) No. 2001-12-DWQ on an emergency basis.

Order No. 2001-12-DWQ imposed requirements on any discharge of aquatic pesticides from public entities to waters of the United States in accordance with the State Water Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Policy). The Policy establishes procedures for implementing water quality standards for priority pollutants[2] in NPDES permits.

Section 5.3 of the Policy allows for short-term or seasonal exceptions from its requirements for resource or pest management conducted by public entities. In order to qualify for an exception from meeting priority pollutant standards, a public entity must fulfill the requirements listed in section 5.3 and the State Water Board must decide to grant the exception. Among other requirements, entities seeking an exception to complying with water quality standards for priority pollutants must submit California Environmental Quality Act (CEQA) documents. Because of the emergency adoption of Order No. 2001-12-DWQ, the State Water Board invoked an exemption to the requirements of section 5.3 and issued the permit incorporating a categorical exception to water quality standards for priority pollutants.

Order No. 2001-12-DWQ required that dischargers develop a best management practices (BMPs) plan that minimizes adverse impacts to receiving waters and a monitoring and reporting plan that is representative of each type of aquatic pesticide application.

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[1] Headwaters, Inc. v. Talent Irrigation District, (9th Cir. 2001) 243 F.3d 526.

[2] The water quality standards for priority pollutants are listed in 40 Code of Federal Regulations (CFR), § 131.38 (b)(1), and include acrolein and copper.

ORDER NO. 2001-12-DWQ LAWSUIT

In August 2001, Waterkeepers Northern California (Waterkeepers) filed a lawsuit against the State Water Board challenging several aspects of Order No. 2001-12-DWQ. In a settlement agreement, the State Water Board agreed to fund a comprehensive aquatic pesticide monitoring program (APMP) that would assess pesticide alternatives, receiving water toxicity caused by residual aquatic pesticides, and other monitoring parameters. The State Water Board contracted with the San Francisco Estuary Institute (SFEI) to conduct the program. On February 5, 2004, SFEI provided the draft report to APMP's Steering Committee. On April 13, 2004, SFEI circulated the final report publicly. The report made the following conclusions:

1. **2,4-D**

   The study monitored the effects of 2,4-D D (in the 2,4-D dimethylamine salt formulation) and a nonylphenolethoxylate surfactant at the Stone Lake National Wildlife Refuge. No toxicity was observed at this sampling event.

2. **Acrolein**

   APMP work with acrolein this year focused on development of a field sampling method that would allow for accurate determination of concentrations in the environment. Toxicity testing is difficult for acrolein due to its rapid breakdown and volatilization. As acrolein is labeled as an aquatic pesticide, it is also functionally a biocide with very low Lowest Observed Effect Concentration (LOEC)/No Observed Effect Concentration (NOEC) values. Therefore, anywhere acrolein is found, it can be considered toxic. The most appropriate monitoring at this time would be chemical characterization only. The current U.S. Environmental Protection Agency (USEPA) method has an adequate Method Detection Limit (MDL); however, commonly used field sampling techniques are insufficient and will lead to erroneous results.

3. **Copper**

   Copper sulfate applications were monitored in two reservoirs. In one reservoir treatment area treated with dissolved copper sulfate, toxicity (in the form of mortality) was observed for at least 24 hours after application in juvenile trout. Lethal (mortality) and sublethal (reproduction) toxicity were observed in Ceriodaphnia (water flea) up to one week after application.

   In the reservoir treated with granular copper sulfate applications, significant mortality was observed in Ceriodaphnia and juvenile trout water toxicity tests immediately after application within the treatment area. Follow up water sampling was not conducted because the reservoir received only one application in 2003. Mortality and growth inhibition was also observed in a number of the sediment samples. Sediment copper concentrations exceeded National Oceanographic and Atmospheric Administration

(NOAA) Effect Ratio Low and Medium values. However, the limited toxicity observed in the sediments indicates that the majority of the copper is not bioavailable.
Chelated copper pesticides were monitored during applications in two irrigation canal systems. One system used a product of mixed copper ethanolamines and the other the same product of mixed copper ethanolamines in an emulsified formulation. Chelated copper formulations are likely to have distinct behavior from copper sulfate and each other in aquatic environments based on the chelating agent and other adjuvants.

In both systems where monitoring occurred, the water samples were almost uniformly toxic pre-application and post application. Therefore, no definitive conclusions can be drawn about the toxicity of mixed copper ethanolamines. Copper carbonate is the active ingredient in other chelated copper products and no monitoring of copper carbonate-based pesticides was conducted.

4. **Glyphosate**

Glyphosate was monitored at several locations. It was commonly used with a nonylphenolethoxylate surfactant. No toxicity was found to be associated with the glyphosate applications.

5. **Diquat Dibromide or Diquat**

Diquat was sampled at two locations (one small pond and one Delta slough). At both sites, 100 percent mortality was observed in the acute and chronic Ceriodaphnia toxicity tests one hour after application. Twenty four hours after application to the Delta slough, no toxicity was observed in the treatment area. Additional samples were not gathered from the pond site.

6. **Fluridone**

Fluridone was sampled at several locations. In Costa Ponds, the fluridone water concentration ranged from 0.05 μg/L before application to 7.2 μg/L one hour after application. The fluridone porewater concentration ranged from 0.08-1.24 μg/L. Toxicity was observed in all *Selenastrum* tests conducted, including the water collected before pre-application. This indicates that fluridone was not the only cause of toxicity. No toxicity was observed in the Ceriodaphnia or fathead minnow tests. Monitoring during an application of liquid fluridone, the pesticide was found to accumulate in the tissue of fish and crayfish two weeks after application. At four weeks after the cessation of treatment, tissue concentrations had returned to pre-application levels.

In Big Bear Lake, the fluridone sediment concentrations ranged from 5.88-300 μg/L. Toxicity in the Hyallela tests (10 and 28 day tests) was observed but bore no correlation to sediment fluridone concentration. The sediment fluridone concentration was also not correlated to the pore water fluridone concentration.

7. **Triclopyr**

Only one site treated with triclopyr (in the triclopyr, triethylamine salt formulation) was monitored in 2003. It was used with a nonylphenolethoxylate surfactant. No toxicity was observed.

8. **Nonionic Surfactants**

There is a wide range of surfactants available, but the most commonly used surfactants for aquatic pesticides applications are Target Prospreader Activator and R-11. Both are nonylphenolethoxylate surfactants. There are only limited data available on surfactants.

In summary, these results show that no toxicity was found with the use of 2,4-D, glyphosate and triclopyr. Toxicity testing is difficult for acrolein. Results were inconclusive for diquat and fluridone. Toxicity was conclusive only in copper-based applications. To confirm these results, additional monitoring will be conducted in 2004.

The APMP includes a section on Alternative or Non-Chemical Methods to Aquatic Pest Control. The report found that water quality impacts from alternative or non-chemical methods were temporary or not apparent. Turbidity increased, but usually returned to pre-project status within days. Shredding in stagnant water bodies indicated decreases in dissolved oxygen, increases in nutrients, and an increase in biochemical oxygen demand. Shredding is not selective in its impacts and will shred non-target species within the area being controlled. In water bodies where harvesting was conducted routinely, the effects on water quality appeared to be short-lived, and unlikely to adversely affect beneficial uses. Alum and gypsum may be a substitute for copper in controlling algae, but more research is needed to adequately produce useful results.

Data results indicated that the relative cost-effectiveness of conventional pesticides versus alternative non-chemical methods varied among different project scenarios, including water body and the particular weed being targeted. Using conventional pesticides for floating or submerged weeds in Delta water bodies proved most cost effective. A combination of chemical application and mechanical harvesting for milfoil in Big Bear Lake was most cost effective. Mowing was most effective for vegetation in wetlands. The use of alternative or non-chemical methods should be done at the appropriate time in the life cycle of the targeted weed and at the correct pesticide dilution to increase efficiency.

DISCHARGER MONITORING DATA REVIEW

State Water Board staff reviewed the 2003 annual monitoring reports from dischargers under Order No. 2001-12 DWQ and found that water quality in application areas return to background water quality levels when pesticides are applied with the proper label instructions. Results show that acrolein levels are not detectable after 24 hours. Generally, diquat and glyphosate returned to below water quality objective levels five days after application. Copper dissipated within two

weeks when applied in small amounts or percentages. If greater amounts of copper were used, it took up to four weeks for the water to return to levels observed before application.

AQUATIC PESTICIDE PROJECTS

The use of aquatic pesticides by Control Agencies[3] is necessary to manage resources and maintain beneficial uses, such as to ensure the proper operation of municipal and agricultural irrigation water distribution systems, maintain capacity in flood control channels, maintain boating access, and control invasive species. Weed control projects are undertakings necessary to control a specified type of weed to an acceptable level in the treatment area[4] that is being managed. The need for aquatic pesticide application events as part of a project can vary from week to week and from season to season due to such things as temperature and flow of the receiving water. It is a balancing act between managing resources and impairing resources. This General Permit and the other governmental regulatory programs described below provide different pieces to ensure this balancing act is successful.

RELATED AQUATIC PESTICIDE REGULATIONS

Pesticide formulations contain disclosed active ingredients that yield toxic effects on target organisms and may also have toxic effects on non-target organisms. They also contain inactive or inert ingredients, as well as adjuvants. Adjuvants are compounds chosen by the discharger and added to aquatic pesticides during an application event to increase the effectiveness of the aquatic pesticides on target organisms. Inactive ingredients and adjuvants are trade secrets and have not been publicly disclosed.

According to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), USEPA has sole jurisdiction of pesticide label language. Label language and any changes thereto must be approved by USEPA before the product can be sold in this country. As part of the labeling process, USEPA evaluates data submitted by registrants to ensure that a product used according to label instructions will cause no harm (or "adverse impact") on non-target organism that cannot be reduced (or "mitigated") with protective measures or use restrictions. Registrants are required to submit data on the effects of pesticides on target pests (efficacy) as well as effects on non-target pests. Data on non-target effects include plant effects (phytotoxicity), fish and wildlife hazards (ecotoxicity), impacts on endangered species, effects on the environment, environmental fate, breakdown products, leachability, and persistence; however, FIFRA is not necessarily as protective of water quality as the Clean Water Act (CWA).

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[3] The Control Agency is the permitted discharger authorized by this General Permit. It is the agency responsible for controlling the weeds or pests. In some cases, such as irrigation districts, the Control Agency may own the conveyance system. In other cases, such as application to Delta waters, the Control Agency may not own the water body or conveyance system into which aquatic pesticides are applied. Additionally, the Control Agency may be the pesticide applicator, but it may also contract with a separate entity that does the actual pesticide application. In either case, however, the Control Agency must ensure that the discharge is in compliance with this General Permit.

[4] The treatment area is the area being treated by the aquatic pesticide to control weeds and therefore, the area being targeted to receive lethal doses of aquatic pesticides. It is the responsibility of the discharger to define the treatment area for each specific location that it discharges to.

Department of Pesticide Regulation (DPR) is responsible for reviewing the toxic effects of aquatic pesticide formulations and determining whether a pesticide is suitable for use in California's waters through a registration process. To do this, DPR also reviews data submitted by the registrants. While DPR cannot require manufacturers to make changes in labels, DPR can refuse to register products in California unless manufacturers address unmitigated hazards by amending the pesticide label. Consequently, requirements that are specific for use in California are included in many pesticide labels that are approved by USEPA.

DPR also licenses applicators of pesticides designated as a "restricted material "[5]. To legally apply these pesticides, the applicator must be a holder of a Qualified Applicator Certificate or work under the supervision of someone who is certified. For aquatic pesticides, the qualified Applicator Certificate must have the category "aquatic."

State regulations require that the County Agricultural Commissioners (CACs) determine if a substantial adverse environmental impact will result from the proposed use of a restricted material. The CAC implements this by issuing Use Permits for the application of pesticides considered as restricted materials. In evaluating local conditions, CACs may use information supplied by DPR, which suggests permit conditions that reflect minimum measures necessary to protect people and the environment. State regulations require that specific types of information be provided in an application to the CACs for a pesticide use permit. The CACs review the application to ensure that appropriate alternatives were considered and that any potential adverse effects are mitigated. The CACs also conduct pre-project inspections on at least five percent of projects.

ADDITION OF NEWLY REGISTERED AQUATIC PESTICIDES

Finding ~~31~~32 of this Order states that it may be reopened to add coverage of aquatic pesticides that have been newly registered by DPR.

On February 27, 2006, DPR registered sodium carbonate peroxyhydrate for aquatic application. Sodium carbonate peroxyhydrate is an algaecide used to control blue-green algae. The formulation registered in February (PAK 27) is selective and has little impact on green species and eukaryotic organisms (*A Literature Review and Case Study* by Noel Boulos and Samuel B. Moore). Upon activation, the compound breaks down into hydrogen peroxide and sodium carbonate. Hydrogen peroxide has a half-life of less than 8 hours in an aquatic environment and can breakdown through hydrolysis, photolysis, anaerobic and aerobic metabolism, leaching and adsorption/desorption, and sediment dissipation.

On August 30, 2005, DPR registered imazapyr for aquatic application. Imazapyr is a herbicide used to control floating and emergent aquatic vegetation, including shoreline grass, broadleaf weeds, brush species, and perennials. It does not control submerged or mostly submerged

[5] DPR designates a pesticide as a restricted material in California if it poses hazards to public health, farm workers, domestic animals, honeybees, the environment, wildlife, or crops other than those being treated ("Regulating Pesticides: A Guide to Pesticide Regulation in California," October 2001, DPR).

foliage. Imazapyr is a slow-acting amino acid synthesis inhibitor. It has an average water half-life of four days with photodegradation as the primary form of degradation in water.

Imazapyr acts quicker and is less toxic than other low-volume herbicides. According to the San Francisco Estuary Invasive Spartina Project's May 4, 2005 report titled *Use of Imazapyr Herbicide to Control Invasive Cordgrass (Spartina spp.) in the San Francisco Estuary*, imazapyr in water rapidly degrades via photolysis. The report further states that a number of field studies demonstrated that imazapyr rapidly dissipated from water within several days, no detectable residues of imazapyr were found in either water or sediment within two months; and in estuarine systems, dilution of imazapyr with the incoming tides contributes to its rapid dissipation suggesting that imazapyr is not environmentally persistent in the estuarine environment and does not result in significant impacts to water quality. The report concludes that imazapyr herbicides can be a safe, highly effective treatment for control and eradication of non-native *Spartina* species in the San Francisco Estuary and offers an improved risk scenario over the existing treatment regime with glyphosate herbicides.

PERMIT COVERAGE/NOTIFICATION REQUIREMENTS

This General Permit addresses the discharge of aquatic pesticides related to the application of 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, 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[6] 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, 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.

The basic requirements of this General Permit include:

1. The applicator must follow all pesticide label instructions and any Use Permits issued by a CAC;

[6] The application area is the area to which aquatic pesticides are directly applied.

2. The discharger must be licensed by DPR or work under the supervision of someone who is licensed if the aquatic pesticide is considered a restricted material;

3. The discharger must comply with effluent limitations including developing and implementing an Aquatic Pesticide Application Plan (APAP);

4. The discharger must comply with applicable receiving water limitations; and

5. The discharger must comply with monitoring and reporting requirements.

To obtain coverage under this General Permit, a discharger must submit a completed Notice of Intent to Comply with the Terms of this General Permit (Notice of Intent, NOI), a vicinity map, and the first annual fee to the appropriate Regional Water Quality Control Board (Regional Water Board). These items constitute a complete application package, the submittal of which authorizes the discharge of pollutants associated with the application of aquatic pesticides in compliance with this General Permit, unless the Regional Water Board requests additional information necessary to determine the applicability of the discharge to this General Permit.

Each enrollment will cover all discharges occurring within the boundaries of that Regional Water Board. Separate NOIs are required for discharges located within more than one Regional Water Board's boundary, as defined in section 13200 of the California Water Code (CWC). Only one annual fee is required for all applicable discharges from one entity.

Authorization to discharge under this General Permit is terminated upon receipt by the discharger, from the appropriate Regional Water Board(s), of a Notice of Exclusion (NOE),[7] or upon the adoption of either an individual or other general NPDES permit covering the discharge. Alternatively, the discharger may initiate termination under this General Permit by submitting a letter to the appropriate Regional Water Board explaining why coverage under the General Permit is no longer necessary.

WATERS OF THE UNITED STATES

This General Permit regulates the discharge of pollutants associated with the application of aquatic pesticides to waters of the United States. "Waters of the United States" include all waters currently used, used in the past, or susceptible to use in interstate commerce; all interstate waters; all other waters the use, degradation, or destruction of which would or could affect interstate or foreign commerce. Waters of the United States include waters used by interstate or foreign travelers for recreation, waters from which fish or shellfish are taken and sold in interstate or foreign commerce, impoundments[8] of and tributaries to waters of the United States, and wetlands adjacent to waters of the United States. Waters of the United States include, but

[7] An NOE is a one-page notice that indicates that the discharger or proposed discharger is not eligible for coverage under this General Permit and states the reason why. This justification can include, but is not limited to, necessity to comply with a total maximum daily load or to protect sensitive water bodies.
[8] Surface water impoundments include, but are not limited to, drinking water reservoirs, ornamental lakes and ponds, and impoundments used to store irrigation water.

are not limited to, irrigation and flood control channels that exchange water with waters of the United States.

WATER QUALITY STANDARDS

The CWA defines Water Quality Standards as "Provisions of state or federal law which consist of designated uses for the waters of the United States, water quality criteria for waters based upon such uses, and antidegradation policies. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act." [40 Code of Federal Regulations (CFR) section 131.3(i)].

In California, *Water Quality Control Plans* designate the beneficial uses of waters of the State and water quality objectives (WQOs) to protect those uses. The *Water Quality Control Plans* are adopted by the State and Regional Water Boards through a formal administrative rulemaking process, and, upon approval by USEPA, the WQOs for waters of the United States (generally surface waters) become State water quality standards.

USEPA has established water quality criteria in California for priority pollutants in the National Toxics Rule and the California Toxics Rule (CTR). The CTR criteria are also water quality standards.

EFFLUENT LIMITATIONS

NPDES permits for discharges to surface waters must meet all applicable provisions of sections 301 and 402 of the CWA. These provisions require controls that utilize best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and any more stringent controls necessary to reduce pollutant discharge and meet water quality standards.

Title 40, CFR section 122.44 states that if a discharge causes, has the reasonable potential to cause, or contributes to an excursion (Reasonable Potential) of a numeric or narrative water quality criterion, the permitting authority must develop effluent limits as necessary to meet water quality standards. Title 40, CFR section 122.44(k)(3) allows these effluent limits to be requirements to implement BMPs if numeric effluent limits are infeasible. It is infeasible for the State Water Board to establish numeric effluent limitations in this General Permit because:

1. The application of aquatic pesticides is not necessarily considered a discharge of pollutants according to the Talent decision. The regulated discharge is the discharge of pollutants associated with the application of aquatic pesticides. These include over-applied and misdirected pesticide product and pesticide residue. At what point the pesticide becomes a residue is not precisely known and varies depending on such things as target weed, water chemistry, and flow. Therefore, in the application of aquatic pesticides, the exact effluent is unknown;

2. It would be impractical to treat the numerous short duration intermittent pesticide releases to surface waters from many different locations; and

3. Treatment, in many cases, may render the pesticide useless for aquatic weed control.

Therefore, the effluent limitations contained in this General Permit are narrative and include requirements to develop and implement an APAP that describes appropriate BMPs, including compliance with all pesticide label instructions, and to comply with receiving water limitations.

The BMPs required herein constitute BAT and BCT and will be implemented to minimize the area and duration of impacts caused by the discharge of aquatic pesticides in the treatment area and to allow for restoration of water quality and protection of beneficial uses of the receiving waters to pre-application quality following completion of a treatment event.

APAP

An APAP is a comprehensive plan developed by the discharger that describes the project, the need for the project, what will be done to reduce water quality impacts, and how those impacts will be monitored. Specifically, the APAP must contain the following elements:

1. Description of the water body(ies) or water body systems being controlled;

2. Description of what weed(s) are being controlled and why;

3. Discussion of control tolerances (i.e., how much growth can occur before action is necessary);

4. Discussion of the factors influencing the decision to use aquatic pesticides in regards to those tolerances (pros and cons);

5. Type(s) of aquatic pesticides used[9], the method in which they are applied, and the adjuvants used;

6. Description of the application area and the treatment area in the system;

7. Other control methods used (alternatives) and what their limitations are;

8. How much product is needed and how this is determined;

9. Monitoring plan (See Attachment C), including the location of representative site(s);

10. If applicable, list the gates or control structures and inspection schedule of those gates or control structures to ensure that they are not leaking;

[9] List the types and the names of aquatic pesticides used or anticipated to be used. If additional or alternative pesticides are used during the year, amend the APAP and note this in the annual report.

11. If the Control Agency has been granted a section 5.3 exception, describe the exception period. If weeds are also controlled outside of this period, describe how is it ensured that receiving water criteria are not exceeded;

12. Description of the BMPs to be implemented; and

13. Evaluation of other available BMPs to determine feasible alternatives to the selected aquatic pesticide application project that could reduce potential water quality impacts.

The development of BMPs provides the flexibility necessary to establish controls to minimize the area and duration of impacts caused by the discharge of aquatic pesticides. This flexibility allows dischargers to implement different BMPs for different types of applications and different types of waters.

RECEIVING WATER LIMITATIONS

Once an aquatic pesticide has been applied to an application area, the pesticide product can actively treat the target species within the treatment area. During the treatment event, the aquatic pesticide is at a sufficient concentration to actively kill or control target weeds. When active ingredient concentrations are below this effective concentration, the aquatic pesticide becomes a residue. The minimum effective concentration, and the time required to reach it, vary due to site specific conditions, such as flow, target species, and water chemistry. The Receiving Water Limitations require that an application event does not result in an exceedance of water quality standards in the receiving water. The receiving water includes:

1. Anywhere outside of the treatment area at any time, and

2. Anywhere inside the treatment area after completion of the treatment event.

In recognition of the variability in the temporal extent of a treatment event, this General Permit does not require it to be discretely defined. Instead, post-event monitoring of the water is required no more than a week from the time of aquatic pesticide application.

For those dischargers that have been granted a section 5.3 exception, the event may result in "short-term or seasonal" exceedance of water quality standards for priority pollutants in the receiving water. Again, there is no discrete definition of short-term but the intent is to allow the exception to apply for some period of time, such as the summer months (June, July, and August) and in some years extending through September due to weather. The exception is not intended to apply all year.

The discharger may apply aquatic pesticides longer than would be considered short-term or seasonal. However, it must demonstrate that exceedances of priority pollutant standards occur only during the defined short-term or season. It is up to the discharger to make this demonstration. The justification must be incorporated into the APAP and it must be confirmed through monitoring, if necessary.

To protect all designated beneficial uses of the receiving water, the most protective (lowest) and appropriate (to implement the CTR criteria and WQOs in the *Water Quality Control Plans*) limit should be selected as the water quality limit for a particular water body and constituent. In many cases, water quality standards include narrative, rather than numerical, water quality objectives. In such cases, numeric water quality limits from the literature or publicly available information may be used to ascertain compliance with these standards.

For acrolein and copper, the freshwater aquatic life protection objective (in *Water Quality Control Plans*) and criterion (from CTR) are applicable. For 2,4-D, diquat, endothall, fluridone, and glyphosate, the most protective limits are those for the protection of the MUN beneficial use. The resulting numeric limits shall be used to assess impacts from pollutants associated with aquatic pesticide application on the quality of waters of the State and the beneficial uses that they are able to support. The absence of WARM or COLD criteria for a constituent does not mean that those beneficial uses or other beneficial uses are absent in the receiving water. It simply means that there are no State or USEPA-based numeric water quality objectives or criteria to implement those beneficial uses. This is the case for 2,4-D, diquat, fluridone, and glyphosate.

Below are brief descriptions of the active ingredients covered by this General Permit. The surfactant (a type of adjuvant) nonylphenol is also discussed.

2,4-D

Applications of 2,4-D-based aquatic pesticides are used to control broad-leaved aquatic weeds, as well as water hyacinth. It is applied using a spray nozzle.

The California Department of Health Services (DHS) and USEPA have promulgated a Primary Maximum Contaminant Level (MCL) of 70 μg/L for 2,4-D that is applicable for drinking water sources, or water bodies with a domestic or municipal supply (MUN) designation. This General Permit requires compliance with the Primary MCL for discharges to water bodies with MUN designation. The receiving water limitation for discharge of 2,4-D to water bodies with MUN designation is 70 μg/L.

Acrolein

Acrolein-based aquatic pesticides are used to control submerged and floating vegetation. Application is accomplished by directly injecting the acrolein-based pesticides into flowing water.

Acrolein is a priority pollutant, and its criteria are specified in Table (b)(1) of the CTR. Criteria are established for human consumption of water and organisms (320 μg/L)[10] and only organisms

[10] These criteria apply to waters of the Sacramento-San Joaquin Delta and other waters of the State defined as inland waters that include a municipal use (MUN) use designation.

(780 μg/L).[11] The maximum recommended concentration of acrolein for the control of submerged or surface dwelling target species[12] is 15,000 μg/L.

Acrolein is recommended to be applied at a concentration that is greater than the CTR criteria or applicable WQOs[13]. Therefore, there would be a Reasonable Potential for aquatic pesticide applications to cause residue concentrations to exceed the CTR criteria or WQOs.

All Regional Water Board Basin Plans contain narrative criteria prohibiting discharges from causing toxicity in receiving waters. USEPA found acute and chronic toxic effects to freshwater organisms at 68 μg/L and 21 μg/L, respectively.[14] The Lowest Observed Effect Levels (LOELs) of 68 mg/L and 21 μg/L were determined from toxicity testing to freshwater organisms. Therefore, in order to protect freshwater aquatic life from toxic effects resulting from acrolein-based aquatic pesticide residue, this General Permit requires that receiving water residue of acrolein be less than the chronic 21 μg/L LOEL.

This General Permit requires that:

1. Acrolein residue, resulting from applications to inland surface waters, bays, and estuaries with uses of water that support warm and cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates (designation WARM and COLD), be less than 21 μg/L;

2. Acrolein residue, resulting from applications to inland surface waters, bays, and estuaries with a MUN designation, be less than 320 μg/L; and

3. Acrolein residue, resulting from applications to inland surface waters, bays, and estuaries without a MUN or warm and cold designation, be less than 780 μg/L.

Copper

Copper-based aquatic pesticides are used to control algal and aquatic plant growth. There are many different formulations, and application methods vary from pitching water-soluble tablets to direct injection of copper-based liquid products.

Copper-based aquatic pesticide labels recommend applications of copper can be up to 1,000 μg/L or more. Applicable water quality criteria for fresh and salt water, discussed below, are less than 1,000 μg/L. As described above for acrolein, limitations are required for discharges that have the Reasonable Potential to cause an exceedance of applicable criteria or WQOs.

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[11] These criteria apply to waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland waters without and MUN use designation.
[12] Acrolein safety manual.
[13] Acrolein could be applied in concentrations much higher that CTR criteria or WQOs, which could in turn cause residue concentrations to exceed the criteria.
[14] USEPA Goldbook, 1986.

Copper is a priority pollutant and the criteria for dissolved copper are specified in Table (b)(1) of the CTR. Criteria are established for maximum and continuous discharges in fresh and salt water. Conversion factors were also used to convert dissolved copper limitations to the total copper limitations assigned in this General Permit. The continuous or chronic criterion has been chosen in this case because it is the most protective considering that in many cases aquatic pesticides are applied several times per season and the limitation is for pesticide residue in receiving waters.

Freshwater copper criteria need to be adjusted for water hardness and may significantly differ from one irrigation system to another. Water hardness shall be determined by the calculation[7] or titration method. It is necessary to specify a range of total copper limitations in this General Permit because of the possible variations in freshwater hardness statewide. The total copper limitation will be calculated using the following equation:

Maximum Residual Total Copper Concentration = ~~exp[0.85459(ln(hardness) 1.702)]~~
exp{0.8545[ln (hardness)] – 1.702}

For example, for application in water with a hardness of 325 mg/L, in order to be in compliance with this General Permit, the copper concentration in the receiving water must be less than ~~32.7 µg/L~~**25.5 µg/L**.

Diquat

Diquat-based aquatic pesticides are used to control aquatic weeds. Diquat is a quick-acting contact pesticide, causing injury only to the parts of the plant to which it is applied.

All Regional Water Board Basin Plans contain narrative criteria prohibiting discharges from causing toxicity in receiving waters. USEPA has established an MCL of 20 µg/L for diquat that is applicable for drinking water sources or water bodies with an MUN designation. Therefore, to prevent receiving waters with an MUN designation from toxicity due to the use of diquat-based aquatic pesticides, this General Permit requires compliance with USEPA's MCL of 20 µg/L. The receiving water limitation for discharges of diquat to water bodies with MUN designation is 20 µg/L.

Endothall

Endothall-based aquatic pesticides are used to control a variety of aquatic weeds. USEPA has promulgated a Primary MCL of 100 µg/L for endothall that is applicable for drinking water sources or water bodies with an MUN designation. This General Permit requires compliance with USEPA Primary MCLs for discharges to water bodies with MUN designation. Therefore, the receiving water limitation for discharge of endothall to water bodies with MUN designation is 100 µg/L.

[7] Hardness, mg equivalent $CaCO_3$ mg/L = 2.497[Ca, mg/L] + 4.118[Mg, mg/L].

Fluridone

Fluridone is a systemic herbicide that kills the entire plant and is generally non-selective, which means most submersed plants and some floating leaved plants will be killed by fluridone during the treatment. USEPA has a reference dose as a drinking water level of 560 µg/L. This General Permit requires compliance with USEPA's reference dose of 560 µg/L for discharges to water bodies with MUN designation. Therefore, the receiving water limitations for discharge of fluridone to water bodies with MUN designation is 560 µg/L.

Glyphosate

Glyphosate-based aquatic pesticides are used to control emergent foliage of aquatic weeds. Glyphosate-based aquatic pesticides are ineffective on submerged or mostly submerged foliage. USEPA has promulgated a Primary MCL of 700 µg/L for glyphosate that is applicable for drinking water sources or water bodies with an MUN designation. This General Permit requires compliance with USEPA Primary MCLs for discharges to water bodies with MUN designation. Therefore, the receiving water limitation for discharge of glyphosate to water bodies with MUN designation is 700 µg/L.

Imazapyr

Currently, there are no State or USEPA-based numeric objectives or criteria for imazapyr. Therefore, this General Permit does not have receiving water limitations for imazapyr. However, it requires dischargers who use imazapyr to monitor their applications.

Nonylphenol

Nonylphenol is soluble in water and moderately resistant to natural degradation in water. Because of its ~~chemical properties~~**toxicity to aquatic organisms** and widespread use as a chemical intermediate (surfactant), concerns have been raised over the risks it poses to both freshwater and saltwater organisms. ~~Currently, there are no State or USEPA-based numeric objectives or criteria for nonylphenol. However, this General Permit requires monitoring for nonylphenol when this type of adjuvant is used.~~ **On February 23, 2006, USEPA promulgated the final aquatic life ambient water quality criteria for Nonylphenol. This General Permit requires compliance with the most protective of these criteria. The freshwater chronic criterion is 6.6 µg/L, and the saltwater chronic criterion is 1.7 µg/L.**

Sodium Carbonate Peroxyhydrate

Currently, there are no State or USEPA-based numeric objectives or criteria for sodium carbonate peroxyhydrate. Therefore, this General Permit does not have receiving water limitations for sodium carbonate peroxyhydrate. However, it requires dischargers who use sodium carbonate peroxyhydrate to monitor their applications.

Triclopyr

Triclopyr is an herbicide used for the control of perennial broadleaf weeds. Triclopyr has little tendency to hydrolyze, and photolysis is the main degradation pathway in natural water. In river water, the half-life of triclopyr was determined to be 1.3 days in artificial and natural light. Currently, there are no State or USEPA-based numeric objectives or criteria for triclopyr. However, this General Permit requires dischargers who use triclopyr to monitor their applications.

CEQA EXEMPTION

Pursuant to CWC section 13389, Regional Water Boards are exempt from the requirement to comply with Chapter 3, Division 13 of the Public Resources Code (PRC) when adopting NPDES permits. While adoption of this General Permit is exempt from preparation of a CEQA document, public entities receiving exceptions pursuant to section 5.3 of the Policy were required to prepare a CEQA document, as discussed below.

POLICY EXCEPTION

The Policy contains implementation provisions for water quality standards. The Policy provides that categorical exceptions may be granted to allow short-term or seasonal exceptions from meeting the priority pollutant criteria/objectives if "necessary to implement control measures … for resource or pest management… conducted by public entities to fulfill statutory requirements." The Policy specifically refers to vector or weed control, and pest and fishery management as bases for categorical exceptions. The exceptions are available only to public entities that have adequately provided the following, as listed in the Policy:

1. CEQA documentation including notifying potentially affected public and government agencies;

2. A detailed description of the proposed action which includes the proposed method of completing the action;

3. A time schedule;

4. A discharge and receiving water monitoring plan that specifies monitoring prior to application events, during application events, and after completion with the appropriate quality control procedures; and

5. Any necessary contingency plans.

The State Water Board requested in a letter dated August 6, 2003 that aquatic pesticide users who seek exceptions provide the above information. All the above information must have been submitted to the State Water Board prior to the adoption of this General Permit for public entities to obtain a section 5.3 exception.

The public entities listed in Attachment E have prepared Initial Studies, Negative Declarations (ND), and Notices of Determination or Mitigated Negative Declarations (MND) for the discharge of aquatic pesticides in accordance with CEQA (PRC §21000 et seq.) to comply with the exception requirements of section 5.3 of the Policy. The boards of each public entity, as the lead agencies under CEQA, approved the Final ND/MND and determined that the discharge of aquatic pesticides in their respective projects would not have significant effect on the environment. Those public entities have determined that the water quality or related water quality impacts identified in the environmental assessments of the ND/MND are less than significant. The boards of each public entity, as the lead agencies under CEQA, approved the Final ND/MND and are not required to meet priority pollutant criteria until after completion of the application event.

As required in section 15096 of the CEQA Guidelines, the State Water Board, as Responsible Agency under CEQA, considered the ND/MND approved by the board of each public entity and finds that the projects will have less than significant water quality impact if the waste discharge requirements in this General permit are followed. Accordingly, the public entities listed in Attachment E are hereby granted an exception pursuant to section 5.3 of the policy.
Aquatic pesticide users not listed in Attachment E are required to meet all applicable priority pollutant criteria in receiving waters, consistent with applicable federal and State regulations.

Several lawsuits have been filed which challenge the Negative Declarations adopted by various applicants for this General Permit. Pursuant to section 15233 of the CEQA Guidelines, the State Water Board must treat the Negative Declarations at issue as if they comply with CEQA and must continue to process the applications according to the time limits for responsible agency action contained in Government Code section 65952. Accordingly, the following applicants are granted a conditional exception under section 5.3 of the Policy: Merced Irrigation District, Modesto Irrigation District, Oakdale Irrigation District, South San Joaquin Irrigation District, and Turlock Irrigation District. The conditional exceptions granted by this General Permit only provide permission to proceed with the project at the applicant's risk. An applicant's conditional exception shall automatically be withdrawn in the event that a court enters a final decision finding that the applicant's Negative Declaration was inadequate.

The California Department of Food and Agriculture (CDFA) has determined that its ongoing projects to eradicate hydrilla are exempt from the requirements of CEQA because the activities are necessary to prevent or mitigate an emergency pursuant to PRC section 21080 (b)(4). The bases for this determination are that the CDFA Hydrilla Program is mandated under sections 403 and 6048 of the Food and Agriculture Code and the Governor and/or the CDFA Secretary has declared that an emergency situation existed as each eradication project began. Although CDFA has determined the CDFA Hydrilla Program is exempt form CEQA, CDFA will coordinate all eradication activities with federal, state and local regulatory agencies to ensure no long-term significant environmental impacts occur.
As required in section 15096 of the CEQA Guidelines, the State Water Board, as a Responsible Agency under CEQA, considered the exemption claimed by CDFA and finds that the projects will have less than significant water quality impact if the waste discharge requirements in this General Permit are followed. Accordingly, CDFA is hereby granted an exception pursuant to

section 5.3 of the Policy, as long as the Governor or the CDFA Secretary has declared that an emergency situation exists prior to project implementation.

MONITORING REQUIREMENTS

This General Permit requires that dischargers comply with the Monitoring and Reporting Program (MRP), Attachment C of this General Permit. The goals of the MRP are to:

1. Determine compliance with the receiving water limitations and other requirements specified in this General Permit;

2. Measure and improve the effectiveness of the APAP;

3. Support the development, implementation, and effectiveness of BMPs;

4. Assess the chemical, physical, and biological impacts on receiving waters resulting from aquatic pesticide applications;

5. Assess the overall health and evaluate long-term trends in receiving water quality;

6. Demonstrate that water quality of the receiving waters following completion of resource or weed management projects are equivalent to pre-application conditions;

7. Identify and characterize aquatic pesticide application projects conducted by the discharger; and

8. Ensure that projects that are monitored are representative of all pesticides and application methods used by the discharger.

The MRP provided by this General Permit is considered baseline monitoring. Monitoring plans proposed by entities receiving a section 5.3. exception as a mitigation measure must also comply with that monitoring plan proposed in their CEQA document where the two plans differ.

The APMP, conducted by SFEI as an outcome of the settlement agreement, evaluated the toxicity of the 2,4-D, acrolein, copper, diquat, fluridone, glyphosate, and triclopyr. The APMP report states that no toxicity was found with the use of 2,4-D, glyphosate, and triclopyr; toxicity testing is difficult for acrolein due to its rapid breakdown and volatility; results were inconclusive for diquat and fluridone; and toxicity in copper-based applications was confirmed. Additionally, during the prior permit term, there were no incidents to suggest that toxicity testing is warranted.

The purpose of toxicity testing is to determine if the aquatic pesticide applications cause toxicity in the receiving water. Since the active ingredients, surfactants, and breakdown products used in these aquatic pesticides are known and have receiving water limitations and/or are analyzed for in the MRP, toxicity testing is not necessary. This General Permit specifies receiving water limitations for each active ingredient that has State or USEPA-based water quality objectives or

criteria and when available for their breakdown products and surfactants. These limitations are adequate to protect the beneficial uses of the receiving waters.

In order to meet the MRP's monitoring goals, dischargers are required to provide for all application sites a map and information on surface area and/or volume of treatment area and any other information used to calculate dosage and quantity of each pesticide used. In addition, dischargers are required to conduct visual monitoring at all application sites during each application event. Furthermore, dischargers are also required to conduct water quality monitoring at 10 percent of all its application sites during each application event. Ten percent is used as a standard quality control protocol in sample analysis methodology to ensure that the process stays within acceptable criteria. The MRP requires sampling a minimum of two representative sites for a discharger with 20 application sites or less and 10 percent of all application sites for a discharger with more than 20 application sites. Sampling 10 percent of all the application sites is adequate to obtain information necessary to evaluate the effects of all the applications.

Additionally, specific monitoring and requirements are also provided for irrigation canals or similar systems that have reasonable control over treated water.

PERMIT RE-OPENERS

This General Permit contains a re-opener provision that allows the General Permit to be re-opened for the specific purpose of granting exceptions to agencies that have adequately met the section 5.3 exception criteria. Alternatively, dischargers may request an individual permit with the appropriate Regional Water Board.

The re-opener provision also allows for additional aquatic pesticides to be added to those authorized by this General Permit or to revise the monitoring and reporting program to allow for group or regional monitoring.

STATE WATER RESOURCES CONTROL BOARD

WASTE DISCHARGE REQUIREMENTS

WATER QUALITY ORDER NO. 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

The State Water Resources Control Board (hereafter State Water Board) finds that:

1. States may request authority to issue general National Pollutant Discharger Elimination System (NPDES) permits pursuant to Title 40, Code of Federal Regulations (CFR) section 122.28. On June 8, 1989, the State Water Board submitted an application to the U.S. Environmental Protection Agency (USEPA) requesting revisions to its NPDES program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES program. On September 22, 1989, the USEPA, Region 9, approved the State Water Board's request and granted authorization for the State to issue general NPDES permits.

2. Federal regulation at 40 CFR section 122.28(a)(1) allows NPDES permits to be written to cover a category of discharges within State political boundaries.

3. According to section 301(a) of the federal Clean Water Act (CWA), discharges of pollutants from point sources to waters of the United States are prohibited unless they are in compliance with an NPDES permit.

4. In order to manage resources and protect beneficial uses, many agencies use aquatic pesticides to control aquatic weeds.

5. On March 12, 2001, the Ninth Circuit Court of Appeals held that discharges of pollutants from the use of aquatic pesticides in waters of the United States require coverage under an NPDES permit (Headwaters, Inc. v. Talent Irrigation District[1]).

6. Because of the serious public health, safety, and economic implications of delaying pesticide applications, in 2001 the State Water Board adopted Water Quality Order (Order) No. 2001-12-DWQ, Statewide General NPDES Permit for Discharges of Aquatic Pesticides to Waters of the United States, on an emergency basis to provide immediate NPDES permit coverage for broad categories of aquatic pesticide use in California.

7. In August 2001, Waterkeepers Northern California (Waterkeepers) filed a lawsuit against the State Water Board challenging several aspects of Order No. 2001-12-DWQ. Major aspects of the challenge included the emergency adoption of the Order without compliance with the

[1] Headwaters, Inc. v. Talent Irrigation District, (9th Cir. 2001) 243 F.3d 526.

California Environmental Quality Act (CEQA) and other exception requirements of the State Water Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Policy); failure to address cumulative impacts; and failure to comply with the California Toxics Rule (CTR).

8. In a settlement of the Waterkeepers' lawsuit, the State Water Board agreed to fund a comprehensive aquatic pesticide monitoring program (APMP) that would assess receiving water toxicity caused by aquatic pesticide residues. Available data from the APMP were used to develop the terms and conditions of this General Permit.

9. The results of the APMP show that no toxicity was found with the use of 2,4-D, glyphosate, and triclopyr; toxicity testing is difficult for acrolein due to its rapid breakdown and volatilization; toxicity effects were inconclusive for diquat and fluridone; and toxicity in copper-based applications was confirmed.

10. Pesticide formulations may include "active ingredients"[2] and "inert ingredients"[3]. Adjuvants[4] or surfactants may be added to the active ingredients in the application equipment that is used in the delivery of the pesticide.

11. Pollutants associated with aquatic pesticide application include over- applied and misdirected pesticide product and pesticide residues. Pesticide residues are pesticide byproducts, breakdown products, or pesticide products that are present after the use of the pesticide for controlling the target weed.

12. This General Permit is intended to cover the discharge of pollutants associated with the application of 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, and triclopyr-based aquatic pesticides to surface waters associated with controlling aquatic weeds.

13. On August 30, 2005, the California Department of Pesticide Regulation (DPR) registered imazapyr for aquatic application. On September 7, 2005, this General Permit was modified to allow the discharge of pollutants associated with the application of imazapyr-based aquatic pesticides to surface waters for aquatic weed control.

14. On February 27, 2006, DPR registered sodium carbonate peroxyhydrate for aquatic application. On June 7, 2006, this General Permit was modified to allow the discharge of pollutants associated with the application of sodium carbonate peroxyhydrate-based aquatic pesticides to surface waters for aquatic weed control.

15. The aquatic pesticides covered by this General Permit are applied directly into the water body and/or directly to organisms in the water or on the water surface with the intent of

[2] Active ingredients are manufacturer disclosed ingredients that yield toxic effects on target organisms.
[3] Inert ingredients are additional ingredients that are not toxic to target organisms. These ingredients are often trade secrets and therefore not always disclosed by the manufacturer.
[4] Adjuvants are ingredients that are added to aquatic pesticides during a treatment event. These ingredients are chosen by the discharger, based on site characteristics, and typically increase the effectiveness of aquatic pesticides on target organisms.

killing or controlling the target aquatic organisms. The impacts of these chemicals may not be limited to the target organisms–other plants and aquatic life in the treatment area[5] may be impacted. Due to water movement at the treatment locations, residual pesticides can be carried to adjacent areas while concentrations in the water are still high enough to cause adverse impacts not only to aquatic organisms but also to other beneficial uses such as irrigation, municipal water supplies, and recreation (such as swimming).

16. As part of the pesticide registration process of pesticides for use in California, USEPA and the Department of Pesticide Regulation (DPR) evaluate data submitted by registrants to ensure that a product used according to label instructions will cause no harm or adverse impact on non-target organisms that cannot be reduced or mitigated with protective measures or use restrictions. While DPR conducts these tests it does not require or conduct Compliance Monitoring.

17. DPR and the County Agricultural Commissioners (CACs) regulate the sale and use of pesticides in California. The use of pesticides must be consistent with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) pesticide label instructions. If applying a pesticide designated as a restricted material, applicators must either be licensed by DPR with a Qualified Applicator Certificate or work under the supervision of someone who is licensed and obtain Use Permits from CACs. For the use of aquatic pesticides, a Qualified Applicator Certificate with the category "aquatic" is required, and their use must be reported to the CACs where required by law or by agreement with DPR.

18. DPR regulates the use of pesticide-treated commodities and sites where needed to ensure that pesticide residues do not pose a hazard to human health or the environment. DPR also regulates the use of pesticides to reduce the release of residues from treated sites. This includes regulation of wastes generated by applications not in accordance with all laws and regulations, including drift from applications.

19. Under this General Permit, aquatic pesticide discharges require minimal or no treatment systems to meet limits and pose no significant threat to water quality. As such, they are eligible for Category 3 in section 2200(b)(9) of Title 23, California Code of Regulations (CCR). This category is appropriate because aquatic pesticide applications incorporate best management practices (BMPs) to control potential impacts to beneficial uses, and this General Permit prohibits pollutant discharge associated with aquatic pesticide application from causing exceedance of CTR criteria or water quality objectives. The annual fee associated with this rating can be found in section 2200(b)(9) of Title 23, CCR.

20. Section 122.44(k)(3) of 40 CFR allows effluent limits to be in the form of BMP requirements, if numeric effluent limits are infeasible. Numeric effluent limits for pollutant discharges associated with the application of aquatic pesticides are infeasible. Therefore, this General Permit requires the implementation of BMPs. The BMPs are identified in the

[5] The treatment area is the area that is treated by the aquatic pesticide to control weeds and therefore, the area being targeted to receive lethal doses of aquatic pesticides. It is the responsibility of the discharger to define the treatment area for each specific location that it discharges to.

discharger's Aquatic Pesticides Application Plan (APAP) to control and abate the discharge of pollutants associated with aquatic pesticide applications. In addition, where State or USEPA-based water quality objectives or criteria are available, this General Permit includes numeric receiving water limitations.

21. This General Permit requires submittal of a Notice of Intent to Comply with the Terms of this General Permit (NOI) to obtain permit coverage.

22. If the area of aquatic pesticide application extends beyond a Regional Water Quality Control Board (Regional Water Board) boundary, discharges in each Regional Water Board shall be covered by a separate NOI under this General Permit. Only one annual fee must be submitted to the State Water Board.

23. Although a discharge may be eligible for coverage under this General Permit, the appropriate Regional Water Board may determine that the discharge must be regulated under an individual permit or a different general NPDES permit. If an individual or another general NPDES permit is issued for a discharge, then the applicability of this General Permit to the discharge is immediately terminated on the effective date of the other permit.

24. The State Water Board has considered antidegradation pursuant to 40 CFR section 131.12 and State Water Board Resolution No. 68-16. Discharges must be consistent with both State and federal antidegradation policies. The conditions of this General Permit require aquatic pesticide discharges to meet applicable water quality objectives. Waters of exceptional quality may be degraded due to the application of aquatic pesticides, however, it would only be temporary and in the best interest of the people of the State. The nature of aquatic pesticides is to be toxic in order to protect beneficial uses such as municipal and agricultural supply, recreation, and human health (preventing floods by maintaining capacity in flood control channels). However, compliance with receiving water limitations must be maintained. Therefore, this General Permit is consistent with State and federal antidegradation policies.

25. There may be other non-toxic or less toxic control measures available to minimize the discharge of wastes to waters of the United States. This General Permit requires dischargers to evaluate BMPs that may include alternative control options, procedures to determine that water quality impacts have been minimized, and a determination that there are no feasible alternatives to the selected resource or weed management measures.

26. The State Water Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;
    b. Other waste discharges;
    c. Past, present, and probable future beneficial uses of the waters under consideration;
    d. Environmental characteristics of the waters under consideration;
    e. Economic considerations;

f. The need to maintain conveyance facilities to provide water supplies for municipal, irrigation, and industrial purposes; and
g. Seasonal and weather conditions that require timely implementation of control measures.

27. The designated beneficial uses of surface waters throughout the State may include domestic or municipal, industrial, and agricultural supply; water contact and non-contact recreation; navigation; ground water recharge; fresh water replenishment; hydropower generation; wildlife habitat; cold freshwater and warm freshwater habitat; fish migration and fish spawning; marine habitat; estuarine habitat; shellfish harvesting; ocean commercial and sport fishing; preservation of areas of special biological significance; and preservation of rare and endangered species. To the extent that the applicable State or Regional Water Board *Water Quality Control Plan* designates additional or different beneficial uses, the *Water Quality Control Plan* shall govern.

28. USEPA establishes water quality criteria for priority pollutants in the National Toxics Rule and the CTR, and water quality objectives are established in *Water Quality Control Plans*. The State Water Board's Policy went into effect on May 22, 2000 and generally requires limitations for all constituents that will cause, have the reasonable potential to cause, or contribute to toxicity in receiving waters.

29. Section 5.3 of the Policy provides that the State Water Board may allow short-term or seasonal categorical exceptions from meeting the priority pollutant criteria/objectives if it is determined to be necessary to implement control measures for resource or pest management conducted by public entities to fulfill statutory requirements, including, but not limited to, those in the California Fish and Game, Food and Agriculture, Health and Safety, and Harbors and Navigation codes. Section 5.3 requires that the provisions of CEQA are satisfied and, dischargers provide specific discharge information before an exception may be granted.

30. Because of the emergency nature of Order No. 2001-12-DWQ, many of the actions that would normally occur prior to issuance of a permit granting a section 5.3 categorical exception to priority pollutant objectives/criteria had not yet occurred. Therefore, Order No. 2001-12-DWQ was issued as a limited-term permit, which expired on January 31, 2004. During the term of the Order No. 2001-12-DWQ, the public entities seeking an exception to the CTR during the term of this General Permit were directed to complete necessary CEQA documents and prepare other submittals to satisfy the criteria for the categorical exception.

31. The State Water Board has received CEQA documentation and all other information required for a section 5.3 exception from public entities listed in Attachment E to this General Permit. This General Permit grants the public entities listed in Attachment E a section 5.3 categorical exception from meeting priority pollutant criteria for short-term or seasonal time frames. This General Permit does not grant remaining enrollees a section 5.3 exception of the Policy.

32. Several lawsuits have been filed which challenge the Negative Declarations adopted by various applicants for this General Permit. Pursuant to section 15233 of the CEQA Guidelines, the State Water Board must treat the Negative Declarations at issue as if they comply with CEQA and must continue to process the applications according to the time

limits for responsible agency action contained in Government Code section 65952. Accordingly, the following applicants are granted a conditional exception under section 5.3 of the Policy: Merced Irrigation District, Modesto Irrigation District, Oakdale Irrigation District, South San Joaquin Irrigation District, and Turlock Irrigation District. The conditional exceptions granted by this General Permit only provide permission to proceed with the project at the applicant's risk. An applicant's conditional exception shall automatically be withdrawn in the event that a court enters a final decision finding that the applicant's Negative Declaration was inadequate.

33. This General Permit may be re-opened to modify Attachment E if additional entities qualify for a section 5.3 exception. This General Permit may also be re-opened if additional aquatic pesticides are registered by DPR or to revise the monitoring and reporting program to allow for group or regional monitoring.

34. This General Permit does not authorize any take of endangered species. The discharge is prohibited from adversely impacting biologically sensitive or critical habitats, including, but not limited to, habitat of species listed under federal or State endangered species laws. To ensure that endangered species issues are raised to the responsible agencies, the State Water Board has notified the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Department of Fish and Game of this General Permit.

35. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA (Public Resources Code section 21100, et seq.), in accordance with section 13389 of the California Water Code (CWC).

36. The State Water Board has notified interested agencies and persons of its intent to prescribe waste discharge requirements in this General Permit and has provided them with an opportunity to submit comments.

37. The State Water Board, in a public hearing, heard and considered all comments pertaining to the discharges to be regulated by this General Permit.

38. This Order shall serve as an NPDES permit pursuant to section 402 of the Clean Water Act and amendments thereto and shall take effect upon the date of adoption.

WASTE DISCHARGE REQUIREMENTS
WATER QUALITY ORDER NO. 2004-0009-DWQ

IT IS HEREBY ORDERED that all dischargers subject to this General Permit shall comply with the following:

A. Application Requirements:

In order to obtain coverage, the discharger must submit the following to the appropriate Regional Water Board(s)[6]. Dischargers that apply 2,4-D, acrolein, copper, diquat, endothall, fluridone, glyphosate, imazapyr, sodium carbonate peroxyhydrate, and triclopyr -based aquatic pesticides to waters of the United States are eligible for coverage under this General Permit provided:

1. An NOI (Attachment A) signed in accordance with the signatory requirements of Standard Provision B;
2. A vicinity map; and
3. An annual fee (for first-time enrollees).

Regional Water Boards may require additional information in order to determine whether a discharge is appropriately covered by this General Permit. Additionally, the Regional Water Board may issue a Notice of Exclusion, which either terminates permit coverage or requires submittal of an application for an individual permit or alternative general permit.

B. Effluent Limitations:

1. The discharge of wastes other than as described in this General Permit is prohibited, unless authorized by a separate NPDES permit.

2. The discharge of wastes shall not cause or contribute to conditions of nuisance or pollution.

3. The discharge shall not cause or contribute to long-term adverse impacts on beneficial uses of waters of the United States.

4. The discharger shall apply pesticides in accordance with the developed APAP, as described in section D.4.

C. Receiving Water Limitations:

1. Discharges shall not cause or contribute to an exceedence of the following in the receiving water.

[6] The discharger must submit an NOI to each applicable Regional Water Board it discharges within. However, only one application fee is required for each discharger, regardless of the number of NOIs submitted.

Constituent/ Parameter	BENEFICIAL USE			
	MUN	WARM or COLD	Other than MUN, WARM, or COLD	All Designations
2,4-D	70 µg/L			
Acrolein[7]	320 µg/L	21 µg/L	780 µg/L	
Copper[8]				Maximum Copper Concentration = ~~exp[0.8545 (ln(hardness)) 1.702]~~ **exp{0.8545[ln(hardness)] – 1.702}**
Diquat	20 µg/L			
Endothall	100 µg/L			
Fluridone	560 µg/L			
Glyphosate	700 µg/L			
Nonylphenol				Freshwater Chronic Criterion = 6.6 µg/L, Saltwater Chronic Criterion = 1.7 µg/L
Toxicity				Applications shall not cause or contribute to toxicity

The most restrictive (smallest) receiving water limit shall apply when discharges are to water bodies that have multiple limits listed above.

2. Discharges shall not cause or contribute to an exceedance of any CTR criteria or applicable water quality objective in a State or Regional Water Board *Water Quality Control Plan* in the receiving water.

D. Aquatic Pesticide Use Requirements:

1. **License Requirements.** Dischargers must be licensed by DPR if such licensing is required for the aquatic pesticide application project.[9]

2. **Application Requirements.** The pesticide use must be consistent with FIFRA pesticide label instructions and any Use Permits issued by CACs.

3. **Application Schedule.** When requested, the discharger shall provide a phone number to persons who request the discharger's application schedule. The discharger shall provide the requester with the most current application schedule and inform the requester if the schedule is subject to change. Information may be made available by electronic means.

4. **Public Notice Requirements.** Every calendar year, prior to the first application of aquatic pesticides, the discharger shall notify potentially affected governmental agencies. The notification shall include the following information:

    a. A statement of the discharger's intent to apply aquatic pesticide(s);

[7] Public entities listed in Attachment E are not required to meet this limitation in receiving waters during the Exception period, as described in the APAP in accordance with Aquatic Pesticide Requirement D.5.k.
[8] Public entities listed in Attachment E are not required to meet this limitation in receiving waters during the Exception period, as described in the APAP in accordance with Aquatic Pesticide Requirement D.5.k.
[9] A license is required for application of restricted material, as defined by DPR.

b. Name of pesticide(s);
c. Purpose of use;
d. General time period and locations of expected use;
e. Any water use restrictions or precautions during treatment; and
f. A phone number that interested persons may call to obtain additional information from the discharger.

5. **Aquatic Pesticides Application Plan (APAP).** The discharger shall develop an APAP that contains the following elements:

a. Description of the water system to which aquatic pesticides are being applied;

b. Description of what weed(s) are being controlled and why;

c. Discussion of control tolerances (i.e., how much growth can occur before action is necessary);

d. Discussion of the factors influencing the decision to use aquatic pesticides in regards to those tolerances (pros and cons);

e. Type(s) of aquatic pesticides used[10], the method in which they are applied, and the adjuvants used;

f. Description of the application area and the treatment area in the system;

g. Other control methods used (alternatives) and what their limitations are;

h. How much product is needed and how this is determined;

i. Monitoring plan (see Attachment C), including the location of representative site(s);

j. If applicable, list the gates or control structures and provide an inspection schedule of those gates or control structures to ensure they are not leaking;

k. If the Control Agency has been granted an exception, describe the exception period. If weeds are also controlled outside of this period, how is it ensured that receiving water criteria are not exceeded;

l. Evaluation of other available BMPs to determine if there are feasible alternatives to the selected aquatic pesticide application project that could reduce potential water quality impacts; and

[10] List the types and the names of the aquatic pesticides most often used or anticipated to be used. If additional or alternative pesticides are used during the year, amend the APAP and note this in the annual report.

m. Description of the BMPs to be implemented.

6. **Pesticide Application Log.** The discharger shall maintain a log for each aquatic pesticide application. The application log shall contain, at a minimum, the following information:

   a. Date of application;
   b. Location of application;
   c. Name of applicator;
   d. List of gates or control structures in the treatment area that may discharge to surface waters, if applicable;
   e. Time of gate or control structure closure and reopening, include any calculations used to determine closure and reopening times, if applicable;
   f. Application details, such as water temperature, flow or level of water body, time application started and stopped, and aquatic pesticide application rate and concentration;
   g. Visual monitoring assessment; and
   h. Certification that applicator(s) followed the APAP.

E. Provisions:

1. **Permit Compliance.** The discharger must comply with all conditions of this General Permit including timely submittal of technical and monitoring reports as directed by the appropriate Regional Water Board's Executive Officer.

2. **Alternatives.** In accordance with APAP D.5.m, the discharger shall implement the identified alternative measures to the selected aquatic pesticide application project that could reduce potential water quality impacts.

3. **Monitoring and Reporting.** The discharger shall comply with the provisions of the attached Monitoring and Reporting Program (MRP) contained in Attachment C to this General Permit and any revision thereto.

4. **Standard Provisions.** The discharger shall comply with all the applicable items of the Standard Provisions and Reporting for Waste Discharge Requirements (Standard Provisions), which are part of this General Permit (Attachment D).

5. **General Permit Reference.** A copy of this General Permit shall be kept where key operating personnel can refer to the document. Key operating and site management personnel shall be familiar with its contents.

6. **Monitoring Reports to USEPA.** When requested by USEPA, the discharger shall also submit Discharge Monitoring Reports to USEPA.

7. **Change of Control Agency.** In the event of any change in the Control Agency that sought coverage under this Genera Permit, the original Control Agency shall notify the

succeeding Control Agency of the existence of this General Permit by letter, a copy of which shall be immediately forwarded to the appropriate Regional Water Board. Upon receipt of the letter, Regional Water Board staff shall terminate coverage of the original Control Agency under this General Permit. The new Control Agency shall complete and submit to the Regional Water Board a revised NOI form (Attachment A) in accordance with Application A.1.

8. **Qualified Biologist Certification Following Project Completion.** Upon completion of an aquatic pesticide project, public entities listed in Attachment E to this General Permit shall provide certification by a qualified biologist that beneficial uses of receiving waters accepting aquatic pesticides have been restored.

9. **Submittal of APAP.** Dischargers that apply for this General Permit before August 1, 2004 shall submit their APAP to the appropriate Regional Water Board by August 1, 2004; those dischargers that apply for this General Permit after August 1, 2004 shall submit their APAP to the appropriate Regional Water Board with their NOI application.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 20, 2004.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None

ABSENT: None

ABSTAIN: None

Original signed by
Debbie Irvin
Clerk to the Board

Dan Skopec
Acting Secretary

State Water Resources Control Board

Arnold Schwarzenegger
Governor

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5455
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
FAX (916) 341-5463 • Internet Address: http://www.waterboards.ca.gov

ATTACHMENT A

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF
WATER QUALITY ORDER NO. 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

I. NOTICE OF INTENT STATUS (see instructions)

MARK ONLY ONE ITEM	A. ☐	New Applicator	B. ☐	Change of Information for WDID#

II. CONTROL AGENCY INFORMATION

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip
G. Contact Person	H. Title		I. Phone

III. RECEIVING WATER INFORMATION

A. Do wastes and pesticide residues discharge to (check all that apply):

1. ☐ Canals, ditches, or other constructed conveyance facilities owned and controlled by Control Agency?
   Name of the conveyance system: _____

2. ☐ Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Control Agency
   Owner's name:_____
   Name of the conveyance system: _____

3. ☐ Directly to river, lake, creek, stream, bay, ocean, etc.?
   Name of water body: _____

B. Regional Water Quality Control Board(s) where application sites are located (REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9):
REGION _____
(List all regions where pesticide application is proposed.)

NOTICE OF INTENT
WATER QUALITY ORDER NO. 2004-0009-DWQ

IV. PESTICIDE APPLICATION INFORMATION

A. Target Organism: ____Algae _____Aquatic Weeds (surface) _____Aquatic Weeds (submerged)

____OTHER (identify): _____

B. Aquatic Pesticides Used: List Name and Active ingredients
_____

C. Period of Application: Start Date _____ End Date_____

D. Types of Adjuvants Used:

V. AQUATIC PESTICIDES APPLICATION PLAN

Has Aquatic Pesticides Application Plan been prepared and is the applicator familiar with its contents? Yes ☐ No ☐
If not, when will it be prepared? _____

VI. NOTIFICATION

Have potentially affected public and governmental agencies been notified? Yes ☐ No ☐

VII. VICINITY MAP AND FEE

A. Have you included vicinity map(s) with this submittal? ..... YES ☐ NO ☐
Separate vicinity maps must be submitted for each Region where a proposed discharge will occur.

B. Have you included payment of the filing fee (for first-time enrollees only) with this submittal? … YES ☐ NO ☐ NA ☐

VIII. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name:_____

B. Signature: _____ **Date:** _____

C. Title:_____

INSTRUCTIONS
FOR COMPLETING THE NOI

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

These instructions are intended to help you, the discharger, complete the Notice of Intent (NOI) form for the general National Pollutant Discharge Elimination System (NPDES) permit. **Please type or print clearly when completing the NOI form and vicinity map(s).**

Send the completed and signed form along with the filing fee, supporting documentation, and vicinity map(s) to the appropriate Regional Water Board. One NOI should be submitted by appropriate discharger to cover all proposed discharges within the boundaries of each Regional Water Quality Control Board (Regional Water Board). If proposed discharges will occur in more than one Region, submit extra copies of the NOI and maps for each Region where a discharge will occur. Only one annual fee is required for each discharger.

Section I – Notice of Intent Status

Please mark whether this is the first time coverage under this General Permit is being requested or if this is a change of information for a discharge already covered under this General Permit. If this is a change of information, please supply the eleven-digit Waste Discharge Identification (WDID) number for the discharge.

Section II – Control Agency Information

A. Enter the name of the Control Agency.
B. Enter the street number and street name where mail and correspondence should be sent (P.O. Box is acceptable).
C. Enter the city that applies to the mailing address given.
D. Enter the county that applies to the mailing address given.
E. Enter the state that applies to the mailing address given.
F. Enter the zip code that applies to the mailing address given.
G. Enter the name (first and last) of the contact person for the Control Agency listed above.
H. Enter the contact person's title.
I. Enter the contact person's daytime telephone number.

Section III – Receiving Water Information

A. Check all boxes that apply. At least one box must be checked.

1. Check this box if the application site is a canal, ditch, or other constructed conveyance system owned and controlled by the Control Agency. Print the name of the conveyance system.
2. Check this box if the application site is a canal, ditch, or other constructed conveyance system owned and controlled by a different person or entity other than the Control Agency. Clearly print the name and the owner of the conveyance system.

3. Check this box if the application site is not a constructed conveyance system (including application to river, lake, creek, stream, bay, ocean) and enter the name of the water body.

B. List all Region numbers where pesticide application is proposed. Regional Water Board boundaries are defined in section 13200 of the California Water Code. The numbers for each Region are given below and a map is attached.

1- North Coast
2- San Francisco Bay
3- Central Coast
4- Los Angeles
5- Central Valley (Sacramento, Fresno, Redding)
6- Lahontan (South Lake Tahoe, Victorville)
7- Colorado River Basin
8- Santa Ana
9- San Diego

Section IV – Pesticide Application Information

A. Check the appropriate target organism. If the target organism is not listed, check OTHER, and list the name or type of target organism in the space provided.
B. List the name and active ingredients of each pesticide to be used.
C. List the start and end date of proposed pesticide application season.
D. List the name(s) and type(s) of adjuvants that will be used.

Section V – Aquatic Pesticides Application Plan (APAP)

An APAP must be prepared and the applicator familiar with its contents before aquatic pesticide application is authorized under this General Permit. If an APAP is not complete at the time of application, enter the date by which it will be completed.

Section VI – Notification

Have you notified potentially affected governmental agencies, as required by Provision D.4 of the General Permit?

Section VII – Vicinity Map and Fee

A. If you have included vicinity map(s) with your Form A submittal, check the YES box if you have not included the vicinity map(s), check the NO box. **NOTE:** Vicinity map(s) of the proposed pesticide application site must be received before you can be covered by this General Permit. You must submit separate vicinity map(s) for each Regional Water Board service area where a discharge is proposed. If applying for coverage under Region 5, please send in two additional copies of the required map, if applying for coverage under Region 6, please send in one additional copy of the required map.

B. Check the YES box if you have included payment of the annual fee for a Category 3 discharge specified in Title 23, California Code of Regulations, section 2200(b)(9) with your submittal. Check the NO box if you have not included this payment.

NOTICE OF INTENT INSTRUCTIONS
WATER QUALITY ORDER NO. 2004-0009-DWQ

NOTES:

1. Payment of this fee is not necessary if you have paid an annual fee within the last year for coverage under the previous order, Order No. 2001-12-DWQ.
2. You will be billed annually and payment is required to continue coverage.

Section VIII

A. Print the name of the appropriate official. For a municipality, State, federal, or other public agency, this would be a principal executive officer, ranking elected official, or duly authorized representative. The principal executive officer of a federal agency includes the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of USEPA).

B. The person whose name is printed above must sign and date the NOI.

C. Enter the title of the person signing the NOI.

ATTACHMENT B
WATER QUALITY ORDER NO. 2004-0009-DWQ
STATE WATER RESOURCES CONTROL BOARD

Division of Water Quality
P.O. Box 100
Sacramento, CA 95812-0100
Web Page: http://www.waterboards.ca.gov

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1)
5550 Skylane Blvd, Ste. A
Santa Rose, CA 95403
(707) 576-2220 FAX: (707)523-0135
Web Page:
http://www.waterboards.ca.gov/northcoast/

SAN FRANCISCO BAY REGION (2)
1515 Clay Street, Ste. 1400
Oakland, CA 94612
(510) 622-2300 FAX: (510) 622-2640
Web Page:
http://www.waterboards.ca.gov/sanfranciscobay/

CENTRAL COAST REGION (3)
895 Aerovista Place, Ste 101
San Luis Obispo, CA 93401
(805) 549-3147 FAX: (805) 543-0397
Web Page:
http://www.waterboards.ca.gov/centralcoast/

LOS ANGELES REGION (4)
320 W. 4th Street, Ste. 200
Los Angeles, CA 90013
(213) 576-6600 FAX: (213) 576-6640
Web Page:
http://www.waterboards.ca.gov/losangeles/

CENTRAL VALLEY REGION (5S)
11020 Sun Center Dr., #200
Rancho Cordova, CA 95670-6114
(916) 464-3291 FAX: (916) 464-4645
Web Page:
http:www.waterboards.ca.gov/centralvalley/

FRESNO BRANCH OFFICE (5F)
1685 E St.
Fresno, CA 93706
(559) 445-5116 FAX: (559) 445-5910
Web Page:
http://www.waterboards.ca.gov/centralvalley/

REDDING BRANCH OFFICE (5R)
415 Knollcrest Drive, Ste. 100
Redding, CA 96002
(530) 224-4845 FAX: (530) 224-4857
Web Page:
http://www.waterboards.ca.gov/centralvalley/

LAHONTAN REGION (6 SLT)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5400 FAX: (530) 544-2271
Web Page:
http://www.waterboards.ca.gov/lahontan/

VICTORVILLE OFFICE (6V)
14440 Civic Drive, Suite 200
Victorville, CA 92392-2383
(760) 241-6583 FAX: (760) 241-7308
Web Page:
http://www.waterboards.ca.gov/lahontan/

COLORADO RIVER BASIN REGION (7)
73-720 Fred Waring Dr., Ste. 100
Palm Desert, CA 92260
(760) 346-7491 FAX: (760) 341-6820
Web Page:
http://www.waterboards.ca.gov/coloradoriver/

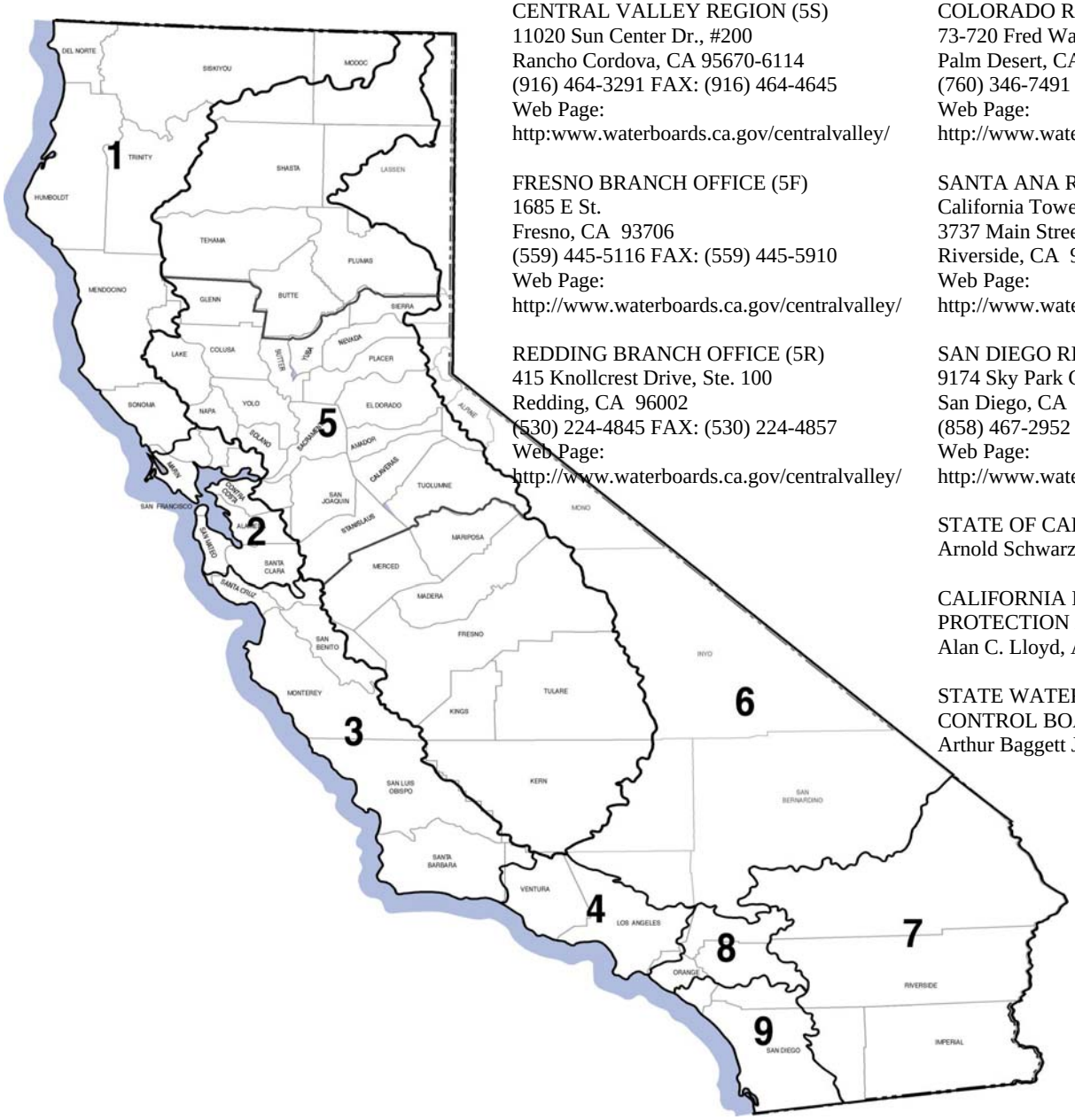
SANTA ANA REGION (8)
California Tower
3737 Main Street, Ste. 500
Riverside, CA 92501-3339
Web Page:
http://www.waterboards.ca.gov/santaana/

SAN DIEGO REGION (9)
9174 Sky Park Court, Ste. 100
San Diego, CA 92123-4340
(858) 467-2952 FAX: (858) 571-6972
Web Page:
http://www.waterboards.ca.gov/sandiego/

STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

CALIFORNIA ENVIRONMENTAL
PROTECTION AGENCY
Alan C. Lloyd, Agency Secretary

STATE WATER RESOURCES
CONTROL BOARD
Arthur Baggett Jr., Chairman



ATTACHMENT C

STATE WATER RESOURCES CONTROL BOARD
MONITORING AND REPORTING PROGRAM (MRP)

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

A. MONITORING PROVISIONS

1. **Sampling Analysis.** All laboratory analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants" (Guidelines), promulgated by the U.S. Environmental Protection Agency (USEPA) (Title 40 Code of Federal Regulations part 136), except nonylphenol analysis. Nonylphenol shall be analyzed using USEPA Method 3535/Ligquid Chromatograph-Fluorescence. Hardness shall be determined by the calculation[1] or titration method.

2. **Sampling Procedures.** Samples shall be collected using sampling procedures, which minimize loss of monitored constituents during sample collection and analysis and maintain sample integrity.

3. **Monitoring Frequency.** If the discharger monitors any constituent required to be monitored under this General Permit more frequently than specified, the monitoring results shall be submitted to the appropriate Regional Water Board.

4. **Retention of Records.** The discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this General Permit, and records of all data used to complete the application for this General Permit. Records shall be maintained for a minimum of three years from the date of the sampling, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the appropriate Regional Water Board Executive Officer.

5. **Monitoring Records.** Records of monitoring information shall include the following:

   a. The date, exact place, and time of sampling or measurements;

   b. The individuals who performed the sampling or measurements;

   c. The dates analyses were performed;

   d. The individuals who performed the analyses;

[1] Hardness, mg equivalent $CaCO_3$ mg/L = 2.497[Ca, mg/L] + 4.118[Mg, mg/L]

e. The analytical techniques or method used; and

f. The results of such analyses.

6. **Device Calibration and Maintenance.** All monitoring instruments and devices that are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

B. RECEIVING WATER MONITORING

1. For each application at each site, the discharger shall prepare a map with a convenient scale showing the application area, treatment area, immediately adjacent untreated areas (if entire water body is not treated), and water bodies receiving treated water. The discharger shall also provide information on surface area and/or volume of application area and treatment area and any other information used to calculate dosage and quantity of each pesticide used at each application site. For acrolein applications, the map shall also show the acrolein injection points and locations of major canals, spillways, or gates that may flow to natural waters.

   Discharger shall also identify sampling locations described in B.3 through B.5 below and provide global positioning systems (GPS) coordinates for each sampling site.

2. Dischargers who operate canals, ditches, ponds, or other systems that allow dischargers reasonable control over their treated water through gates, weirs, locks, etc. shall inspect the integrity of their systems prior to every application within the system to ascertain that treated water does not unintentionally get discharged to streams, rivers, lakes, or other natural waterways.

3. The dischargers shall collect samples at 10 percent of all application sites for each type of aquatic pesticide used for each type of site. The 10 percent sampling sites shall be representative sites.

4. A discharger with 20 application sites or less shall collect samples at a minimum of two sites[2]. A discharger with greater than 20 sites shall collect samples at 10 percent of all the sites. The number of representative sites shall be rounded to the nearest whole number using scientific number protocol. For example, if the number of sites is 25, the discharger must sample three representative sites.

5. The following monitoring is required for each sampling:

   a. **Background Monitoring**
      Background samples shall be collected upstream at the time of the application event, or they may be collected at the treatment area, just prior (up to 24-hours in advance of application) to the application event.

[2] If the discharger only applies aquatic pesticides at one site, samples are required from that site only.

b. **Event Monitoring**
Event monitoring samples shall be collected immediately downstream of the treatment area in flowing waters or adjacent to the treatment area in non-flowing waters, immediately after the application event or shortly after application, but after sufficient time has elapsed such that treated water will have entered the adjacent or downstream area.

c. **Post-Event Monitoring**
Post-event samples shall be collected within the treatment area and immediately downstream of the treatment area in flowing waters or adjacent to the treatment area in non-flowing waters within one-week after the application event.

6. The following parameters shall be analyzed for:

TABLE 1 - MONITORING PARAMETERS

SAMPLE TYPE	CONSTITUENT/ PARAMETER	SAMPLE METHOD	LABORATORY METHOD	FREQUENCY
Visual	1. Site description (pond, lake, open waterway, channel, estimate of percent covered by vegetation, etc.) 2. Appearance of waterway (sheen, color, clarity, etc.) 3. Weather conditions (fog, rain, wind, etc.)	Visual Observation	Not Applicable	All applications at all sites
Physical	1. Temperature[3] 2. Turbidity[4] 3. Electrical conductivity/salinity[4]	Grab[5]	See USEPA Guidelines	All applications at 10 percent of all sites
Chemical	1. Active Ingredient 2. Nonylphenol[6] 3. pH[4] 4. Dissolved Oxygen[4] 5. Hardness ($CaCO_3$)[7]	Grab[5]	See USEPA Guidelines	All applications at 10 percent of all sites

C. ADDITIONAL MONITORING

Dischargers that propose monitoring as part of their CEQA compliance must also comply with that monitoring plan where the two plans differ.

[3] Field testing.
[4] Field or laboratory testing.
[5] Samples shall be collected at three feet below the surface, or mid-depth if water body is less than six feet deep.
[6] Required when nonylphenol is used.
[7] Required for copper applications only.

D. REPORTING

1. All reports shall be submitted to the appropriate Regional Water Board. All reports submitted in response to this Order must comply with the provisions stated in "Standard Provisions and Reporting for Waste Discharge Requirements (NPDES)" (Attachment D), section B, Monitoring and Reporting Requirements.

2. Annual reports shall contain the following information:

   a. An Executive Summary discussing General Permit compliance or violation and the effectiveness of the APAP to reduce or prevent the discharge of pollutants associated with aquatic pesticide applications;

   b. A summary of monitoring data, including the identification of water quality improvements or degradation, and recommendations for improvements to the APAP (including proposed BMPs) based on the monitoring results. All receiving water monitoring data shall be compared to applicable water quality standards;

   c. Identification of BMPs and a discussion of their effectiveness in meeting this General Permit requirements;

   d. A discussion of BMP modifications addressing violations of this General Permit;

   e. A map showing the location of each application and treatment area;

   f. Types and amounts of aquatic pesticides used at each application event during each application;

   g. Information on surface area and/or volume of treatment area and any other information used to calculate dosage and quantity of each pesticide used;

   h. List of gates in the treatment area that may discharge to surface waters; time of gate closure and reopening, include any calculations used to determine closure and reopening times, if applicable;

   i. Sampling results for all required monitoring under section B of this MRP and any additional sampling conducted in compliance with section A.3 of this MRP. Sampling results shall indicate the name of the sampling agency or organization, detailed sampling location information (including latitude and longitude or township/range/section if available), detailed map or description of each sampling site (i.e., address, cross roads, etc.), collection date, name of constituent/parameter and its concentration detected, minimum levels, method detection limits for each constituent analysis, name or description of water body sampled, and a comparison with applicable water quality standards, description of analytical QA/quality control plan. Sampling results shall be tabulated so that they are readily discernible;

j. Recommendations to improve the monitoring program, BMPs, and APAP to ascertain compliance with this General Permit; and

k. Proposed changes to the APAP and monitoring program.

E. REPORT SCHEDULE

Monitoring reports shall be submitted to the Regional Water Board Executive Officer in accordance with the following schedule:

Reporting Frequency	Reporting Period	Report Due
Annual	January 1-December 31	March 1

ATTACHMENT D

STATE WATER RESOURCES CONTROL BOARD

STANDARD PROVISIONS AND REPORTING FOR WASTE DISCHARGE REQUIREMENTS

WATER QUALITY ORDER NO. 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. CAG 990005

A. General Provisions

1. **Duty to Comply** [Title 40, Code of Federal Regulations (CFR) 122.41(a)][California Water Code (CWC) 133811]

   a. The Discharger must comply with all of the conditions of this General Permit. Any General Permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

   b. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not been modified to incorporate the requirement.

2. **Duty to Mitigate** [40 CFR 122.41(d)]

   The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

3. **Proper Operation and Maintenance** [40 CFR 122.41(e)],

   The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this General Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a Discharger only when necessary to achieve compliance with the conditions of this General Permit.

4. **Permit Actions** [40 CFR 122.41(f)][CWC 13263(e)][40 CFR 122.44(b)(1)]

   a. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

   b. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

5. **Property Rights** [40 CFR 122.41(g)][CWC 13263(g)]

   a. This General Permit does not convey any property rights of any sort, or any exclusive privileges.

   b. All discharges of waste into water of the State are privileges, not rights.

6. **Duty to Provide Information** [40 CFR 122.41(h)]

   The Discharger shall furnish the Regional Water Quality Control Board (Regional Water Board), the State Water Resources Control Board (State Water Board), or the U.S. Environmental Protection Agency (USEPA), within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine compliance with this General Permit. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required by this General Permit to be kept.

7. **Inspection and Entry** [40 CFR 122.41(h)]

   The Discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Permit; and

   b. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Permit; and

   c. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit; and

d. Sample or monitor, at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the Clean Water Act or the Porter-Cologne Water Quality Control Act, any substances or parameters at any location.

8. **Bypass and Upset** [40 CFR 122.41(m)] [40 CFR 122.41(n)]

a. Definitions.

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(3) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Prohibition of Bypass.

(1) Bypass is prohibited, and the Regional Water Board may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under 40 CFR 122.41(m)(3).

c. Conditions necessary for a demonstration of upset.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in 24-Hour Reporting; and

(4) The permittee complied with any remedial measures required under 40 CFR 122.41(d).

d. Burden of proof.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

9. **Transfers** [40 CFR 122.41(L)(3)] [CWC 133771] [40 CFR 122.61(a)(b)]

This General Permit is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or reissuance of the permit conditions to change the name of the Discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the Porter-Cologne Water Quality Control Act.

10. **Severability**

The provisions of this General Permit are severable and, if any provision of this General Permit or the application of any of its provisions to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

11. **Pollution, Contamination, or Nuisance** [CWC 13050]

Neither the treatment nor the discharge shall create a condition of pollution, contamination, or nuisance.

B. <u>Monitoring and Reporting Requirements</u>

1. **Signatory Requirements** [40 CFR 122-41(k)] [40 CFR 122.221]

a. All permit applications or Notices of Intent (NOIs) submitted to the Regional Water Board, State Water Board, or USEPA shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this provision, a responsible corporate officer means: a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA).

b. All reports required by this General Permit and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in paragraph (a) of this provision or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision;

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(3) The written authorization is submitted to the Regional Water Board, State Water Board, or USEPA.

c. If an authorization under paragraph (b) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this provision must be submitted to the Regional Water Board, State Water Board, or USEPA together with any reports, information, applications, or NOIs to be signed by an authorized representative.

d. Any person signing a document under paragraphs (a) or (b) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2. **Monitoring Reports** [40 CFR 122.41(l) (4)]

   a. Monitoring results shall be reported at the intervals specified in this General Permit.
   b. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms approved by the Regional Water Board or State Water Board for reporting results of monitoring of pollutants and sludge use or disposal practices.

   c. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this General Permit.

3. **Compliance Schedules** [40 CFR 122.41(l) (5)]

   Reports of compliance or noncompliance with interim and final requirements contained in any compliance schedule of this General Permit shall be submitted no later than 14 days following each schedule date.

4. **Twenty-Four Hour Reporting** [40 CFR 122.41(l) (6)]

   a. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   b. The following shall be included as information that must be reported within 24 hours under this paragraph:

      (1) Any bypass which exceeds any effluent limitation in this General Permit.

      (2) Any upset which exceeds any effluent limitation in this General Permit.

      (3) Violation of a maximum daily discharge limitation for any of the pollutants listed in this General Permit is to be reported within 24 hours. The Regional Water Board may waive the above required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours.

5. **Other Noncompliance** [40 CFR 122.41(1)(7)]

   The Discharger shall report all instances of noncompliance not reported under Provisions (B.3) and (B.4) at the time monitoring reports are submitted. The reports shall contain the information listed in Provision (B.4).

6. **Other Information** [40 CFR 122.41(l) (8)]

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application or NOI, or submitted incorrect information in a permit application, NOI or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information.

7. **Planned Changes** [40 CFR 122 41(l)(1)]

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the General Permit nor to notification requirements under 40 CFR Part 122.42 (a) (1); or

c. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application/NOI process or not reported pursuant to an approved land application plan.

8. **Anticipated Noncompliance** [40 CFR 122.41(l)(2)]

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

9. **Discharge Monitoring Quality Assurance (DMQA) Program** [State Water Board/USEPA 106 Partnership Agreement]

The Discharger shall conduct appropriate analyses on any sample provided by USEPA as part of the DMQA program. The results of such analyses shall be submitted to USEPA's DMQA manager.

C. <u>Enforcement Provisions</u>

1. The Clean Water Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $25,000 per day of violation. Any person who negligently violates permit conditions implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a fine of not less than $2,500 or more than $25,000 per day for each violation, or by imprisonment of not more than one year, or both. Higher penalties may be imposed for knowing violations and for repeat offenders. The Porter-Cologne Water Quality

Control Act provides for civil and criminal penalties comparable to and in some cases greater than those provided under the Clean Water Act. [40 CFR 122.41(a)(2)][CWC sections 13385 and 13387].

2. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit including monitoring reports or reports of compliance or noncompliance shall be punished upon conviction by a fine of not more than $10,000 per violation or by imprisonment for not more than six months per violation, or by both. [40 CFR 122-41(k)(2)].

3. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this General Permit shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or both. Higher penalties may be imposed for repeat offenders. [40 CFR 122.41(j)(5)].

ATTACHMENT E
WATER QUALITY ORDER NO. 2004-0009-DWQ

STATE WATER RESOURCES CONTROL BOARD

LIST OF PUBLIC ENTITIES GRANTED AN EXCEPTION PURSUANT TO STATE WATER RESOURCES CONTROL BOARD POLICY FOR IMPLEMENTATION OF TOXICS STANDARDS FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA (POLICY)

WATER QUALITY ORDER NO. 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

The public entities listed herein have prepared Initial Studies, Negative Declarations (ND), and Notices of Determination or Mitigated Negative Declarations (MND) for the discharge of aquatic pesticides in accordance with the California Environmental Quality Act [CEQA (Public Resources Code Section 21000 et seq.)] to comply with the exception requirements of section 5.3 of the Policy. The boards of each public entity, as the lead agencies under CEQA, approved the Final ND/MND and determined that the discharge of aquatic pesticides in their respective projects would not have a significant effect on the environment. These public entities have determined that the water quality or related water quality impacts identified in the environmental assessments of the ND/MND are less than significant. In addition to submitting the CEQA documentation, these public entities have also complied with the other exception requirements of section 5.3 of the Policy.

As required in Section 15096 of the CEQA Guidelines, the State Water Resources Control Board (State Water Board), as a Responsible Agency under CEQA, considered the ND/MND approved by the board of each public entity and finds that the projects will have less than significant water quality impact if the waste discharge requirements in this General Permit are followed. Accordingly, the public entities listed herein are hereby granted an exception pursuant to section 5.3 of the Policy.

The California Department of Food and Agriculture (CDFA) has determined that its ongoing projects to eradicate hydrilla are exempt from the requirements of CEQA because the activities are necessary to prevent or mitigate an emergency pursuant to Public Resources Code Section 21080 (b)(4). The bases for this determination are that the CDFA Hydrilla Program is mandated under sections 403 and 6048 of the Food and Agriculture Code and the Governor of California and/or the CDFA Secretary has declared that an emergency situation existed as each eradication project began. Although CDFA has determined the CDFA Hydrilla Program is exempt form CEQA, CDFA will coordinate all eradication activities with federal, state and local regulatory agencies to ensure no long-term significant environmental impacts occur.

As required in Section 15096 of the CEQA Guidelines, the State Water Board, as a Responsible Agency under CEQA, considered the exemption claimed by CDFA and finds that the projects will have less than significant water quality impact if the waste discharge requirements in this General Permit are followed. Accordingly, CDFA is hereby granted an exception pursuant to section 5.3 of the Policy, as long as the Governor or the CDFA Secretary has declared that an emergency situation exists prior to project implementation.

ATTACHMENT E
WATER QUALITY ORDER NO. 2004-0009-DWQ

Public Entities with Policy Section 5.3 Exception

1. Byron-Bethany Irrigation District
2. City of Antioch Department of Public Works
3. Contra Costa Water District
4. Contra Costa County Flood Control and Water Conservation District
5. Department of Food and Agriculture
6. Department of Water Resources
7. Friant Water Users Authority
8. **Glenn-Colusa Irrigation District**
9. Maine Prairie Water District
10. Marin Municipal Water District
11. Metropolitan Water District of Southern California
12. Modesto Irrigation District
13. Nevada Irrigation District
14. North Marin Water District
15. Oakdale Irrigation District
16. Placer County Water Agency
17. **Potter Valley Irrigation District**
18. Princeton-Cordora-Glenn Irrigation District
19. Provident Irrigation District
20. Reclamation District 1004
21. Santa Cruz Water Department
22. Solano Irrigation District
23. South Feather Water and Power Agency
24. South Sutter Water District
25. Tehama Colusa Canal Authority
26. Woodbridge Irrigation District
27. Yolo County Flood Control and Water Conservation District

ATTACHMENT F
WATER QUALITY ORDER NO. 2004-0009-DWQ

Definition of Terms

1. **Application Area –** The application area is the area to which aquatic pesticides are directly applied. (See Figure 1.)

2. **Application Event –** The application event is the time that introduction of the aquatic pesticide to the application area takes place. The application event is the time that the product is applied, not the length of time that it releases pesticide to the environment.

3. **Control Agency -** The Control Agency is the permitted discharger authorized by this General Permit. It is the agency responsible for controlling weeds. In some cases, such as irrigation districts, the Control Agency may own the conveyance system. In other cases, such as application to Delta waters, the Control Agency may not own the water body or conveyance system into which aquatic pesticides are applied. Additionally, the Control Agency may be the pesticide applicator, but it may also contract with a separate entity that does the actual pesticide application. In either case, however, the Control Agency must ensure that the discharge is in compliance with this General Permit.

4. **Pollutants Associated with Aquatic Pesticide Application –** Pollutants associated with aquatic pesticide application are the pollutants being regulated by this General Permit. They include aquatic pesticide residue, as well as misdirected and over-applied aquatic pesticides.

5. **Policy –** Policy is an abbreviation for the State Water Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*. It establishes procedures for implementing water quality standards for priority pollutants.

6. **Priority Pollutants -** Priority pollutants are listed in 40 Code of Federal Regulations, section 131.38(b)(1), and include acrolein and copper. Limits are set for priority pollutants in the California Toxics Rule.

7. **Project** –Projects are undertakings necessary to control a specified type of weed to an acceptable level in the treatment area that is being managed.

8. **Representative Site –** A site within and near the treatment area that is typical of the hydrologic and vegetative conditions present at the treatment area.

9. **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.

10. **Section 5.3 Exception –** Section 5.3 exception refers to a variance that dischargers may be granted, in accordance with section 5.3 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*. The variance allows dischargers to exceed water quality criteria for priority pollutants, as set by the California Toxics Rule.

11. **Treatment Area –** The treatment area is the area that is treated by the aquatic pesticide to control weeds. It is the responsibility of the Control Agency to define the treatment area. (See Figure 1.)

12. **Treatment Event –** The treatment event is the period during which the aquatic application is actively killing or controlling weeds within the treatment area. It starts upon initiation of the application event and proceeds until the concentration of the aquatic pesticide is below that which can kill the target weed.

ATTACHMENT F
WATER QUALITY ORDER NO. 2004-0009-DWQ

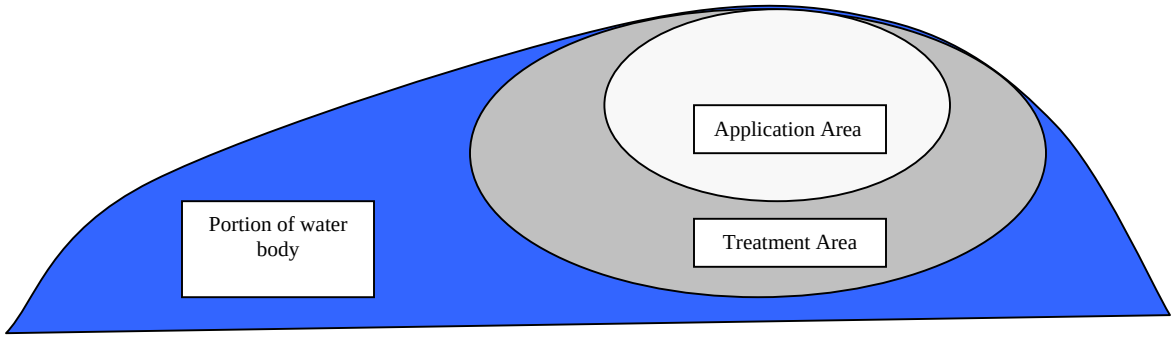
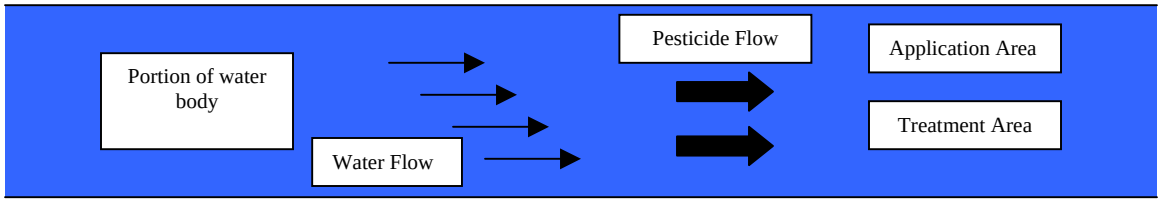



Figure 1