

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION--DIVISION OF WATER QUALITY
MAY 22, 2007**

ITEM 12

SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS (BASIN PLAN) IN THE CENTRAL VALLEY FOR THE CONTROL OF DIAZINON AND CHLORPYRIFOS RUNOFF INTO THE SACRAMENTO-SAN JOAQUIN DELTA

DISCUSSION

On June 23, 2006, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopted Resolution No. R5-2006-0061 ([attachment](#)) amending the Basin Plan to establish a program for the control of diazinon and chlorpyrifos runoff into the Sacramento-San Joaquin River Delta Waterways (Delta Waterways). In ~~2002~~1996, the Delta Waterways were placed on the federal Clean Water Act (CWA) 303(d) list because they were impaired for aquatic toxicity resulting from elevated concentrations of the organophosphorous (OP) pesticides diazinon and chlorpyrifos. The sources of these compounds are agricultural and urban runoff.

The Delta Waterways are listed because they do not meet water quality standards, and, therefore, section 303(d) of the CWA requires that a Total Maximum Daily Load (TMDL) be established. A TMDL specifies load allocations for nonpoint sources and waste load allocations for point sources that, when implemented, are expected to result in attainment of applicable water quality standards. State law requires an implementation plan and schedule to ensure that the TMDL is achieved. The TMDL addresses the aquatic toxicity impairment and ensures that water quality standards will be achieved.

The Central Valley Water Board Toxic Hot Spots Clean-up Plan (Water Code section 13394) includes requirements to develop a Basin Plan amendment for diazinon and chlorpyrifos in the Delta Waterways.

The beneficial uses that are the most sensitive to diazinon and chlorpyrifos are freshwater habitats of warm and cold water species. The proposed amendment establishes site-specific numeric water quality objectives for diazinon and chlorpyrifos in the Delta Waterways; a specific timeframe for compliance with objectives and allocations; the necessary elements of a TMDL; and an implementation framework for ensuring compliance.

Water Quality Objectives

The proposed amendment establishes site-specific numeric water quality objectives for diazinon and chlorpyrifos in the Delta Waterways. The objectives were derived using U.S. Environmental Protection Agency (USEPA) methods and were applied to data sets screened by the California Department of Fish and Game. In addition, the amendment requires additional reductions in diazinon and chlorpyrifos, which are necessary to account for additive toxicity, as required by the additive toxicity formula in the Basin Plan.

TMDL

The proposed amendment establishes the loading capacity, waste load allocations, and load allocations for diazinon and chlorpyrifos discharges to Delta Waterways. The loading capacity and allocations are established at levels necessary to attain the applicable numeric and narrative water quality objectives within each of the Delta Waterways. A combined additive toxicity formula, found in the Basin Plan, is used to set a loading capacity that accounts for the combined toxicity of diazinon and chlorpyrifos. Equating the allocations to the loading capacity provides an implicit margin of safety, since no dilution credit is given.

Implementation

If specific discharges of diazinon and chlorpyrifos are not subject to waste discharge requirements (WDRs) or to a waiver of WDRs, then a prohibition of discharge would apply when the objectives or loading capacity are not met. The prohibition addresses the two seasons of use. Compliance with the diazinon and chlorpyrifos water quality objectives, allocations, and loading capacity in the Delta Waterways is required by December 1, 2011. Each discharger must submit a management plan to the Central Valley Water Board that describes the actions that the discharger will take to reduce diazinon and chlorpyrifos discharges during the irrigation and dormant seasons, and that will meet the applicable allocations by the required compliance dates. The Central Valley Water Board intends to review allocations and implementation at least once every five years beginning no later than December 31, 2010.

Monitoring

The monitoring and reporting program will be designed to measure: (1) compliance with water quality objectives, load allocations, and loading capacity; (2) implementation and effectiveness of management practices to reduce offsite migration of diazinon and chlorpyrifos; (3) degradation of surface water quality from alternatives to diazinon and chlorpyrifos; (4) additive or synergistic effects of multiple pollutants; and (5) whether management practices achieve the lowest pesticide levels that are technically and economically achievable.

Costs

The total estimated costs for management practices to meet the diazinon and chlorpyrifos objectives for the Delta Waterways range from \$5.9 to \$12.7 million. The estimated costs for discharger compliance monitoring, planning, and evaluation range from ~~\$500~~600,000 to \$1.8 million. The estimated total annual costs range from \$6.45 to \$14.4 million (2005 dollars).

POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to establish a program for the control of diazinon and chlorpyrifos runoff into the Delta Waterways as adopted under Central Valley Water Board Resolution No. R5-2006-0061?

FISCAL IMPACT

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

REGIONAL WATER BOARD IMPACT

Yes, approval of this resolution will amend the Central Valley Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendment to the Basin Plan adopted under Central Valley Water Board Resolution No. R5-2006-0061.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Valley Water Board Resolution No. R5-2006-0061, as approved, and the administrative record for this action to the Office of Administrative Law and the TMDL and water quality objectives to USEPA for approval.

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2007-

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS (BASIN PLAN) IN THE CENTRAL VALLEY FOR THE CONTROL OF DIAZINON AND CHLORPYRIFOS RUNOFF INTO THE SACRAMENTO-SAN JOAQUIN DELTA

WHEREAS:

1. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopted a Basin Plan under Resolution No. 94-380 on December 9, 1994 which was approved by the State Water Resources Control Board (State Water Board) on February 16, 1995, by the Office of Administrative Law (OAL) on May 9, 1995, and by the U.S. Environmental Protection Agency (USEPA) on May 26, 2000.
2. On June 23, 2006, the Central Valley Water Board adopted Resolution No. R5-2006-0061 ([Attachment](#)) amending the Basin Plan to establish a program for the control of diazinon and chlorpyrifos runoff into the Sacramento-San Joaquin River Delta Waterways.
3. The Central Valley Water Board found that the analysis contained in the total maximum daily load (TMDL) staff report, the California Environmental Quality Act (CEQA) checklist, notice of public hearing, and notice of filing prepared by Central Valley Water Board staff comply with the requirements of the State Water Board's certified regulatory CEQA process, as set forth in the California Code of Regulations, Title 23, section 3775 et seq.
4. The Central Valley Water Board found that the proposed amendment is consistent with State Water Board Resolution No. 68-16, in that the changes to water quality objectives (i) consider maximum benefit to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies, and the proposed amendment is consistent with the federal Antidegradation Policy (40 CFR part 131.12). The proposed amendment requires actions to be taken to implement management practices to ensure compliance with water quality objectives. Such actions are of maximum benefit to the people of the state. Reduction of discharges of diazinon and chlorpyrifos to the Delta Waterways is necessary to protect beneficial uses of the Delta Waterways. The proposed amendment will not unreasonably affect present and anticipated beneficial uses nor result in water quality less than described in applicable policies because the amendment is intended to result in compliance with water quality objectives. The actions to be taken are not expected to cause other impacts on water quality.
5. The State Water Board finds that the Basin Plan amendment is in conformance with Water Code section 13240, which specifies that Regional Water Quality Control Boards may revise Basin Plans, [section 13241, which authorizes Regional Water Quality Control Boards to establish water quality objectives, and](#) section 13242, which requires a program of implementation of water quality objectives, [and section 13243 which authorizes Regional Water Quality Control Boards to specify certain conditions or areas where the discharges of certain types of waste will not be permitted.](#) The State Water Board also finds that the TMDL as reflected in the Basin Plan amendment is consistent with the requirements of federal Clean Water Act section 303(d).

6. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by OAL. The TMDL and water quality objectives must also be approved by USEPA.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan adopted under Central Valley Water Board Resolution No. R5-2006-0061.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Valley Water Board Resolution No. R5-2006-0061, as approved, and the administrative record for this action to OAL and the TMDL and water quality objectives to USEPA for approval.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 22, 2007

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Clerk to the Board