

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2005-0051

RICE PESTICIDE PROGRAM - CONTROL OF RICE PESTICIDES IN 2005

WHEREAS, in 1990 the California Regional Water Quality Control Board, Central Valley Region (hereafter the Regional Board), established performance goals and a conditional prohibition of discharge for five rice pesticides in the fourth edition of its Water Quality Control Plan (hereafter Basin Plan); and

WHEREAS, the Basin Plan states that the discharge of irrigation return flows containing carbofuran, malathion, methyl parathion, molinate and thiobencarb is prohibited unless the discharger is following management practices approved by the Regional Board, and that implementation of these management practices must be expected to result in compliance with the performance goals; and

WHEREAS, the Basin Plan contains the following rice pesticide performance goals applicable to all waters designated as freshwater habitat: carbofuran (0.4 µg/l), malathion (0.1 µg/l), methyl parathion (0.13 µg/l), molinate (10 µg/l) and thiobencarb (1.5 µg/l); and

WHEREAS, the Basin Plan also contains a water quality objective of 1.0 µg/l thiobencarb in waters designated for municipal and domestic supply. This level is also the secondary maximum contaminant level (MCL) set by the Department of Health Services to prevent taste complaints in drinking water supplies; and

WHEREAS, in 1983, in consultation with the Regional Board and other agencies, the California Department of Food and Agriculture established the Rice Pesticide Program to address fish toxicity and drinking water taste concerns related to rice pesticides; and

WHEREAS, in 1991, the California Department of Pesticide Regulation (DPR) was established and assumed responsibility and oversight of the Rice Pesticide Program; and

WHEREAS, DPR has assumed the lead regulatory role under the California Environmental Quality Act (CEQA) by developing the rice pesticide control effort pursuant to its certified program; and

WHEREAS, DPR and the County Agricultural Commissioners (CAC) have established adequate restrictions on the use of rice herbicides to meet water quality standards and have made enforcement of these restrictions a priority; and

WHEREAS, DPR and the CACs have established a communication and coordination mechanism with the Board regarding the Rice Pesticide Program; and

WHEREAS, in 2003 the California Rice Commission (CRC), a commodity group representing California rice growers and handlers, took over responsibility for the documenting compliance with the Rice Pesticide Program, including monitoring and preparation of the annual report; and

WHEREAS, on 20 March 2003, the Regional Board granted approval of management practices for the 2003 rice season with several new conditions including formation of a Storm Event Work Group, increased monitoring of thiobencarb, increased focus on seepage, prohibiting use of Bolero® 10G in the Sacramento Valley, new restrictions on the use of thiobencarb near rivers, and increased education efforts including CRC-hosted preseason mandatory stewardship meetings; and

WHEREAS, in a letter dated 15 April 2003 DPR recommended that the CACs add the following to the 2003 permit conditions to further reduce pesticide movement to surface waters:

- I. Prior to making thiobencarb applications, the permittee or his/her authorized representative shall attend a 2003 Thiobencarb Stewardship meeting sponsored by the California Rice Commission.
- II. Use of Bolero® 10 G formulation is prohibited in the Sacramento Valley rice growing counties of Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo and Yuba.
- III. All counties within ½ mile of the Sacramento and Feather Rivers: Aerial applications shall occur only when the wind speed is seven mph or less and wind direction is away from the river.
- IV. In Sacramento and Yolo Counties only, no aerial applications shall be made within ¼ mile of the Sacramento River unless:
  1. Ground applications are allowed within the buffer zone; OR
  2. All applications are made under the direct supervision of the commissioner's representative; OR
  3. No more than 33 percent of the total average applied (from the 2002 daily acreage average) in Sacramento and Yolo counties within the buffer zone; and

WHEREAS, in a letter on 2 April 2004 DPR recommended permit conditions for 2004, including the conditions above, with modifications not approved by the Regional Board including elimination of 7 mile per hour wind speed restriction under III and elimination of option of ground application under IV; and

WHEREAS, DPR provides the CRC with use reporting data and enforcement data for inclusion in the CRC's annual report, however the 2004 data was not available in time to complete the report by the 1 January due date set by the Board; and

WHEREAS, in the 4 February 2005 annual report (*CRC Report*), CRC provides monitoring data for the past season and proposes management measures for the 2005 rice season; and

WHEREAS, monitoring data collected during the 2004 season showed a continuation of lower concentrations of thiobencarb in agricultural drains and the Sacramento River than seen in the 2002 season; and

WHEREAS, the Regional Board concludes that based on the low levels of thiobencarb seen in 2004, the existing Program, with slight modifications in language, should continue to prevent discharges containing thiobencarb from exceeding the Basin Plan objective of 1 µg/l in drinking water supplies; and

WHEREAS, if the Regional Board, upon consideration of the management practices, does not approve the 2005 management practices, then the prohibition of the discharge of return flows containing thiobencarb, molinate and malathion remains in effect; and

WHEREAS, the Rice Pesticide Program concludes that there will be no adverse impacts to the environment and after reviewing the control program conducted in 2004, the Board agrees that the management practices should meet the performance goals and that there will be no significant impact on water quality; and

WHEREAS, the Regional Board held a public meeting in which it considered all comments regarding management practices to control the five rice pesticides;

THEREFORE BE IT

RESOLVED, that the Regional Board approves the management practices for the 2005 Rice Pesticides Program, subject to the following conditions, as discussed in the 4 February 2005 CRC Annual Report, with minor changes based on discussions with DPR and the CRC:

1. Continuation of the management practices incorporated into the 2004 use permits, as recommended by DPR to the CACs in the 2 April 2004 letter *Rice Pesticides 2004*, with modifications for 2005 as discussed below.
2. A permit should not be issued unless the permit applicant, or his/her authorized representative, has attended a 2005 Thiobencarb Stewardship Meeting sponsored by the California Rice Commission.
3. The use of Bolero 10 G formulation is prohibited in the Sacramento Valley rice growing counties of Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo and Yuba.
4. No aerial applications shall be made or continued within ½ mile of the Sacramento or Feather rivers in the Sacramento Valley rice growing counties of Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo and Yuba unless there is a continuous positive airflow away from the river.
5. In the Sacramento Valley rice growing counties of Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo and Yuba, no aerial application shall be made or continued within ½ mile of the Sacramento or Feather Rivers when the wind speed exceeds seven (7) miles per hour.
6. In Sacramento and Yolo counties, no aerial applications shall be made or continued within ¼ mile of the Sacramento River unless they are made under the direct supervision of the commissioner's representative.
7. In Sacramento and Yolo counties, the maximum acres treated by air each day within ¼ mile of the Sacramento River shall not exceed 33% of the average acres treated per day by air within this area in each county during 2002.
8. The Communication Plan developed by the Storm Event Work Group in 2004 and updated in 2005 will be utilized in the event of a severe storm occurrence. The Storm Event Work Group will continue to meet as needed.
9. Monitoring of thiobencarb and molinate will continue to include five monitoring sites (CBD5, CBD1, BS1, SR1 and SS1), as in 2004 monitoring, at all sites to focus on the period of heaviest pesticide use. If a severe storm occurs, the CRC will monitor storm related releases from a closed system. Acute toxicity testing will be conducted for 8 weeks at CBD5 on *Ceriodaphnia dubia*, in the same manner as previous testing by DFG.
10. The CRC will continue to fund additional county surveillance at non-traditional hours at the same level as 2004.

11. If the water quality objective for thiobencarb is not met during the 2005 rice season, the CRC, after consultation with DPR, will return before the Board with actions to be implemented to achieve the water quality objective for the 2006 rice season.

RESOLVED, Board approval will not be considered final until DPR submits documentation of transmittal of conditions to the CACs in a form essentially the same as that approved by the Board. The Executive Officer may ask that the Program be brought back to the Board for approval if the conditions are not accurately relayed; and

RESOLVED, the Regional Board encourages DPR to provide the 2005 pesticide use and enforcement data to the CRC by December 1 2005 to allow the CRC the opportunity to submit their annual report by 1 January 2006; and

RESOLVED, that the CRC is requested to provide a written annual summary of the results of the Rice Pesticide Program by 1 January 2006, including results of water quality monitoring and an updated quality assurance project plan (QAPP) for use in the 2006 season.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 18 March 2005.

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THOMAS R. PINKOS, Executive Officer