

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 82-29

TOXAPHENE REPORT

WHEREAS:

1. In May 1980, EPA approved the State Board's Phase II "208" Pesticide Workplan to study the potential impacts of pesticides on beneficial uses;
2. One of the elements in this workplan was development of criteria to select pesticides for highest priority consideration;
3. Eleven criteria were developed and included:
 - a. Acute and chronic toxicity to human and aquatic life,
 - b. Carcinogenicity, mutagenicity and teratogenicity (reproductive effects),
 - c. Bioaccumulation potential,
 - d. Persistence,
 - e. Volume of use in California,
 - f. Public concern about perceived hazards,
 - g. Detection in state monitoring programs,
 - h. Detection in remote areas worldwide,
 - i. Fish and wildlife kills,
 - j. Potential for contamination of surface and ground waters, and
 - k. Actions by other state and federal agencies, e.g., inclusion of a particular pesticide in EPA's priority pollutant list (Clean Water Act), or in EPA's Rebuttable Presumption Against Registration (RPAR) list under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA);
4. On the basis of these criteria, six pesticides, including toxaphene, were selected for study;
5. Toxics Special Project staff has prepared a comprehensive report on toxaphene which addresses the previously described criteria;
6. The report incorporates peer review comments from scientists recognized in the fields of toxaphene chemistry and toxicology, as well as technical comments from scientists from other state and federal agencies;
7. The major findings of this report include:
 - a. Toxaphene is both acutely and chronically toxic to fish and other aquatic life in extremely low concentrations,
 - b. It is an animal carcinogen. The National Cancer Institute selected toxaphene for a study of carcinogenicity because of its structural similarity to strobane, a known animal carcinogen whose registration was cancelled in 1976.

- c. The bioaccumulation potential of toxaphene in aquatic organisms is high,
 - d. Toxaphene has been shown to persist in soil for over 10 years,
 - e. Toxaphene has recently been detected in air, water, or fish in areas far from application sites, including the Great Lakes, Antarctica, Sweden, and the Atlantic and Pacific Oceans,
 - f. Toxaphene was identified as either the sole or the contributing cause of death in nine of the 70 pesticide-confirmed fish kills recorded in California between 1964 and 1977,
 - g. Aerial application of toxaphene may contaminate nontarget surface waters due to its volatility, potential for drift, and stability in air,
 - h. Other states, including Arizona, New York, Connecticut, and New Hampshire, have either banned or severely restricted use of toxaphene. Internationally, many countries including Canada, the United Kingdom, Sweden, Finland and Algeria have taken similar actions, and
 - i. Since 1962, state and federal monitoring programs in California have detected toxaphene in soil, sediment, agricultural drain waters and, more recently, in fish from six rivers.
8. In view of these findings, staff developed several recommendations for mitigating toxaphene's impacts on beneficial uses of water. These recommendations involve several federal and state agencies; and
 9. The Department of Food and Agriculture (DFA) is the primary state agency with authority to regulate pesticide use in California. The California Environmental Quality Act (CEQA) requires the Director of DFA to consult with other state agencies on environmental impacts of pesticide use. The DFA Policy and Registration/Evaluation Committees are the appropriate forums for resolution of pesticide problems such as the potential threat to water quality in California from toxaphene.

THEREFORE BE IT RESOLVED:

1. That the State Board approve the Toxaphene Report;
2. That the State Board request the Department of Food and Agriculture to reevaluate the registration of toxaphene in California;
3. That the Department of Food and Agriculture be requested to submit this report jointly with the State Board to EPA as information to supplement California's 1977 document titled "California's Rebuttal to Presumption Against Registration of Toxaphene";

4. That specific recommendations in the report be transmitted to other affected state and federal agencies for their consideration; and
5. That staff be instructed to develop a statewide toxaphene policy and action plan for implementation by the State Board and the Regional Boards.

CERTIFICATION

The undersigned, Executive Director of the State Water Resources Control 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 June 17, 1982.



Executive Director