



Winston H. Hickox
Secretary for
Environmental
Protection

Department of Pesticide Regulation

Paul E. Helliker, Director
830 K Street • Sacramento, California 95814-3510 • www.cdpr.ca.gov



Gray Davis
Governor

MEMORANDUM

TO: Paul H. Gosselin
Acting Chief Deputy Director

FROM: Paul E. Helliker *Paul Helliker*
Director
(916) 445-4000

DATE: June 15, 1999

SUBJECT: DIRECTOR'S PROPOSED DECISION CONCERNING
S,S,S-TRIBUTYL PHOSPHOROTRITHIOATE (DEF) AS A TOXIC
AIR CONTAMINANT

Attached is a public notice of the proposed decision concerning my response to the scientific review panel's findings on DEF as a toxic air contaminant. My response has been made in accordance with all authorities and requirements stipulated in the Food and Agricultural Code and California Code of Regulations which mandate this determination. The Scientific Review Panel's findings were transmitted to me on June 7, 1999. Therefore, my response has been made within the ten-day statutory deadline.

I thank you, staff, and all the members of the Scientific Review Panel for the excellent work.

Attachment

cc: Alan Lloyd, ARB Chair
Joan Denton, OEHHA Director
Scientific Review Panel
Branch Chiefs



Winston H. Hickox
Secretary for
Environmental
Protection

Department of Pesticide Regulation

Paul E. Helliker, Director
830 K Street • Sacramento, California 95814-3510 • www.cdpr.ca.gov



Gray Davis
Governor

POST UNTIL
JULY 13, 1999

NOTICE OF PROPOSED DECISION CONCERNING THE DIRECTOR'S DECLARATION OF S,S,S-TRIBUTYL PHOSPHOROTRITHIOATE (DEF) AS A TOXIC AIR CONTAMINANT

Section 14023 of the Food and Agricultural Code requires the Director of the Department of Pesticide Regulation (DPR) to determine if a pesticide is a toxic air contaminant after receiving the findings of the Scientific Review Panel. Based on the findings of the Scientific Review Panel's assessment of the report entitled, "Evaluation of S,S,S-Tributyl Phosphorotrithioate as a Toxic Air Contaminant," and the criteria given in the California Code of Regulations, Title 3, section 6890(b), the Director proposes to declare S,S,S-tributyl phosphorotrithioate (DEF) a toxic air contaminant.

Background

With the enactment of California's Toxic Air Contaminant Act (Assembly Bill 1807, Tanner, Chapter 1047, Statutes of 1983; amended by Tanner, Chapter 1380, Statutes of 1984), the Legislature created the statutory framework for the evaluation and control of chemicals as toxic air contaminants (TACs). The statute defines TACs as air pollutants that may cause or contribute to increases in serious illness or death, or that may pose a present or potential hazard to human health. DPR is responsible for the evaluation of pesticides as TACs.

In general, the law focuses on the evaluation and control of pesticides in ambient community air. In implementing the law, DPR must: 1) conduct a review of the physical properties, environmental fate, and human health effects of the candidate pesticide; 2) determine the levels of human exposure in the environment; and 3) estimate the potential human health risk from those exposures. The law requires DPR to list in regulation those pesticides that meet the criteria to be TACs.

NOTICE OF PROPOSED DECISION

Page 2

For each pesticide, the law requires the preparation of a report that includes: an assessment of exposure of the public to ambient concentrations of the pesticide; a risk assessment, which includes data on health effects, including potency, mode of action, and other biological factors; an overview of the environmental fate and use of the pesticide; and the results of air monitoring studies conducted in California to measure the levels of the candidate pesticide present in ambient air. The report is reviewed by the Office of Environmental Health Hazard Assessment, the Air Resources Board, and is made available for public review. Based on the results of these reviews, the draft report is revised as appropriate. The draft undergoes a rigorous peer review for scientific soundness by the Scientific Review Panel, a panel of experts representing a range of scientific disciplines. Based on the results of this comprehensive evaluation, the Director of DPR determines whether the candidate is a TAC. If the Director determines the pesticide meets the criteria to be a TAC, DPR declares the pesticide a TAC in regulation, and adds it to the TAC list.

Once a candidate pesticide has been declared a TAC, it enters phase two of the program—the mitigation, or control, phase. In the mitigation phase, DPR investigates the need for, and appropriate degree of, control for the TAC. If reductions in exposure are needed, DPR must develop control measures to reduce emissions to levels that adequately protect public health.

Department Conclusions

The estimated cancer risk due to a lifetime exposure to DEF in ambient air in Fresno County ranged from 3.9×10^{-7} (maximum likely exposure) to 7.1×10^{-7} (95 percent upper confidence level). The corresponding estimated cancer risk for Kern County ranged from 7.5×10^{-8} to 1.3×10^{-7} .

For pesticides with adverse health effects that do not have thresholds, such as cancer, the California Code of Regulations, Title 3, section 6890(b) specifies the criteria for identifying pesticides as TACs. Under this regulation, a pesticide shall be identified as a TAC if there are concentrations in air that exceed levels which would result in a ten-fold lower risk than that which has been determined by the Director to be a negligible risk.

NOTICE OF PROPOSED DECISION

Page 3

For nonthreshold toxic endpoints such as cancer, one in one million risk typically represents the negligible risk standard. Therefore, pesticides with risks greater than one in ten million (1×10^{-7}) should be identified as TACs.

The Scientific Review Panel agrees with the science presented in the report and recommends that the Director identify DEF as a TAC.

Department Actions

DPR proposes to adopt a regulation designating DEF as a TAC. DPR proposes to add DEF to the list of pesticides in the California Code of Regulations, Title 3, section 6860(a).

DPR will conduct a public hearing concerning the proposed regulation.

Approved By: _____

Paul Helliker

Paul E. Helliker

Director

Date: _____

6/15/99