UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

From: Nikiba Daughtry, Biologist */s/* 4-1-04
Environmental Field Branch
Field and External Affairs Division

To: Arthur-Jean Williams, Chief
Environmental Field Branch
Field and External Affairs Division

Subject: Effects Determination for Methidathion for Pacific Anadromous Salmonids

We reviewed data and other information for Methidathion, a non-systemic organophosphate insecticide/acaricide named by the Washington Toxics Coalition (WTC) and included in the court order for 'effects determinations' and potential consultation with the National Marine Fisheries Service. Methidathion is registered nationally for use on alfalfa (grown for seed), almonds, apples, apricots, artichokes, carambola, cherries, clover (grown for seed), cotton, grapefruit, hay-grass, kiwi fruit, lemons, longan, mandarins, mangos, nectarines, olives, oranges, peaches, pears, pecans, plums, prunes, safflower, sorghum, sugar apple, sunflower, timothy, and walnuts. The Environmental Fate and Effects Division (EFED) has completed an environmental risk assessment for a Interim Reregistration Eligibility Decision (IRED) to be issued in April of 2002. The assessment concludes that levels of concern are exceeded for endangered freshwater fish and populations of aquatic invertebrates exposed to runoff and drift from agricultural treatment sites. We have adapted the more general findings of the EFED assessment to develop an analysis of the potential for effects on endangered and threatened Pacific salmon and steelhead Evolutionary Significant Units (ESUs) from current uses in California and the Pacific Northwest.

Based on the environmental risk assessment and additional considerations indicated in our analysis and other attached or referenced materials, we conclude that the use of methidathion may affect ten salmon and steelhead ESUs, may affect but is not likely to adversely affect nine ESUs, and will have no effect on seven ESUs. Our determinations are based on the known or potential use of Methidathion on crops within habitats and migration corridors of each ESU, the acute risk of Methidathion to endangered fish, and the potential for indirect effects due to acute and chronic risks to their aquatic-invertebrate food supply. Methidathion is a restricted use

pesticide for agricultural uses only, therefore county-level usage data for homeowner and most noncrop uses are not included in this analysis, but we presume that they may contribute to the exposure and risks of these ESUs.

attachments

Methidathion: Analysis of Risks to Endangered and Threatened Salmon and Steelhead
(with attachments)