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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

From: Michael Patterson, Ph. D. /s/ 12-1-03
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 Ethoprop for Pacific Anadromous Salmonids

I reviewed data and other information for ethoprop, an organophosphate nematicide and insecticide 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. Ethoprop is registered nationally for use on several crops, including beans, cabbage, corn (field and sweet), cucumbers, potatoes, citrus seedlings, nursery ornamentals, and several others not grown in the Pacific Northwest of California. Homeowner use is not permitted. The Environmental Fate and Effects Division (EFED) has completed an environmental risk assessment for an Interim Reregistration Eligibility Decision (IRED) issued in 2000. 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. I 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 Evolutionarily Significant Units (ESUs) from current uses in California and the Pacific Northwest.

Based on the environmental risk assessment and additional considerations indicated in my analysis and other attached or referenced materials, I conclude that the use of ethoprop may affect 6 salmon and steelhead ESUs, may affect but is not likely to adversely affect 12 ESUs, and will have no effect on 8 ESUs. My determinations are based on the known or potential use of ethoprop on crops within habitats and migration corridors of each ESU, the acute risk of ethoprop to endangered fish, and the potential for indirect effects due to acute and chronic risks to their aquatic invertebrate food supply.

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