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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

Subject: Effects Determination for Coumaphos for Pacific Anadromous Salmonids

From: Jennifer Leyhe */s/* 7-28-04
Environmental Field Branch
Field and External Affairs Division

Through: Ann Stavola, Biologist
Environmental Field Branch
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To: Arthur-Jean Williams, Chief
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I reviewed data and other information for coumaphos, an organophosphate 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. Coumaphos is registered nationally for use on beef and dairy cattle, horses, goats, sheep, swine, swine bedding, and beehives. The Environmental Fate and Effects Division (EFED) completed an environmental risk assessment for a Reregistration Eligibility Decision (RED) issued in August of 1996. Coumaphos is moderately to highly toxic to both warmwater and coldwater fishes, highly toxic to marine estuarine fish and mollusks, and very highly toxic to freshwater and marine invertebrates.

I have concluded that coumaphos will have no effect on any of the listed or proposed ESUs of Pacific salmon and steelhead. According to the 2000 Quantitative Usage Analysis for coumaphos, approximately 71,000 pounds active ingredient were used nationwide. Relatively little coumaphos is used in California and the Pacific Northwest. Data from California DPR indicated that only 15 pounds to 152 pounds of active ingredient were used throughout the state in 1999 through 2002. USDA data for dairy cattle for the Pacific Northwest states indicated that very little is used. Bayer Corp. submitted proprietary information confirming the low use of this insecticide.

Risk quotients calculated for fish did not exceed the endangered species level of concern which indicates no direct risk to endangered fish. With regard to indirect effects, the risk quotients for aquatic invertebrates did exceed the level of concern. I concluded, however, that

there is no risk to invertebrates due to the low poundage used in the Pacific Northwest and California and its seasonal localized treatment applications. I conclude coumaphos will have no indirect effects to endangered salmonids from loss of food supply.

Attachment