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

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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

From: Ann Stavola, Biologist Ann Stavola
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Office of Pesticide Programs

To: Arthur-Jean Williams, Chief
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Office of Pesticide Programs

Subject: No-Effect Determination for Dichlobenil for Pacific Anadromous Salmonids

I have reviewed the available data and other information for dichlobenil and its potential effects on Pacific anadromous salmonids and their critical habitat. Dichlobenil was cited by the Washington Toxics Coalition (WTC) as a pesticide they believe warrants review. The herbicide is moderately toxic to fish and invertebrates, but highly toxic to aquatic plants.

I have concluded that dichlobenil will have no effect on any of the listed or proposed ESUs of Pacific salmon and steelhead. According to the 1998 RED a maximum of 225,000 pounds active ingredient were used nationwide. Relatively little dichlobenil is used in California and the Pacific Northwest. Data from California DPR indicated that only 2200 pounds to 2700 pounds of active ingredient were used throughout the state in 2000 and 2001. USDA data for the Pacific Northwest states indicated that very little is used on agricultural sites (fruit and nut orchards and cranberries). Crompton Corp. submitted proprietary information confirming the low use of this herbicide. The major uses are noncrop and homeowner applications, but again, with limited total amounts used. Monitoring data from NAWQA and Washington State Pesticide Monitoring Program indicated that although dichlobenil is frequently detected, the concentrations are very low, generally less than the limits of detection (0.2 ppb and 1.2 ppb) by different methods. California state monitoring found no residues.

Although the 1998 RED indicated that risk quotients for fish slightly exceeded the endangered species level of concern, it concluded that there is no risk due to the high volatility of the chemical, a chemical property that is not considered in the GENEEC model. With regard to indirect effects, as the risk quotients for aquatic invertebrates were below the level of concern for loss of food supply we made a "no effect" determination. The risk quotients for aquatic

vegetation did exceed the level of concern for loss of cover, but we consulted with several Environmental Fate and Effects Division scientists for further analysis of the environmental fate of dichlobenil in the streams of the Pacific Northwest. Based on the mode of action of the chemical, its high volatility and low binding potential to sediments, in addition to the limited amount and type of use in California and the Pacific Northwest, we conclude dichlobenil will have no effect for indirect effects to endangered salmonids from loss of cover.

Attachment