Memorandum

From: Ann Stavola, Biologist */s/* 7-29-04
Environmental Field Branch
Office of Pesticide Programs

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

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

I have reviewed the available data and other information for tebuthiuron and its potential effects on Pacific anadromous salmonids and their critical habitat. Tebuthiuron was cited by the Washington Toxics Coalition (WTC) as a pesticide they believe warrants review. Tebuthiuron is registered nationally to control weeds, woody plants and brush on pastures, rangeland and many nonagricultural and industrial sites as rights of way, ditch banks, and railway beds. The herbicide is practically nontoxic to freshwater fish and invertebrates, and estuarine molluscs and crustaceans. It is less toxic to aquatic vascular plants than to green algae and diatoms.

I have concluded that tebuthiuron will have no effect on any of the listed or proposed ESUs of Pacific salmon and steelhead. According to the 2002 TRED, an addendum to the 1994 RED for human health concerns, less than 195,000 pounds of tebuthiuron were used nationwide in 1999. This is a 40% decline in use from 1996. Relatively little tebuthiuron is used in California and the Pacific Northwest. Data from California DPR indicated that less than 12,000 pounds of active ingredient were used throughout the state in 2002. Information from Washington State Department of Agriculture indicated that the herbicide is not used on pasture lands or for roadside weed management, the major uses of the herbicide. Proprietary data submitted by the major registrant, Dow AgroSciences for the TRED confirms the low use of this herbicide in California and the Pacific Northwest (PNW) states. Monitoring data from NAWQA, California and Washington indicated that it is infrequently detected, and if so, it is below the USGS freshwater-chronic criterion of ~2 ppb for the protection of aquatic life.

The 1994 RED indicated that risk quotients for aquatic plants exceeded the level of concern for risks to plants, but this assessment was based on an older exposure model using

scenarios not relevant to California and the PNW states. Additionally, the use rates on current labels have been modified from those in the RED analysis, based on the RED's required label changes. With newer exposure models, new labels and scenarios based on soil characteristics in California and the PNW, the risk of tebuthiuron to vascular aquatic plants is below the level of concern.

Therefore, I conclude that tebuthiuron will have no direct effect on endangered salmonids nor indirect effects from loss of food supply or loss of cover.

Attachment