UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

From: Larry Turner, Ph. D.
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 Bensulide for Pacific Anadromous Salmonids

I reviewed data and other information for bensulide, a pesticide 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. An Interim Reregistration Eligibility Decision (IRED) document was issued for bensulide in June 2000. This IRED only briefly summarizes the ecological risks of bensulide, and therefore, I have used the revised Environmental Risk Assessment (ERA) dated June 14, 1999 as the primary starting point for my analysis. To develop an analysis of the potential for effects on endangered and threatened Pacific salmon and steelhead, I have adapted the more general findings of the ERA to the various ESUs of these salmon and steelhead. I have also considered comments by the primary registrant and sought other new or revised information since the ERA was developed. It is important to note that some of the risks identified in the ERA no longer apply because of registration decisions made as a result of the analyses on which the ERA is based.

Based on the ERA and additional considerations indicated in my analysis and other attached or referenced materials, I conclude that the use of bensulide will have no effect on seven salmon and steelhead Evolutionarily Significant Units (ESUs), is not likely to adversely affect two salmon and steelhead ESUs, and may affect 17 salmon and steelhead ESUs. For many of these 17 ESUs, the basis for the "may affect" determination is uncertainty about home lawn use; however, there is concern for agricultural use, especially on onions in eastern Washington and Oregon, and row crops in the Willamette Valley of Oregon. I propose that if OPP adopts a no-spray buffer between agricultural sites where bensulide may be used and sites where salmon and steelhead occur, jeopardy would be avoided and take from agricultural uses would most likely be

eliminated or at least minimized if this buffer were to be applied to bensulide agricultural use sites (e.g., onions, cucurbits, cabbage, broccoli, and lettuce). Because the limited golf course use on greens and tees will result in only minimal exposure of relevant aquatic sites, no measures are needed for this use. For the home lawn use, where we have negligible information on use and where we have no established methods of protection, I recommend working with the states and NMFS to determine the most appropriate method of protection.