

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



**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

ORIGINAL SIGNED 11-30-04

Memorandum

From: **Shannon Borges**
Cara Dzubow
Greg Orrick
Ann Stavola
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 2,4-D for Certain Pacific Anadromous Salmonids

We reviewed data and other information for 2,4-dichlorophenoxyacetic acid (2,4-D), a registered herbicide 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.

2,4-D is registered nationally for a wide variety of agricultural and non-crop uses, including corn, cereal grains, nuts, fruits, turf, and aquatic weed control, among others. The Environmental Fate and Effects Division (EFED) has drafted an environmental risk assessment for an upcoming "Reregistration Eligibility Decision" (RED) for 2,4-D. The assessment concludes that levels of concern are exceeded for endangered freshwater fish, aquatic invertebrates, and aquatic vascular plants exposed to 2,4-D when applied to water for aquatic weed control.

We 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. OPP's levels of concern are exceeded for direct acute risks and chronic risks from some uses to endangered fish. Some uses also exceed criteria for populations of aquatic

invertebrates that may be food for fish and aquatic plants that may provide cover. There are a number of mitigating factors that reduce many, but not all concerns.

Based upon the available information, we determined that use of 2,4-D on rice may affect but is not likely to affect 4 ESUs under labeled application directions, and will have no effect on 22 ESUs. A detailed analysis could not be performed for each ESU for aquatic weed control because this usage information is incomplete. We have concluded that applications of 2,4-D to water for weed control may affect all 26 ESUs.

attachment:

2,4-Dichlorophenoxyacetic Acid: Analysis of Risks to Endangered and Threatened Salmon and Steelhead
(with attachments)