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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Memorandum

From: Michael Patterson, Ph. D. /s/ 4-1-04
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 trifluralin for Pacific Anadromous Salmonids

We reviewed data and other information for Trifluralin, a selective 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. Trifluralin is a selective preemergent dinitroaniline herbicide, first registered in 1963, used to control annual grasses and broadleaf weeds on a variety of food crops including tree fruits, nuts, vegetables, grains, cotton, soybeans, sunflowers, alfalfa, sugar beets and peanuts. It also has many non-food uses including rights-of-ways, ornamentals, cottonwood and poplar plantations, recreational lawns and turf.

The Environmental Fate and Effects Division (EFED) completed an environmental risk assessment for a Reregistration Eligibility Decision (RED) which was issued in September of 1995. The assessment concluded that levels of concern were exceeded for endangered freshwater fish and populations of aquatic invertebrates exposed to runoff and drift from agricultural treatment sites.

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 Evolutionary Significant Units (ESUs) from current uses in California and the Pacific Northwest. Based on the environmental risk assessment and additional considerations indicated in our analysis and other attached or referenced materials, we conclude that the use of trifluralin may affect 11salmon and steelhead ESUs, may affect but is not likely to adversely affect 4 ESUs, and will have no effect on 11ESUs .

Our determinations are based on the known or potential use of Trifluralin on crops within habitats and migration corridors of each ESU, the acute risk of Trifluralin to endangered fish, and the potential for indirect effects due to acute and chronic risks to their aquatic-invertebrate food supply. We don't have county-level usage data for homeowner and most noncrop uses, but we presume that they may contribute to the exposure and risks of these ESUs.

attachments