

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

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

July 17, 2007

## **MEMORANDUM**

SUBJECT: Effects Determinations for Azinphos Methyl Relative to the California Red-Legged Frog

and Designated Critical Habitat

FROM: Stephanie Syslo, Chemist

Risk Assessment Process Leader (ERB 3) . Stephame Septo Environmental Fate and Effects Division

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TO: Arthur-Jean B. Williams, Associate Director

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Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential adverse modification to designated critical habitat from uses of the organophosphate insecticide, azinphos methyl. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA<sup>1</sup>).

The attached assessment was conducted consistent with the Agency's Overview Document. Based on model predicted environmental exposures and available toxicity information combined with field studies, adverse ecological incidents, pesticide use information in the action area, and information specific to the life history and geographic distribution of the species, azinphos methyl may affect and is likely to adversely affect the CRLF. Specifically, this assessment suggests that azinphos methyl may affect and is likely to adversely affect the CRLF via direct effects to the terrestrial-phase CRLF and via indirect effects through reduction of prey items (i.e., freshwater fish, freshwater invertebrates, terrestrial invertebrates, small mammals). Azinphos methyl may affect but is not likely to adversely affect the aquatic-phase CRLF based on use practices for 2008, the first year of the phase-out of the chemical. Further, azinphos methyl has no effect on any assessment endpoints that are based on aquatic or terrestrial plant effects. (See Tables 1.1 and 1.2 in the Executive Summary for more details).

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to

<sup>1</sup> Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL)).

<sup>&</sup>lt;sup>2</sup> Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included one other scientist who has been trained by the Services to make such determinations.

Please let me know if you have any questions regarding this assessment and effects determination for azinphos methyl relative to the CRLF and its designated critical habitat.

cc: Steven Bradbury Peter Caulkins

Attachments