



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 30, 2012

MEMORANDUM

SUBJECT: Effects Determinations for Brodifacoum (PC Code 112701) Relative to the Alameda Whipsnake, Salt Marsh Harvest Mouse and San Joaquin Kit Fox and Designated Critical Habitat for the Alameda Whipsnake

FROM: Mah T. Shamim, Ph.D., Branch Chief
Environmental Risk Branch 5
Environmental Fate and Effects Division

A handwritten signature in blue ink, reading "M. Shamim", is written over the name "Mah T. Shamim" in the FROM field.

TO: Anita Pease, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the federally threatened Alameda Whipsnake (AW, *Masticophis lateralis euryxanthus*), the federally endangered salt marsh harvest mouse (SMHM, *Reithrodontomys raviventris*), and the federally endangered San Joaquin kit fox (SJKF, *Vulpes macrotis mutica*) arising from FIFRA regulatory actions regarding all registered uses of the rodenticide brodifacoum (PC Code 112701). In addition, this assessment evaluates whether the action is expected to result in modification of designated critical habitat for the AW. The attached ecological risk assessment addresses potential risk to AW, SMHM and SJKF, for which brodifacoum was alleged to be of concern in a complaint made by the Center for Biological Diversity against United States Environmental Protection Agency on May 30, 2007 (Case No: 07-2794-JCS).

The attached assessment was conducted consistent with the Agency's Overview Document¹. Effects determinations for this assessment are summarized below:

Based on the best available information, the Agency makes a May Affect, and likely to Adversely Affect (LAA) determination for AW, SMHM, and SJKF from the labeled uses of brodifacoum as described in Table 1-1 (in the attached document). The effects determination is based on potential direct and indirect effects to the assessed species. The LAA determination applies to all currently registered brodifacoum uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the AW from the use of brodifacoum.

¹ 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.

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 make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development.

Please let me know if you have any questions regarding this assessment and effects determination for brodifacoum relative to the AW, SMHM, and SJKF, and potential modification to the designated critical habitat for the AW.

Attachments