



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

December 29, 2010

MEMORANDUM

Subject: Effects Determination for Aluminum and Magnesium Phosphides (PC Codes 066501 and 066504) Relative to the Alameda Whipsnake (*Masticophis lateralis euryxanthus*) and California Tiger Salamander (*Ambystoma californiense*), Central California Distinct Population Segment and Federally Endangered California Tiger Salamander (*Ambystoma californiense*) Sonoma County Distinct Population Segment and Santa Barbara County Distinct Population Segment, San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*), and San Joaquin Kit Fox (*Vulpes macrotis mutica*)

From: Edward Odenkirchen, Ph.D. *Edw Odenkirchen* 12/29/2010
ERB1
Environmental Fate and Effects Division

To: Arthur-Jean B. Williams, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects on the Alameda Whipsnake (*Masticophis lateralis euryxanthus*) and California Tiger Salamander (*Ambystoma californiense*), Central California Distinct Population Segment and Federally Endangered California Tiger Salamander (*Ambystoma californiense*) Sonoma County Distinct Population Segment and Santa Barbara County Distinct Population Segment, San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*), and San Joaquin Kit Fox (*Vulpes macrotis mutica*) arising from FIFRA regulatory actions regarding all registered uses of the rodenticides aluminum and magnesium phosphides (PC Codes 066501 and 066504). In addition this assessment evaluated whether the action is expected to result in modification of the designated habitat for the Alameda Whipsnake and California Tiger Salamander. The attached ecological risk assessment addresses potential risk to the aforementioned species for which aluminum and/or magnesium phosphides were alleged to be of concern in a complaint made by the Center for Biological Diversity against the 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, where specific methods were applicable to the chemical/physical nature of the rodenticides and conditions under which they are registered for use. Effects determinations are summarized below:

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.

Based on the best available information, the Agency makes a No Effect determination for all indoor uses and for all species evaluated in this assessment and any associated Critical Habitat.

Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect determination for all evaluated species from aluminum and magnesium phosphide's outdoor uses. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat for the AW and the CTS by virtue of sealing and rendering toxic treated small mammal burrows, and the elimination of small mammals that construct such burrows.

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 of aluminum and magnesium phosphides relative to the aforementioned species and designated critical habitats.

Attachments