




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

OFFICE OF PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

September 29, 2010

MEMORANDUM

SUBJECT: Effects Determinations for Malathion (PC Code 057701) Relative to the Delta Smelt and California Tiger Salamander, and Designated Critical Habitat for the Delta Smelt and California Tiger Salamander

FROM: Edward Odenkirchen, Senior Scientist 
Environmental Risk Branch 1
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 to the federally threatened delta smelt (DS, *Hypomesus transpacificus*) and Central California Distinct Population Segment (DPS) of the California tiger salamander (CTS, *Ambystoma californiense*), and the federally endangered Santa Barbara County and Sonoma County DPSs of the CTS arising from FIFRA regulatory actions regarding all registered uses of the insecticide malathion (PC Code 057701). In addition, this assessment evaluates whether the action is expected to result in modification of designated critical habitat for the Delta smelt and California tiger salamander. The attached ecological risk assessment addresses potential risk to the Delta smelt and California tiger salamander for which malathion 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:

Delta Smelt: Based on the best available information, the Agency makes a May Affect, and likely to Adversely Affect (LAA) determination for DS from the labeled uses of malathion. The effects determination is based on potential indirect effects to the DS predicted from all currently registered malathion uses in California, as well as potential direct effects from many of the uses. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the DS from all of the use of malathion in California.

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.

California Tiger Salamander: Based on the best available information, the Agency makes a May Affect, and likely to Adversely Affect (LAA) determination for CTS from the labeled uses of malathion. This determination applies to all three DPSs of the species (Central California, Santa Barbara County, and Sonoma County). The effects determination is based on potential direct and indirect effects to the CTS predicted from all currently registered malathion uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the CTS from all of the use of malathion in California.

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 malathion relative to the DS and CTS and potential modification to designated critical habitats.

Attachments