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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

March 28, 2013

MEMORANDUM

SUBJECT: Effects Determinations for Cyfluthrin (PC Code 128831) and *Beta*-cyfluthrin (PC Code 118831) Relative to the Bay Checkerspot Butterfly (*Euphydryas editha bayensis*) (BCB), Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (VELB), California Tiger Salamander (*Ambystoma californiense*) [Central California Distinct Population Segment (DPS) – CTS-CC; Sonoma County DPS – CTS-SC; and Santa Barbara County DPS – CTS-SB], Delta Smelt (*Hypomesus transpacificus*) (DS), California Clapper Rail (*Rallus longirostris obsoletus*) (CCR), California Freshwater Shrimp (*Syncaris pacificus*) (CFWS), San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) (SFGS), and Tidewater Goby (*Eucyclogobius newberryi)* (TG) and Designated Critical Habitat for the BCB, VELB, CTS-CC, CTS-SB, DS, and TG

FROM: Melissa Panger, Ph.D., Senior Scientist
ERB3
Environmental Fate and Effects Division

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

Attached is the assessment of potential direct and indirect effects to the Bay checkerspot butterfly (*Euphydryas editha bayensis*) (BCB), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB), California tiger salamander (*Ambystoma californiense*) [Central California Distinct Population Segment (DPS) – CTS-CC; Sonoma County DPS – CTS-SC; and Santa Barbara County DPS – CTS-SB], delta smelt (*Hypomesus transpacificus*) (DS), California clapper rail (*Rallus longirostris obsoletus*) (CCR), California freshwater shrimp (*Syncaris pacificus*) (CFWS), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) (SFGS), and tidewater goby (*Eucyclogobius newberryi)* (TG) arising from FIFRA regulatory actions regarding all registered uses of the insecticides, cyfluthrin (PC Code 128831) and *beta*-cyfluthrin (PC Code 118831). In addition, this assessment evaluates whether the actions are expected to result in modification of designated critical habitat for BCB, VELB, CTS-CC, CTS-SB, DS, and TG. The attached ecological risk assessment addresses potential risk to BCB, VELB, CTS-CC, CTS-SC, CTS-SB, DS, CCR, CFWS, SFGS, and TG for which cyfluthrin and *beta*-cyfluthrin were 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 Document[1]. Effects determinations for this assessment are summarized below:

> Based on the best available information, the Agency makes a Likely to Adversely Affect determination for the VELB, CTS-CC, CTS-SC, CTS-SB, DS, CCR, CFWS, SFGS, and TG for all uses of cyfluthrin and *beta*-cyfluthrin (see Table 1-1 in the attached document). Additionally, the Agency has determined that there is the potential for modification of the designated critical habitat for the BCB, VELB, CTS-CC, CTS-SB, DS, and TG from all uses of cyfluthrin and *beta*-cyfluthrin (Table 1-2 in the attached document). These determinations are based on the potential for adverse effects to fish and aquatic invertebrates (both freshwater and estuarine/marine species) (cyfluthrin and *beta*-cyfluthrin); small mammals (cyfluthrin); small birds and reptiles (cyfluthrin and *beta*-cyfluthrin); and terrestrial invertebrates (cyfluthrin and *beta*-cyfluthrin).

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 cyfluthrin and *beta*-cyfluthrin relative to the BCB, VELB, CTS-CC, CTS-SC, CTS-SB, DS, CCR, CFWS, SFGS, and TG and potential modification to designated critical habitats.

Attachments

[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.