



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 28, 2012

MEMORANDUM

SUBJECT: Effects Determinations for Bensulide (PC Code 009801) Relative to the Bay Checkerspot Butterfly, California Clapper Rail, California Freshwater Shrimp, California Tiger Salamander (Central California, Santa Barbara County, and Sonoma County Distinct Population Segments), Delta Smelt, San Francisco Garter Snake, Tidewater Goby, and Valley Elderberry Longhorn Beetle and Designated Critical Habitat for the Bay Checkerspot Butterfly, California Tiger (Central California and Santa Barbara County Distinct Population Segments), Delta Smelt, Tidewater Goby, and Valley Elderberry Longhorn Beetle

FROM: Edward Odenkirchen, Senior Science Advisor
ERB1
Environmental Fate and Effects Division

[Handwritten signature] 6/28/12

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

Attached is the assessment of potential direct and indirect effects to the federally threatened Bay Checkerspot Butterfly (BCB, *Euphydryas editha bayensis*), Delta Smelt (DS, *Hypomesus transpacificus*), California Tiger Salamander Central California Distinct Population Segment (CTS-CC, *Ambystoma californiense*), and Valley Elderberry Longhorn Beetle (VELB, *Desmoceris californicus dimorphus*) and the federally endangered California Clapper Rail (CCR, *Rallus longirostris obsoletus*), California Freshwater Shrimp (CFWS, *Syncaris pacifica*), California Tiger Salamander Sonoma County Distinct Population Segment and Santa Barbara County Distinct Population Segment (CTS-SC and CTS-SB, *Ambystoma californiense*), San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*), and Tidewater Goby (*Eucyclogobius newberryi*) arising from FIFRA regulatory actions regarding all registered uses of the herbicide bensulide (PC Code 009801). In addition, this assessment evaluates whether the action is expected to result in modification of designated critical habitat for BCB, CTS-CC, CTS-SB, DS, TG, and VELB. The attached ecological risk assessment addresses potential risk to BCB, CCR, CFWS, CTS, DS, SFGS, TG, and VELB for which bensulide 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:

- **BCB:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for BCB from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct effects to BCB. The LAA determination applies to all currently registered bensulide uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the BCB from the use of bensulide.
- **CCR:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for CCR from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct and indirect effects to CCR. The LAA determination applies to all currently registered bensulide uses in California. There is no designated critical habitat for CCR.
- **CFWS:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for CFWS from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct and indirect effects to CFWS. The LAA determination applies to all currently registered bensulide uses in California. There is no designated critical habitat for CFWS.
- **CTS:** 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 bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct and indirect effects to CTS. The LAA determination applies to all currently registered bensulide uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the CTS-CC and CTS-SB from the use of bensulide. There is no designated critical habitat for CTS-SC.
- **DS:** 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 bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct and indirect effects to DS. The LAA determination applies to all currently registered bensulide uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the DS from the use of bensulide.

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.

- **SFGS:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for SFGS from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on the potential direct and indirect effects to SFGS. The LAA determination applies to all currently registered bensulide uses in California. There is no designated critical habitat for SFGS.
- **TG:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for TG from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct and indirect effects to TG. The LAA determination applies to all currently registered bensulide uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the TG from the use of bensulide.
- **VELB:** Based on the best available information, the Agency makes a May Affect, and Likely to Adversely Affect (LAA) determination for VELB from the labeled uses of bensulide as described in Table 1.1 (in the attached document). The effects determination is based on potential direct effects to VELB. The LAA determination applies to all currently registered bensulide uses in California. Additionally, the Agency has determined that there is the potential for modification of designated critical habitat of the VELB from the use of bensulide.

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. The review panel included one other scientist who has been trained by the Services to make such determinations (Jean Holmes).

Please let me know if you have any questions regarding this assessment and effects determination for bensulide relative to the BCB, CCR, CFWS, CTS, DS, SFGS, TG, and VELB and potential modification to designated critical habitats.

Attachments