Clomazone and Fomesafen Ecological Risk Assessments and ESA Consultation Facts

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EPA has completed draft ecological risk assessments for the pesticides clomazone and fomesafen and is requesting public comment. At the same time, the Agency is initiating formal consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (“the Services”) regarding these pesticides’ potential effects to species listed as endangered or threatened under the Endangered Species Act. These are the first two national ecological risk assessments and effects determinations for conventional pesticides, conducted within the context of EPA’s registration review program. The resulting public comment and biological opinions from the Services will help ensure that the Agency’s final risk assessments and risk management decisions for clomazone and fomesafen are based upon the best available scientific data and information.

EPA’s Findings

Clomazone and fomesafen are herbicides used to control weeds and grasses in a variety of crops and non-crop locations. As part of the registration review process, EPA has completed draft ecological risk assessments, including endangered species effects determinations, for all uses of clomazone and fomesafen. The Agency’s primary risk concern for both pesticides is direct effects on terrestrial plants, and associated indirect effects on listed species dependent on plants. The risk assessments indicate that the use of clomazone or fomesafen is likely to adversely affect a variety of listed species and may affect elements of designated critical habitat influenced by effects to plants.

In conducting these first two national listed species assessments and effects determinations, EPA explored effective and efficient methods of identifying the universe of species that may be exposed and affected by the uses of these pesticides. While the fomesafen assessment used standard geographical tools refined with expanded biological characteristics, the clomazone assessment used refined geographical proximity analyses in determining what species might and might not be exposed to the pesticide at levels of concern. Although the Agency explored new methods, EPA’s risk assessments for clomazone and fomesafen are consistent with scientific procedures outlined in the Agency’s January 2004 Overview of the Ecological Risk Assessment Process (PDF) (92 pp, 627k, About PDF).
Registration Review and ESA Consultation Processes

EPA is reviewing clomazone and fomesafen as part of registration review, the Agency’s program for periodically reviewing registered pesticides to ensure that each pesticide can still perform its intended function without unreasonable adverse effects on human health or the environment.

Dockets were opened and Summary Documents including preliminary work plans were issued for clomazone in February 2007 and fomesafen in March 2007. After taking comment, the Agency developed a final work plan for each pesticide and included it in the docket. The final work plan indicated the time frame in which the Agency anticipates completing risk assessments and making final decisions for these pesticides.

EPA conducted a comprehensive ecological risk assessment including consideration of listed species risks for clomazone and fomesafen. The draft risk assessment and effects determination for each pesticide has been included in the docket, and the public comment period has been extended through August 21, 2009.

Concurrent with requesting public comment on the draft risk assessments, EPA is initiating formal consultation with the Services regarding potential effects from these pesticides to federally listed, threatened or endangered species and their designated critical habitat. The result of consultation is a biological opinion issued by the Services that expresses whether they believe the pesticides’ uses are likely to jeopardize the continued existence of any listed species or destroy or adversely modify habitat designated as critical to any listed species. If the Services determine there is likely jeopardy or adverse modification, they will provide recommended Reasonable and Prudent Alternatives to the action. If the Services conclude the action will result in “take” of any individuals of a listed species, they will specify Reasonable and Prudent Measures to minimize such impact.

EPA will review and consider both the public comments received on the draft ecological risk assessments and the information provided in the Service’s biological opinions in developing proposed registration review decisions for clomazone and fomesafen.

Next Steps

The public comment period on the clomazone and fomesafen draft ecological risk assessments has been extended through August 21, 2009. After reviewing comments received, EPA will

issue final ecological risk assessments,
explain any changes from the draft risk assessments, and
respond to comments.
Once the final risk assessments are completed, the Agency will issue proposed registration review decisions for clomazone and fomesafen, and request public comment on any proposed risk mitigation.

**For More Information:**

**Federal Register Notices**


**Docket Information**

- Registration Review Docket for Clomazone and Fomesafen [EPA-HQ-OPP-2009-0186](https://www.epa.gov/)

- Clomazone Docket [EPA-HQ-OPP-2006-0113](https://www.epa.gov/)
  - [EPA's Clomazone Letter to FWS and NMFS](https://www.epa.gov/), April 22, 2009

- Fomesafen Docket [EPA-HQ-OPP-2006-0239](https://www.epa.gov/)
  - [EPA's Fomesafen Letter to FWS and NMFS](https://www.epa.gov/), April 22, 2009