

Fluometuron Request for Information and Mitigation Proposals
Phase 3 of 4-Phase Process
March 30, 2005

Request for Data and Mitigation Proposals

All elements of the U.S. Environmental Protection Agency's risk assessments and supporting documents for fluometuron are available for public comment. However, EPA is particularly seeking use and usage information, data refinement, and/or mitigation proposals to address the risk estimates presented in the Agency's risk assessments. Further, EPA has prepared an Overview document to summarize the human health and ecological risk assessments for the public.

For the fluometuron use being considered for reregistration, cotton, EPA is seeking the following types of information:

- Common use practices, including maximum rates needed (seasonal and one-time), typical application rates (seasonal and one-time), timing of applications, and geographical areas where fluometuron is used.
- Descriptions of applications to late season cotton and of cotton reentry activities that take place.
- Description of rotational crop practices, including the specific rotational crops being supported; rotational crops usually used with alternate plantings of cotton; the percentage of fluometuron treated fields rotated to specific crops; and, of those rotational crops, the percentage of the commodity that is planted after fluometuron applications.
- Data on anticipated residues in rotational crops.
- Feasibility and use of personal protective equipment by handlers using fluometuron.
- Availability and feasibility of engineering controls to protect handlers using fluometuron.
- Size of farms using fluometuron and the importance of aerial application methods.
- Target weeds, and the cost and efficacy of using alternative methods for control.
- Ground and surface water monitoring data, particularly in areas of high fluometuron use.
- Food monitoring data for residues of fluometuron, if available.
- Cultural practices designed to minimize the impact on the environment, particularly practices that may prevent water contamination and that may protect endangered species.
- Endangered species locations in cotton crop regions.
- Chronic data on ecological species in order to better assess risks to those species.
- Unique risks or benefits associated with the use of fluometuron on cotton.
- Oncogenicity data to better assess the carcinogenicity of fluometuron.

Mitigation proposals are requested in case it is not possible to further refine the following estimated risks of concern.

Risk Estimates of Concern:

Chronic Dietary (Food and Drinking Water)

Chronic dietary (food and drinking water) risk estimates exceed the Agency's level of concern. Since drinking water (from groundwater sources) is the risk driver, the Agency is requesting information to refine or options to mitigate the risk estimates. The Agency will consider these refinements and mitigation options during Phase 4.

Cancer Dietary (Food and Drinking Water)

Cancer dietary (food and drinking water from all sources) risk estimates exceed the Agency's level of concern. In the case of the cancer risk assessment, the risk drivers are drinking water from both surface water and groundwater sources and several rotational crops. In addition, food exposures alone (excluding drinking water) exceed the cancer risk level of concern. Several refinements to reduce or eliminate cancer dietary risk analysis are possible, and the Agency is requesting information to refine or options to mitigate the risk estimates. For example, to refine exposures resulting from rotational crops, the Agency is seeking additional information on rotational crop practices, including percentage of the crops of concern that are rotated from fluometuron treated fields. Currently, the anticipated residue estimates are considered highly conservative based on the nature of the residue data source since field trial and field accumulation studies use maximum application rates and minimum pre-harvest intervals. The Agency will consider these refinements and mitigation options during Phase 4.

Non-Cancer Occupational Handler Risk

Occupational handler non-cancer risk estimates exceed the Agency's level of concern at baseline personal protective equipment (PPE). However, all of these risks can be mitigated with additional PPE or engineering controls. The Agency is requesting information to refine or options to mitigate the risk estimates. In addition, the Agency is seeking information on the feasibility of PPE and engineering controls for fluometuron uses for growers. More details about the level of PPE that may be required for each exposure scenario can be found in the Fluometuron Overview, and in the Fluometuron: Occupational Exposure Assessment for the Reregistration Eligibility Decision Document, dated July 19, 2004. The Agency will consider these refinements and mitigation options during Phase 4.

Cancer Occupational Handler Risk

Occupational handler cancer risk estimates exceed the Agency's level of concern at baseline personal protective equipment (PPE). Risk estimates are below 1×10^{-4} at various levels of additional PPE, but most are greater than 1×10^{-6} even with engineering controls. The Agency is requesting information to refine or options to mitigate the risk estimates. In addition, the Agency is seeking information on the feasibility of PPE and engineering controls for fluometuron uses for growers. More details about the level of PPE that may be required for each exposure scenario can be found in the Fluometuron Overview and in the Fluometuron: Occupational Exposure Assessment for the Reregistration Eligibility Decision Document, dated July 19, 2004. The Agency will consider refinements and mitigation options during Phase 4.

In addition, handler post-application cancer risks for late season mature crop applications exceed the Agency's level of concern until 12 days after application. The Agency is seeking additional information about targeted (directed, basal sprays) and typical late season post-application activities in order to determine whether post-application exposure to fluometuron is likely in late season mature cotton crops. The Agency is requesting information to refine or options to mitigate the risk estimates and will consider refinements and mitigation options during Phase 4.

Ecological Risk

The Agency has ecological risk concerns for mammals, birds, aquatic animals, and plants. The Agency is requesting information to refine or options to mitigate the risk estimates and will consider refinements and mitigation options during Phase 4. In addition, the Agency is requesting chronic data for mammals, birds, aquatic animals, and plants, and is seeking information on locations of endangered species in cotton crop regions.