

EPA Seeks Public Comment on Additional Ecological Mitigation Measures for Atrazine

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The U.S. Environmental Protection Agency (EPA) is releasing proposed revisions to the Agency's September 2020 atrazine interim decision (ID) for public comment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires EPA to periodically re-evaluate pesticides through registration review to ensure that risk assessments and pesticide decisions reflect the best available science. The ID in the registration review process allows EPA to begin implementing measures to mitigate risks of concern before a final decision is issued.

Atrazine is one of the most widely used herbicides in the United States. It is used to control broadleaf and grassy weeds in a variety of agriculture crops, such as field corn, sweet corn, sorghum, and sugarcane. Atrazine is also used in non-agriculture settings, including nurseries, ornamentals, and turf. The herbicide is an important tool in agricultural production because it is economical, has a flexible use pattern, has long residual herbicidal activity, and is effective against a broad spectrum of weeds. Atrazine is also an important tool in herbicide resistance management, both in controlling weeds resistant to other herbicides and maintaining the effectiveness of other herbicides to control weeds.

In its 2016 atrazine ecological risk assessment, EPA determined that the scientifically derived concentration equivalent level of concern (CE-LOC) for atrazine, measured as a 60-day average, was 3.4 micrograms per liter ($\mu\text{g/L}$). This is the concentration of atrazine that, when exceeded, presents a greater than 50 percent chance of negatively affecting an aquatic environment. The CE-LOC is based on effects to aquatic plant communities; however, by ensuring protection of primary producers, the CE-LOC is intended to also provide protection for the entire aquatic ecosystem, including fish, invertebrates and amphibians.

In October 2019, EPA released a memo entitled [Regulatory Update on the Registration Review of Atrazine](#), later cited in the September 2020 ID, that announced a policy decision that an atrazine concentration of 15 $\mu\text{g/L}$ as a 60-day average triggers required monitoring and/or mitigation to protect aquatic plant communities from atrazine runoff. This policy decision did not supplant the scientifically derived CE-LOC of 3.4 $\mu\text{g/L}$. The currently proposed mitigations, if finalized, would supersede the October 2019 memo.

In October 2020, EPA received a petition alleging that the Agency violated its duties under FIFRA by issuing the atrazine ID without substantial evidence supporting the decision. In August 2021, EPA sought a voluntary partial remand in light of [President Biden's Executive Order](#) on protecting public health and the environment and restoring a commitment to science and scientific integrity. On December 14, 2021, the Ninth Circuit Court of Appeals granted EPA a voluntary partial remand, which provided the Agency the opportunity to reevaluate the policy decision to use 15 µg/L as the level of regulation for aquatic plant communities.

Based on its review of the substantial evidence associated with the atrazine ecological risk assessment and a consideration of growers' need for flexible and manageable mitigation measures, EPA is now proposing, for public comment, additional mitigation to protect aquatic plant communities. EPA is proposing the following measures for all atrazine labels in order to decrease atrazine runoff from treated fields:

- Prohibit application when soils are saturated or above field capacity (i.e., the soil's ability to retain water);
- Prohibit application during rain or when a storm event, likely to produce runoff from the treated area, is forecasted to occur within 48 hours following application;
- Prohibit aerial applications of all formulations; and
- Restrict annual application rates to 2 pounds of active ingredient or less per acre per year or less for applications to sorghum, field corn, and sweet corn.

In addition, EPA is proposing to add a "picklist" to labels that would require growers to select a combination of application rate reductions and/or runoff control measures when using atrazine in watersheds with atrazine concentrations that exceed the CE-LOC of 3.4 µg/L. The number of runoff control practices from the picklist that a grower would be required to implement depends on the estimated atrazine concentration in the watershed where the field is located and that watershed's vulnerability to atrazine runoff, as well as the grower's selected application rate. The higher the application rate and the higher the estimated atrazine concentration in the watershed, the greater the number of mitigation practices that may be necessary.

- There are no picklist requirements for fields located in watersheds with predicted atrazine concentrations below 3.4 µg/L (approximately 82 percent of the total number of watersheds nationwide).
- Fields located in watersheds with predicted atrazine concentrations between 3.4-9.8 µg/L (approximately 8 percent of watersheds) would generally be required to choose 1-4 picklist requirements, depending on application rate, crop, region, and soil erodibility.
- Fields located in watersheds with predicted atrazine concentrations of above 9.8 µg/L (approximately 10 percent of watersheds) would have the highest level of required picklist mitigations to select.

The picklist approach provides growers with the flexibility to select the runoff control practices that would be least burdensome to adopt. The practices a grower selects may depend on a variety of factors including crop, geographic region, and field topography. The picklist mitigation requirements are tailored geographically, down to the watershed level, in order to focus the mitigation on the areas with the greatest risk and vulnerability.

The public comment period is now open for the Proposed Revisions to the [Atrazine Interim Registration Review Decision](#) in the atrazine registration review docket ID number [EPA-HQ-OPP-2013-0266](#) at <https://www.regulations.gov/>. Public comments will be accepted for 60 days upon publication of the Federal Register notice.

After considering comments on the proposed revisions to the atrazine ID, EPA will determine if any changes are warranted to the proposed revisions and then release its decision on this re-evaluation. The Agency also intends to seek external peer review of the risks to the aquatic plant community that underlies this proposed risk management strategy. This is in line with the Agency's commitment to science and scientific integrity, and will incorporate the feedback it receives into its final revisions to the ID.

More information on the registration review process is available here.

[More information about atrazine and issues related to this action, including recent litigation, is available on EPA's website.](#)