

Atrazine Regulatory Update - EPA's re-evaluation of the current LOC¹

What happened?

- On June 30, 2022, EPA announced it has re-evaluated the current atrazine level of concern (LOC), which is 15 ppb, and “determined” in its proposed revised interim registration review decision (IRRD) that the LOC is 3.4 ppb with additional label mitigation measures required for atrazine use. EPA then issued a notice announcing a public comment period of 60 days ending on September 6, 2022.
- In its June 30 announcement, EPA stated: “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.”
- **EPA's decision to adopt an atrazine LOC of 3.4 ppb is inconsistent with the scientific and regulatory record and contrary to the advice provided by several FIFRA scientific advisory panels (SAP).**
- At this point, it is difficult to predict when the atrazine label mitigation measures would be finalized and implemented by EPA, but EPA could require that they be implemented as soon as Fall 2023 and in effect for the 2024 growing season.
- **The impact on farmers due to these changes is significant and unprecedented.** An LOC of 3.4 ppb would impact over 65 million acres of corn, sorghum and sugarcane (over 70% of all corn acres).

Brief history of the atrazine LOC

- As part of an earlier atrazine re-registration action going back to 2003, EPA sought to establish an atrazine LOC that was protective of aquatic life. The LOC was derived from a complicated weight of evidence approach by EPA that considered all relevant COSM (microcosm or mesocosm aquatic “community”) studies. The studies came from academia, government (USGS), industry and private sources. EPA also convened multiple SAPs to help determine the appropriate LOC.
- EPA's LOC was 18 ppb during 2004-2011 and 10 ppb (estimated) during 2011-2019.
- In 2012, EPA proposed lowering the LOC to 4-7 ppb, but its rationale for doing so failed scientific peer review. Among other things, the 2012 SAP concluded that EPA had failed to address specific scientific recommendations of the 2007 and 2009 SAPs and that 11 of the COSM studies EPA relied on were either incorrectly scored as “effect” instead of “no effect” or were of such poor scientific quality that they should be excluded from the assessment. When those studies are excluded and properly rescored, the weight of evidence points to an LOC of approximately 25 ppb.
- In 2016, EPA published a draft Ecological Risk Assessment, where they proposed an atrazine LOC of 3.4 ppb, despite detailed public comments and scientific critiques submitted by Syngenta, the Triazine Network, USDA, NASDA and other stakeholders, and SAP recommendations to the contrary. This proposed LOC was not finalized or adopted by EPA. In fact, **in June 2016 EPA stated it “will have atrazine's [draft] assessment peer reviewed by the Scientific Advisory Panel in 2017”** - which it never did.

¹The atrazine concentration-equivalent level of concern (LOC) is a 60-day average exposure level that EPA uses to assess potential risks to aquatic eco-systems (creeks, streams, rivers, etc.) and determine whether additional monitoring or label mitigation measures are required.

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- In 2019, EPA issued a regulatory update that set the LOC at 15 ppb, which was subsequently confirmed in the atrazine IRRD (2020). This LOC was based on sound science, taking into account prior SAP recommendations and public comments submitted by the USDA and other stakeholders. In EPA's IRRD, no significant label changes were proposed for atrazine related to use rates.
- In November 2020, activist groups filed a lawsuit against EPA in the US Court of Appeals 9th Circuit, arguing that the atrazine IRRD should be vacated because, they allege, EPA neglected their responsibility under FIFRA to properly consider the risks of atrazine. The lawsuit did not mention or refer to the atrazine LOC.
- In August 2021, EPA asked the Court to grant a remand (stay, pause) without vacatur, so that EPA could "reconsider" the LOC and the potential for further monitoring or mitigation.
- On June 30, 2022, EPA announced it has re-evaluated the current LOC (15 ppb) and "determined" that the LOC is 3.4 ppb with additional label mitigation measures required for atrazine use.

What's at stake?

- *Atrazine is a vital tool for farmers across the nation, and it is especially important to farmers who implement conservation tillage, or no-till farming, which plays a significant role in carbon sequestration. Farmers are committed to carbon-smart farming. However, if farmers are unable to effectively use atrazine, many acres will return to tillage and carbon savings will be greatly impacted.*
- *Syngenta and other stakeholders have repeatedly urged EPA not to adopt an unprecedented, significantly lower LOC that lacks a solid scientific basis or to require additional, unnecessary label mitigation measures that would have significant, real-world negative impacts on growers and their use of products containing atrazine.*
- ***We urge EPA to be more fully transparent in promptly making available, to the public, all relevant data and its rationale for adopting an atrazine LOC of 3.4 ppb, using its WARP-MP model, and requiring additional label mitigation measures.***
- ***An LOC of 3.4 ppb would impact over 65 million acres of corn, sorghum and sugarcane acres (over 70% of all corn acres).***
- *In its proposed revised atrazine IRRD, EPA proposes label mitigation measures (among others) "lowering maximum annual rates [of atrazine products] to 2.0 lbs a.i./acre, which represents a potential 20% reduction in annual rates" in field corn. This creates a challenge for growers to manage weeds and impacts the many premix products that growers use and need, and which are developed for optimal efficacy while ensuring environmental safety.*
- ***We again urge EPA to seek the independent scientific advice of a FIFRA SAP, and incorporate any recommendations resulting from their scientific review, before changing the current CE-LOC (15 ppb) and requiring any additional label mitigation measures.***

Effectiveness, safety and stewardship of atrazine products:

Atrazine's effectiveness and safety is well documented throughout the United States and around the world, with more than 7,000 scientific studies conducted on the product. Atrazine plays a significant role in feeding the world, and it also contributes to protecting the environment and critical wildlife habitats.

Syngenta has been a leader in stewarding and promoting appropriate uses of atrazine products. As reflected in EPA's IRRD in 2020, Syngenta proactively, voluntarily proposed label modifications for atrazine products that included removing certain uses (e.g., uses in Hawaii; roadside and conifer uses); requiring additional in-

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field downwind buffers; and requiring mandatory spray drift language. These label modifications were approved by EPA and adopted by all atrazine technical registrants.

EPA's current LOC of 15 ppb (since 2019):

EPA's decision to adopt an LOC of 15 ppb in 2019 (confirmed by EPA's IRRD in 2020) was the result of a years-long scientific review process, reflected the Agency's careful consideration of the extensive scientific record and "significant public comments [and] concerns" received from all stakeholders during the registration review process, and incorporated recommendations from multiple SAPs.

The 15 ppb LOC is scientifically valid, very conservative, and highly protective of aquatic plant communities.

Implications of the new proposed LOC of 3.4 ppb:

There are serious implications of EPA adopting this significantly lower LOC for determining "exceedances" in watershed areas and for requiring additional label mitigation for atrazine products.

- Potential impact (LOC of 3.4 ppb): over 65 million acres of corn, sugarcane and sorghum - requiring additional, unnecessary, unwarranted mitigation measures would impose additional costs, complexity and uncertainties on the nation's farmers and food supply.
- Further atrazine usage reductions based on this significantly lowered LOC will contribute to grower decisions that will result in more tillage, increased soil disturbance, and fewer conservation practices that benefit climate-smart agricultural outcomes.
- Reductions in planted corn acreage will also seriously impact available domestic and international grain supplies, which will exacerbate existing and anticipated food shortages.

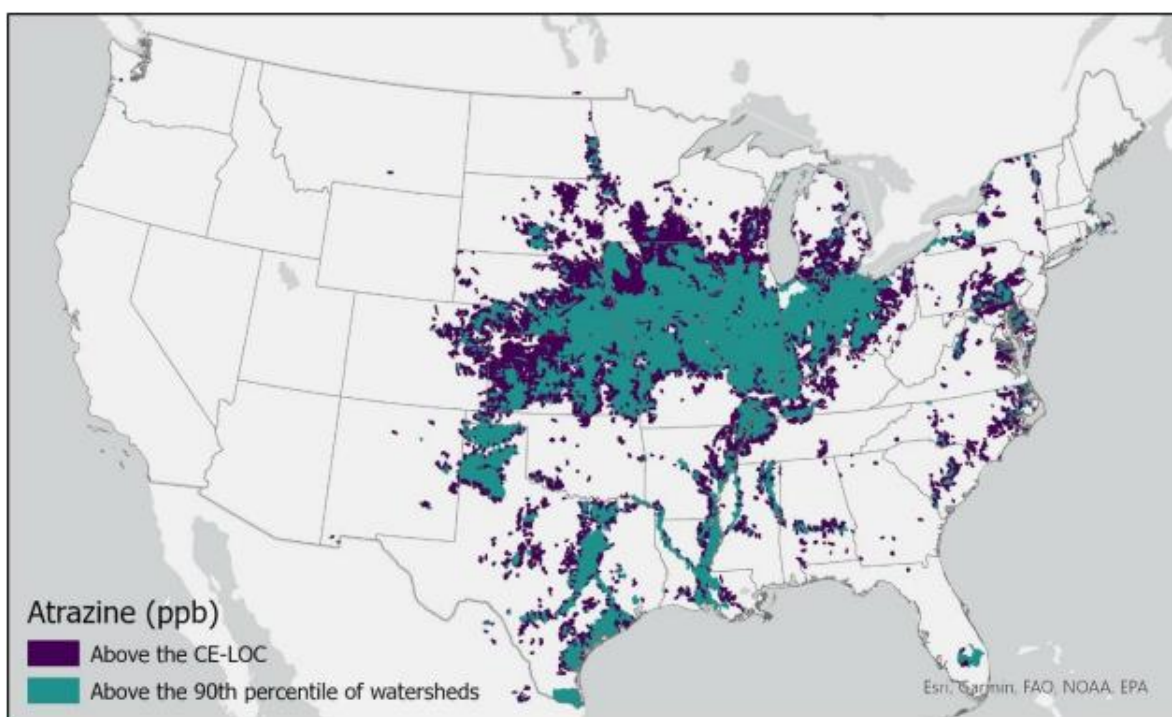


Figure 3: Map of predicted and monitored aquatic atrazine concentrations at the HUC-12 scale. Watersheds at the HUC-12 scale are colored according to atrazine concentration (including both predicted and measured, as previously described), with those above the CE-LOC in purple and those above the 90th percentile of watersheds (by atrazine concentration) in teal.

Source: Syngenta

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Other impacts include:

- generating numerous reports of “exceedances,” unnecessarily alarming the public and burdening regulators based on a CE-LOC that lacks scientific support and practical relevance
- creating the potential for state and federal regulators to adopt the 3.4 ppb CE-LOC for other purposes, such as setting water quality standards and requirements, despite the lack of scientific support and practical relevance;
- undermining the transparency and reliability of the administrative record and process, by reversing EPA’s scientific and regulatory determination of the atrazine LOC in 2019 - 2020 (15 ppb) while claiming that the Agency’s underlying position never actually changed.

There is now an EPA docket open at <https://www.regulations.gov/docket/EPA-HQ-OPP-2013-0266> where you can comment.

To learn more, please visit www.atrazine.com, www.agsense.org, <https://agsense.org/articles/growers-get-ready-to-fight-epa-again-on-atrazine-read-our-letter-to-epa/>, and <https://agsense.org/articles/epa-resurrects-radical-atrazine-proposal-threatens-key-sustainability-efforts/>.