

Background Facts on Chlorpyrifos Use and Safety

The important crop protection tool chlorpyrifos has been in the news lately due to an Environmental Protection Agency (EPA) decision to deny an activist group's petition for an immediate ban on the crop product. This issue has been in legal dispute for more than 10 years, and is not an issue raised by the new Administration in Washington, DC.

This background paper is intended to provide information that may be helpful in responding to questions about this issue and the product's use and safety.

As required by law, the EPA evaluates the risk that may be present from the potential use of any crop protection chemical before it is approved for use. It also provides for re-registration of crop protection tools to regularly reevaluate and update its scientific review. This analysis involves consideration of the hazard of the product and the potential exposure to it. Based on the results of extensive, well controlled scientific studies of animal toxicity, EPA makes a determination of safety and sets a tolerance for use for each product on different commodities.

Chlorpyrifos General Use and History

- Chlorpyrifos has been widely used in the United States since 1965 as a broad spectrum insecticide to reduce food waste through crop loss.
- The safety of this product has been supported by more than 4,000 regulatory studies, and was re-registered by EPA in 2006 after a thorough scientific review of its safety.
- It is currently approved for use in more than 100 countries for over 50 products including apples, cherries, sweet potatoes, and more.

Why the Controversy?

- In 2007, two NGOs petitioned EPA to revoke the tolerances for chlorpyrifos based on certain epidemiological publications. EPA undertook another re-registration review conducting multiple risk assessments and review by its independent Scientific Advisory Panel that confirmed safety.
- The EPA Scientific Advisory Panel highlighted numerous deficiencies in setting regulatory standards based on epidemiological studies. Using such studies would represent a break in precedent, and would allow scientific safety decisions to be based on studies with no established process or criteria.
- The dispute was elevated through the courts with EPA announcing in March 2015 that it would not grant the petition. However, in June 2015, EPA reversed its course saying it would grant the petition, with an effective date for the action of March 31, 2017.
- The U.S. Department of Agriculture, international government agencies, and again, EPA's own Scientific Advisory Panel, challenged that decision and asked the agency to reconsider its position.
- Finally, EPA announced on March 29, 2017 that it was denying the NGO petition, citing the support of the USDA, international government agencies, and the scientific community in general. Rather than an immediate suspension, chlorpyrifos will now proceed through another rigorous scientific review. All pesticides, including chlorpyrifos, will continue to be reviewed on a regular basis as required by law.

- The broader agricultural community and scientists at USDA strongly supported EPA's decision. The following statement was issued by USDA's Office of Pest Management Policy:

"This is a welcome decision grounded in evidence and science," said Sheryl Kunickis, director of the Office of Pest Management Policy at USDA. "It means that this important pest management tool will remain available to growers, helping to ensure an abundant and affordable food supply for this nation and the world. This frees American farmers from significant trade disruptions that could have been caused by an unnecessary, unilateral revocation of chlorpyrifos tolerances in the United States. It is also great news for consumers, who will continue to have access to a full range of both domestic and imported fruits and vegetables."

Monitoring for Safety

- USDA's most recent 2015 Pesticide Monitoring Program shows very low residues of chlorpyrifos. Out of 9,843 fruit and vegetable samples analyzed, more than 99% of samples showed no detectable traces of the product.
- Of the less than 1% of detections, only one sample showed detection above the EPA tolerance, which already includes a 100-fold safety factor for safe consumption.
- For full data, <https://www.ams.usda.gov/sites/default/files/media/2015PDPAnnualSummary.pdf> (see p 16)

What Does This Mean for Producers and Retailers?

- Chlorpyrifos has a long history of scientific review by multiple U.S. government administrations from 1965 to the present, as well as international government agencies.
- The U.S. Department of Agriculture supports EPA's decision to proceed with its scientific review of any questions raised by NGOs about this product in an orderly and rigorous way.
- Ongoing scientific review is a necessary and regular part of all pesticide evaluation and approval, and should not cause needless concern among producers and retailers.
- It is important that all of industry and consumers are able to rely upon the rigorous scientific review of U.S. and international government agencies, without substituting their own perceptions and judgments in place of the regulatory process.