

THE SACRAMENTO BEE



Environmental advocates target possible flaws in EPA pesticide system

By Kendall Helblig

Tuesday, Dec. 17, 2013

WASHINGTON -- The honeybees that pollinate one-third of Americans' daily diet are dying, and in the eyes of some environmentalists one culprit may be a decades-old Environmental Protection Agency system.

The system is called "conditional registration," and it's essentially a way to get pesticides on the market quickly. But to environmentalists and other experts, the system has become too loose, letting some potentially dangerous pesticides on the market, or letting them stay there too long.

In the case of honeybees, insecticides conditionally registered in the early 2000s have been blamed for impairing the bees' immune systems; in the past five years, the honeybee population has declined 20 percent to 30 percent each year, according to the U.S. Department of Agriculture.

"To continue to risk the collapse of our honeybee population and other insects that support our ecosystems is a tragedy," said Jonathan Evans of the Center for Biological Diversity, a national environmental advocacy group.



Bob Brawdy / Tri-City Herald/MCT

A honeybee with bulging pollen sacs and coated with yellow pollen dust visits Gaillardia flowers blooming in a Franklin County flower garden in Pasco, Washington.

The criticism of the EPA's conditional registration system is nothing new. A Government Accountability Office report from August, for example, said the agency has a confusing recordkeeping system for tracking pesticides – a problem the GAO first flagged in 1986. The recent report helped revive claims that conditional registration is unsafe.

"I think it's really concerning that they have acknowledged that they have all these problems and missing data, but they are still trying to go full steam ahead," said Mae Wu, an attorney at the Natural Resources Defense Council, another advocacy group.

For its part, the EPA said its own 2012 review showed that recordkeeping troubles have not affected the safety of products it has approved.

The EPA also said it was taking steps to improve the tracking of its pesticides, seeking to “promote consistency and enhance transparency” of its system.

The conditional registration system began in 1978 with an amendment to the law that governs insecticide use. It allows some pesticides to be sold before all necessary studies are completed as long as the company follows up with required data by a designated date, the pesticide will not cause “any unreasonable risk to the environment” and “the use of the pesticide is in the public interest,” according to EPA’s website.

About 16,000 pesticides are currently registered with the EPA, and each manager in the agency’s Office of Pesticide Programs is responsible for keeping track of about 800.

But without a centralized system, managers monitor their products in different ways – some with spreadsheets, others handwritten notes, others their own memory, said Alfredo Gomez, director of the natural resources and environment division of the GAO.

As a result, the GAO found that the EPA is unable to provide accurate information on the current number of conditionally registered products. (Both the NRDC advocacy group and the EPA have said about two-thirds of pesticides are conditionally registered, although the flawed recordkeeping make it difficult to confirm that number.)

And environmental advocates say the EPA’s bookkeeping problems point to a larger issue: Too many products have gone into use prematurely, often without strict deadlines for submitting the final – required – data.

“I think the public is unfortunately putting its faith in a process that is broken,” said Evans of the Center for Biological Diversity.

In response to the most recent GAO report, the EPA has again promised to better track conditional registrations. But experts at top environmental watchdog groups say they are worried about the EPA’s ability to follow through on those promises, and they also believe the EPA has overused conditional registration altogether in approving pesticides.

One of those is nanosilver, an active ingredient comprised of tiny particles of silver. Nanosilver is used in antimicrobials designed to protect an array of common products from organisms that may cause stains or odors. It is still unclear whether the size of nanosilver may make it toxic to humans or wildlife.

A conditional registration for a new active ingredient “shall be granted only if the administrator determines that use of the pesticide . . . is in the public interest,” according to the law. NRDC’s Wu said nanosilver products do not fit that bill.

“We are missing a lot of information about how this chemical may behave in the human body,” said Wu. “If we are going to be putting this untested pesticide out on the market without understanding how it will affect us and our children, then we are treating ourselves like guinea pigs.”

The NRDC took the EPA to court in 2012 over a nanosilver product called AGS-20, which the EPA had conditionally registered after determining the substance would not expose humans to dangerous concentrations of nanosilver.

In November, the 9th U.S. Circuit Court of Appeals, based in San Francisco, granted one of the NRDC's three claims, effectively sending the pesticide back to the EPA for further review. One judge in the case, Lynn S. Adelman, said the EPA's conclusion that exposure to AGS-20 posed no risk to people and the environment "is not supported by substantial evidence."

When questioned about conditional registration, the EPA told McClatchy that its internal 2012 analysis "did not show the agency's past use of conditional registrations was inappropriate," only that its "tracking system was inefficient and confusing."

Environmental advocates aren't convinced, especially in light of the honeybee crisis, termed colony collapse disorder.

In 2003, Bayer CropScience received conditional registration for clothianidin, a type of neonicotinoid. Neonicotinoids are insecticides that target the central nervous system in insects; they were introduced as an alternative to other pesticides that are more toxic to humans and wildlife, according to the EPA.

Bayer followed up with more data about how clothianidin affects pollinators in 2007 — three years late, according to the NRDC. EPA reviewers determined Bayer's study had structural flaws but classified it as "supplemental,"

meaning they thought it provided some scientifically sound information but did not follow testing protocol, according to a 2011 letter posted on EPA's website from the director of the Office of Pesticide Programs, which responds to concerns about clothianidin.

Still, clothianidin was switched to full registration in 2010.

"The EPA is not aware of any data demonstrating that bee colonies are subject to elevated losses due to long-term exposure to this compound," the agency says on its website. The U.S. Department of Agriculture also says that the science on colony collapse disorder is still unclear, and it could be because of several factors, and that neonicotinoids are only one possibility. It said that the students "that reported a negative impact on honeybees by neonicotinoids relied on large, unrealistic doses and gave bees no other choice for pollen, and therefore did not reflect risk to honeybees under real-world conditions."

In a statement, Bayer says, "There has been no demonstrated effect on bee colony health associated with the proper and labeled use of neonicotinoids."

Even so, the European Commission voted recently to severely limit or ban three major neonicotinoids across most of Europe for two years while it studies the issue. In addition, beekeepers and environmental and consumer groups joined forces in another lawsuit against the EPA, for its failure to follow the lead of European officials.

Although the GAO cited the history of clothianidin and nanosilver, the purpose of its report wasn't to evaluate the pesticides – only to assess EPA's recordkeeping. But the GAO did make three recommendations to the EPA to improve its recordkeeping system and website, which the GAO said contains inaccurate information about conditional registration.

In a statement to McClatchy, the EPA said it has recently updated its website with clearer content.