Development and timeline for acetochlor water quality standard

Developing a new water quality standard is a painstaking process that takes years for the Minnesota Pollution Control Agency (MPCA) scientific staff to accomplish. A significant amount of that staff time is devoted to researching and reviewing valid studies to develop standards that protect the aquatic community and human health. Most information in developing the acetochlor standard came from U.S. Environmental Protection Agency (EPA) Office of Pesticide Program (OPP) for pesticide registration. However, because of Federal Insecticide, Fungicide, and Rodenticide Act requirements, EPA-OPP only releases Data Evaluation Records, or their critical reviews of the studies, and not the full toxicity studies. To supplement this information, MPCA worked with the Minnesota Department of Agriculture to request full toxicity studies from primary pesticide registrants (Monsanto for acetochlor) to supplement MPCA’s review of the studies. Toxicity studies completed by the registrants were vital to proposing water quality standards for acetochlor; without the use of their studies, which underwent rigorous review by EPA and MPCA scientists to ensure adherence to scientific protocols, there would be no standards.

Standard development timeline

After reviewing the studies and developing a draft standard, the formal public input process began as part of Clean Water Act (CWA) triennial review of water quality standards, specifically revisions to Minn. R. ch. 7050. In the case of the acetochlor standard, the following occurred:

- Jan. 2006: Draft standards were published on MPCA's Web site. Staff presented draft standards to the MPCA Citizens' Board, and a list of interested parties was notified and able to make preliminary comments.
- July 2007: Following Minnesota's Administrative Procedures Act (APA) requirements for rule adoption, final public notice period began. Announcement of a public hearing schedule and process to have comments considered was made and published in the State Register. An administrative law judge (ALJ) set a deadline for initial comments to be received by him by Oct. 3, 2007 and final comments by October 10, 2007.
- Aug. 28, 2007: Acetochlor Registration Partnership (ARP - representatives of manufacturers of acetochlor) met with MPCA staff to share additional aquatic plant studies identified from a search of open published literature. MPCA staff informed ARP that reports and studies must be submitted at a public hearing for consideration in the rule process.
- August 29-Sept. 12, 2007: MPCA held seven public hearings throughout the state.
Sept. 11, 2007: ARP presented six additional studies and a consultant's report at the public hearing in Marshall, Minn. MPCA staff proceeded to evaluate these open literature papers for acceptability based on standard methods and to develop a technically sound evaluation of the additional studies that supplemented the original dataset (registrant studies). Another search of library databases found no other relevant aquatic plant studies. The six aquatic plant studies identified by the registrant were available in scientific journals and had no disclosed links to pesticide registrants, whereas all the eight aquatic plant species results used to develop the first proposed chronic standard were all registrant studies.

Oct. 3, 2007: MPCA submitted recommended rule revisions which included a revised acetochlor chronic standard in initial post hearing comments to the ALJ that included supporting scientific rationale. Staff response to comments was sent to key parties attending the hearings and MPCA comments were made available in hard copy from the central office, or from the ALJ.

Oct. 10, 2007: End of final comment period. MPCA submitted final comments to the ALJ again stating the need for an acetochlor standard and the basis for a scientifically-defensible revised chronic standard. Final post-hearing comments were also sent to the same groups as initial comments and were made available in hard copy from the central office, and from the ALJ.

Nov. 16, 2007: The ALJ returned a positive report on the entire process MPCA carried out to adopt the water quality rules, including the determination that the original and revised standards met APA requirements for public participation and were fully supported as "needed and reasonable."

Dec. 18, 2007: Staff presented standards to MPCA Citizens' Board; Board approved the standards.

The water quality standards require EPA approval before being finalized. EPA has submitted preliminary findings that the acetochlor revised standard is scientifically sound and meets CWA requirements to protect the beneficial uses of surface water.

The decision to revise the draft acetochlor standard followed the rule of public input called for in the Administrative Procedures Act. MPCA staff worked to gather input from all stakeholders, and based the standard on all credible scientific research available, as not taking the studies into account could have possibly resulted in a legal challenge to the standard.

This timeline is intended to better clarify the process and how MPCA staff developed the acetochlor water quality standard. For more information, please contact:

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