

Sept. 26, 2011

Atrazine Petition Talking Points

EPA received a May 6, 2011, petition from the group Save the Frogs, requesting the agency to ban the use and production of atrazine. EPA has posted the petition for public comment, which is consistent with its stated goal to be open and transparent in scientific and regulatory processes.

Atrazine passes the most stringent, up-to-date safety requirements in the world. The U.S. Environmental Protection Agency (EPA) and the Australian Pesticides and Veterinary Medicines Authority have concluded atrazine is safe at levels found in the environment. In addition, the World Health Organization has also favorably reviewed atrazine (2007, 2010).

EPA's April 2010 update on atrazine contained the following statement on amphibians "...atrazine does not adversely affect amphibian gonadal development based on a review of laboratory and field studies, including studies submitted by the registrant and studies published in the scientific literature. At this time, EPA believes that no additional testing is warranted to address this issue."

http://www.epa.gov/oppsrrd1/reregistration/atrazine/atrazine_update.htm#amphibian

None of the information submitted in the Save the Frogs' petition justifies a change in EPA's 2010 conclusions or a need for regulatory action.

Unrelated to this petition, EPA had already planned to update its atrazine review on ecological and aquatic systems, including any recent publications and data on amphibians. This review will also include a Scientific Advisory Panel meeting in 2012.

SUBMITTING YOUR COMMENTS TO EPA (due Nov. 14, 2011):

Your comments may be submitted to EPA docket number EPA-HQ-OPP-2011-0586 by one of the following methods on or before Nov. 14, 2011:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Type in keyword "EPA-HQ-OPP-2011-0586." Then open the docket folder and follow the on-line instructions for submitting comments.
- **Mail:** Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460-0001. Be sure to include docket number EPA-HQ-OPP-2011-0586.
- **Delivery:** OPP Regulatory Public Docket (7502P), Environmental Protection Agency, Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. Be sure to include docket number EPA-HQ-OPP-2011-0586. Deliveries are only accepted during the Docket Facility's normal hours of operation (8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays). Special arrangements should be made for deliveries of boxed information. The Docket Facility telephone number is (703) 305-5805.

It is imperative to include docket number EPA-HQ-OPP-2011-0586 with your comments.

ATRAZINE SUPPORTED BY EXTENSIVE SCIENCE & REGULATORY REVIEWS

- One of the most closely examined pesticide in the world, atrazine's safety has been established in more than 6,000 scientific studies over the past 50 years.
- Atrazine passes the most stringent, up-to-date safety requirements in the world. The U.S. Environmental Protection Agency (EPA) and the Australian Pesticides and Veterinary Medicines Authority have concluded atrazine is safe at levels found in the environment. In addition, the World Health Organization has also favorably reviewed atrazine (2007, 2010).
- The regulatory standards in place for atrazine protect human health and the environment and include wide margins of safety.
- In 2006, EPA re-registered atrazine, based on the overwhelming evidence of safety from more than 6,000 studies. EPA found the triazine class of herbicides poses "no harm" to "the general U.S. population, infants, children ... or other major identifiable groups."
- In 2009, EPA initiated a review of new studies, reports and recent publications and announced a series of SAPs, a public and transparent process using external panels of independent scientists, to review this information and provide guidance to the agency.
- In 2010, the World Health Organization raised its recommended safe level of atrazine in drinking water from 2 parts per billion to 100 parts per billion.
- In 2010, the Minnesota Department of Agriculture (mda), Minnesota Department of Health and Minnesota Pollution Control Agency completed a special registration review of atrazine, stating: "The review finds that atrazine regulations protect human health and the environment in Minnesota." And MDA officially concluded: "This review determined that no modifications to atrazine regulation are required in Minnesota at this time."
- The European Union's (EU) safety review concluded atrazine is safe for humans and animals. The United Kingdom's Scientific Committee on Plants, which examined atrazine for the EU, found, "It is expected that the use of atrazine, consistent with good plant protection practice, will not have any harmful effects on human or animal health or any unacceptable effects on the environment."
- The Agricultural Health Study, a large, on-going epidemiological study of more than 89,000 participants, concluded in May 2010: "Overall, there was no consistent evidence of an association between atrazine use and any cancer site." The study is sponsored by the EPA and the National Institutes of Health (including the National Cancer Institute and the National Institute of Environmental Health Sciences).
- The World Health Organization reviewed atrazine (2007) and concluded it is "not likely to pose a carcinogenic risk to humans."

ATRAZINE SAFE TO FROGS & ENVIRONMENT

- None of the information submitted in the Save the Frogs' petition justifies a change in regulatory action.
- EPA concluded in 2007 "that atrazine does not adversely affect amphibian gonadal development based on a review of laboratory and field studies, including studies submitted by the registrant and studies published in the scientific literature." In its April 2010 update, EPA stated that no additional testing is warranted to address this issue at this time.
- Subsequent to the 2007 review by EPA, several publications from independent laboratories, using 5 five additional species of amphibians, indicate no effects by atrazine on amphibians. These publications were omitted from the petition.
- The Australian government conducted a review of Dr. Hayes' March 2010 publication, cited in the Save the Frogs petition, and determined that it does not warrant a reconsideration of atrazine's regulatory status.
- Based on EPA guidance, two large-scale studies (Kloas, 2007) were conducted in separate laboratories using 3,200 frogs and 100,000 tissue samples to determine whether or not atrazine has an impact on growth, development, survival, or sexual differentiation in frogs. EPA audited and inspected the data from these studies, stating: "The data are sufficiently robust to outweigh previous efforts to study the potential effects of atrazine on amphibian gonadal development" and "there is no compelling reason to pursue additional testing."
- In an April 2008 story in *The New York Times*, Yale University scientist Dr. David Skelly found fewer hermaphroditic frogs in agricultural areas where atrazine is used than in suburban areas where it is less likely to be found, saying, "What we found in most of the agricultural ponds we sampled was no evidence of reproductive deformity."
- The native northern leopard frog continues to thrive in areas where atrazine is heavily used, including in irrigation ditches next to U.S. Midwest corn fields.
- Despite more than 50 years of atrazine use, scientists have not found credible evidence of an impact of atrazine on a single animal species in the field, let alone a human population.
- Over the past 20 years, deformities and declines in frog populations have been linked to causes such as natural fungal disease, non-native fish, natural parasites and habitat destruction, but never to atrazine.
- Atrazine products are critical modern agricultural tools that support land and water conservation, helping to maintain habitats for frogs and other wildlife.

ATRAZINE VITAL TO FARMING & ECONOMY:

- The herbicide atrazine has been vital to the farm economy for more than 50 years and has been fundamental in increasing corn, sorghum, and sugarcane production and helping reduce soil erosion through conservation tillage.
- The use of atrazine supports good environmental practices such as no-till farming, which helps reduce soil erosion and protect wildlife habitats. In fact, frogs continue to thrive in areas where atrazine is used, including in irrigation ditches and ponds next to corn fields.
- Atrazine is used in more than 60 countries in Asia, Africa, Australia, South America and the Middle East. In the United States, farmers use atrazine on more than half of all corn acreage, on two-thirds of sorghum acreage, and up to 90 percent of sugar cane acreage in some states.
- Atrazine is one of the best technologies in modern agriculture. It is not only effective, but atrazine's flexibility allows it to be used on a crop from before it is planted to after the crop emerges.
- Atrazine fights weed resistance. It enhances the performance of many other herbicides, minimizing selection pressure for herbicide-resistant weeds.
- Atrazine increases corn productivity by an average of 5.7 bushels more per acre.
- According to a 2003 EPA estimate, farming without atrazine would cost corn growers as much as \$28 per acre in alternative herbicide costs and reduced yields. The impact today would be even greater due to the current price of corn.
- The EPA estimates that the total impact on corn, sorghum and sugar-cane growers in the U.S. would exceed \$2 billion per year if atrazine were not available.
- Atrazine is a critical component in at least 59 agricultural products used by U.S. farmers.