

Atrazine Risks –Still in debate

Who do you trust?

What is Happening?

- Oct 7, 2009 – EPA announces a reevaluation of “Atrazine Science”
 - Reaction to a report by National Resources Defense Council and News Articles in the New York Times and Huntington Post on August 23 &24
 - Report based on NRDC analysis of EPA required Surface water Monitoring Program

How does this work?

- Atrazine reregistered in 2003
- As a part of reregistration monitoring of 120 Community water systems
- Watershed monitoring
- Data from 2003-2007 is available on the web
- Also studies on Amphibians

EPA FIFRA & CWA

- EPA Registers Pesticides under FIFRA and the Food Quality Protection Act
 - FIFRA is a risk benefit statute
 - FQPA is a De Minimus Risk statute
 - EPA must reregister (review) all pesticides at least once every 15 years
 - EPA can review registration at any time if new findings show a need

EPA FIFRA & CWA

- EPA regulates Water Quality and Community Water Systems under the Clean Water Act and the Safe Water Drinking Act
 - Standards are set through a very rigorous system
 - Data Requirements and methodologies are different under the Water Statutes
 - Pesticide Tolerances set based on Exposure from use, food, drinking water
 - Water Quality Standards set for exposure to water

Atrazine Registration –A brief History

- 1958 – Atrazine registered as a Pesticide with USDA
- 1983 EPA issues a Registration Standard for Atrazine – Notes concern about Dietary Cancer Risk
- EPA asks for more studies and data to support Registration

Atrazine Registration – A brief History

- 1988 EPA notifies Registrant of opening a Special Review under FIFRA based concerns of Carcinogenicity from treated food and drinking water
- Four Data call ins 9/90, 9/92, 3/95 & 10/95
- 1990 EPA Office of Water regulates Atrazine under the Safe Drinking Water Act

Registrant Risk Reduction Measures

- 1990
 - Reduce max crop rates from 4 lbs ai to 3 lbs ai
 - Reduce max non crop rate from 40 to 10 lbs ai
 - Post emerge Apps Corn & Sorghum < 12 inches in height
 - Deleted uses
 - Well head protection 50 ft setback
 - Restricted Use for all but lawncare, turf and conifer use

Registrant Risk Reduction

- 1992
 - Reduce Application rate to 2.5 lbs/yr
 - 1.5/yr pre emerge
 - 1/yr post emerge
 - Delete all non crop uses
 - Expand setbacks to include surface waters
 - 66 feet to where runoff enters surface water sources
 - 220 ft to Lakes and Reservoirs

Triazine Cumulative Review

Nov 1994 EPA announces a Special Review of all triazine pesticides due to concerns about cancer risks, all triazines classified as possible human carcinogens

1999 NRDC sues EPA over Atrazine wants decision on Special Reviews court orders a schedule for completing registration decisions

Enter the Frogs

- August 2002 EPA and NRDC ask for a new schedule- complete IRED by 1/31/2003 and a revised IRED by 10/31/2003
- EPA also agrees to Scientific Advisory Committee review of issues and studies on Amphibian studies
 - Tyrone Hayes, Cal Berkley

Reregistration Decisions

- 2001 EPA completes Preliminary Risk Assessments
- 2002 EPA revises Risk Assessments
- 2003 Interim Reregistration Eligibility Decision entered
- 2003 SAP reviews Cancer studies and Amphibian issues – finds not likely to be carcinogen , amphibians ???

Waiting for the Shoe to Drop

- Current Atrazine registration decisions are based on concerns about Hormonal Activity
- EPA has announced studies and protocols to be followed in testing for Hormone effects
- 66 ais will undergo Data Call ins during the next two years including Atrazine
- EPA will be going to the SAP 3 to 4 times in 2010 with Atrazine issues

Why is this so Hard?

- Scientific knowledge changes
- Old testing requirements haven't all caught up
- Researchers find new causal actions
- Mapping of the genome and advances in medical science
- What's next? Obesogens?

Atrazine Debate Who are the players

- EPA Office of Pesticide Programs (OPP) FIFRA
- EPA Office of Water SWDA and CW
- Principal Registrant – Syngenta
- CropLife America
- Natural Resources Defense Council
- Grower Groups
- University Researchers
- State Regulators

Where Do I get Information & Who Do I Trust

- EPA's website at pesticides
 - Decisions in the Federal Register
 - Docket files and Comments
 - Minutes of the Scientific Advisory Panel
 - Registration Eligibility Decisions
 - RED & IRED documents
 - Data has been generated under Good Laboratory Practices and EPA protocols

Who Do I trust

- What makes good Press is not always Good Science
 - When Studies come out do a reality check
 - Who did them, how done, are there other studies or research done by others that reach the same conclusion
 - Are there other motives?

Who Do I Trust

- Registrants and Interest Groups Have to Stake out a Positive Position
 - Registrants are responsible for the product and its Effects
 - Registrants are responsible for providing Data
 - Interest groups are working for the Interests of their members

EPA and Science

- Registration and Clean Water Act Decisions are to be Science based
- Suspicions about Politics with a thumb on the Scale
- Data Reviews are Driven by compliance with EPA methods and Requirements

Scientific Advisory Panel

- Seven Scientist nominated by the National Institute of Health & National Science Foundation Appointed by EPA Administrator
 - May appoint sub panels of up to ten specialists
 - Provide a sounding board for EPA staff Scientists
 - Give Opinions on if the EPA folks have properly assessed Data
 - Provide input on the methods EPA will require

Where do We Go From Here

- EPA has promised a “Transparent” process
- Most of the Data is in, Process will evaluate if the “science is right”
- May be Surprises along the way
- SAP meetings scheduled for February, April and September
- Still to be scheduled Amphibian effects