Preemption and Defamation

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Lecture 11
Environmental Politics and Law
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Atrazine – Management Possibilities

- Ban the Chemical
- Modify use patterns
- Restrict Use Spatially Vegetative buffers
- Restrict application methods
- Regional restrictions
- Protective equipment
- Require additional data
Environmental Protection Agency

2003

“EPA ADOPTS AGGRESSIVE MEASURES ON HERBICIDE ATRAZINE”

“Approach Ensures Protection of Nation's Most Vulnerable Drinking Water Sources”
Stephen Johnson,
Head of EPA’s Pesticide Division

Atrazine could be safely used if people were careful with it and watersheds were monitored.
“The Agency has concluded that atrazine may continue to be used, provided all the precautions and the new specific measures are implemented to reduce risks to drinking water. These new measures will help ensure the continued protection of drinking water.”
Syngenta is required to conduct a specialized testing program in vulnerable watersheds on a weekly basis during certain times of the year to monitor "raw" drinking water during high-use periods for this pesticide.

‘If the Agency's regulatory safety standards are exceeded in raw drinking water, atrazine use is cancelled in that geographic area.’ (EPA Jan. 31, 2003)
Comments Submitted by an Obscure Yale Professor...

First, evidence that atrazine may alter normal hormonal function is now sufficient to justify shifting the burden to the registrants to demonstrate the absence of hormonal effects, especially early in life.
Comments Continued...

Second, millions of Americans are routinely exposed to the chemical without their knowledge or consent.
Third, EPA has no ability to prevent human exposure to atrazine from contaminated water supplies.
Comments Continued...

Fourth, neither the registrant nor the Agency has demonstrated that there is a reasonable certainty that exposures to atrazine and its metabolites will induce no harm to children, as required by the FQPA.
"Because of the rapid developmental brain changes, the influence of atrazine on neurotransmitters in the hypothalamus and on GnRH (gonadotropin releasing hormone) may well have a differential, permanent effect on children."

EPA Scientific Advisory Panel
Finally, why should the public bear the financial burden of water testing and filtration? My view is that the registrants should bear this responsibility.
CORPORATE LESSONS FROM ATRAZINE

1. Delay Regulatory Decision (19 Years...20 Year Patent Life)
2. Overwhelm EPA With Evidence
3. Attack Studies That Find Adverse Effects
4. Fund Research of EPA Science Advisors
5. Avoid Considering Effects of Mixtures
6. Suggest Use Reduction, Geographic Restriction, Seasonal Restriction, Labeling Changes... Anything to Avoid National Ban
Using Law and Regulation to
Effect Chemical Substitution & Risk Reduction
**Diazinon Indoor Air Concentrations:**

**Days Following Application**

Lewis et al. 2001.

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![Graph showing Diazinon Indoor Air Concentrations](image-url)

- $y = -0.3899 \ln(x) + 1.3352$
  - $R^2 = 0.8357$
- $y = -0.1751 \ln(x) + 0.7815$
  - $R^2 = 0.8864$
- $y = -0.364 \ln(x) + 1.2849$
  - $R^2 = 0.8412$
- $y = 0.0011x^2 - 0.0499x + 0.7539$
  - $R^2 = 0.9767$

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Repeated Air Exposures & Decay Rate Analysis
6 Week Delay Between Applications

[Graph showing repeated air exposures over time with decay rate analysis for different applications labeled from Applic 1 to Applic 7, with an aggregated exposure line.]
Repeated Air Exposures & Decay Rate Analysis
6 Week Delay Between Applications
Assume 1% Decay Rate Per Day

 ug/kg/day

Applic 1
Applic 2
Applic 3
Applic 4
Applic 5
Applic 6
Aggregated Exposure

Microencapsulation: 1988
NAS 1993
DNT Studies: 1999
Chlorpyrifos Cancellation 2000
Preemption

Supremacy Clause of the US Constitution, “This Constitution and the Laws of the United States… shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby…”
Theories of Recovery

- Failure to Warn Family
- Applicator Negligence: Failure to exercise reasonable care
- Design Defects: High Concentration
- Failure to Disclose Incident Reports
29 Texas peanut growers alleged that application of a Dow Agrosciences’ weed killer, Strongarm, damaged their peanut plants during the year 2000 growing season.

The pesticide label however claimed that “Use of Strongarm is recommended in all areas where peanuts are grown.”

When the herbicide was used on the Texas peanut farm land where soils often exceed a pH of 7.2, it not only damaged the peanut crop, but failed to control the weeds.

By 2001, EPA approved a new label for the chemical that included a new warning, “Do not apply Strongarm to soils with a pH of 7.2
“Congress surely would have expressed its intent more clearly if it had meant to deprive injured parties of a long available form of compensation. Moreover, this history emphasizes the importance of providing an incentive to manufacturers to use the utmost care in distributing inherently dangerous items.”
"It seems unlikely that Congress considered a relatively obscure provision like Section 136v(b) to give pesticide manufacturers virtual immunity from certain forms of tort liability....

We have been pointed to no evidence that such tort suits led to a “crazy-quilt” of FIFRA standards or otherwise created any real hardship for manufacturers or for...
Industry Arguments

1. Emphasize Benefits of Product or Technology
2. Evidence is Insufficient to Justify Reg: Play the Good Scientist
3. Challenge Every Claim of Hazard: Compare to Natural Hazards
4. Human Experimentation: justify relief from 10 X safety factor
5. Exposure: Average nationally, yearly and demographically
6. Label Restrictions: Meet Any Disclosure Requirement in 6 point type
7. Restricted Use: Applicator Training and Licensing
8. Registration Is a Property Right: Prohibition Demands Compensation (5th Amend.)
10. If Product is Banned Domestically: Let Us Export
11. Substitutes: Don’t Compare Us; Relative Risk is Uncertain
12. Environmental Surveillance is Acceptable If We Self Monitor and
    Instead Of Ban
13. Comparative Risk: Spend $ on Seat Belts, Drug Control and
    Suicide Prevention
**Environmental & Consumer Group Arguments:**

1. Burden of Proof Shifted to Private Sector: Demonstrate Safety
2. Evidence is Insufficient to Justify Finding Safety (Need 10XSF)
3. Susceptibility: Toxicity: Developmental, Endocrine, Neuro, Immune: Data Are Incomplete....Don’t Wait
4. Exposure: Demand Distributional Analysis by Age Class
5. Mixtures: Common Mechanism Demands Collective Analysis
7. Pace of Review: Keep to Schedule or See you in Court
8. Restricted Use, Label Changes and Ecological Restrictions....
10. Are the most exposed the most susceptible?
11. Oppose Federal Preemption of State and Local Control
12. Demand Disclosure of Inert Ingredients
Strategic Targets for Reform

1. Governments
   • Legislative Branch
   • Executive and Administrative (EPA, USDA, FDA, OMB, WH)
   • Judicial
   • Int’l, Nat’l, State, Local… Citizens

2. Media

3. Consumers: Corporations, Universities, Hospitals, Golf Courses

4. 2nd & 3rd Party Commercial Vendors

5. Labor Groups

7. Institutional Risk Bearers: Insurance Companies
Reform

1. Labeling Requirements: Ingredients, Warnings, Education
2. Balancing v. Health Protective Standards
3. Prior Informed Consent
4. Secrecy: Property Rights to Knowledge of Risk
5. Certification: Process vs. Product
6. Defamation Laws: Alar Case
7. Preemption: Bates Case
8. Riskiest First: Strategic Attention to Highest Risk
10. Protection of the Most Vulnerable
11. Precautionary Policy in the Face of Uncertainty
12. Export of Banned Substances