United States Environmental Protection Agency

Chemical Management Reform

Steve Owens
Assistant Administrator

Office of Chemical Safety and Pollution Prevention

Improving EPA's Chemical Management Program

- Priority for Administrator Lisa Jackson
- 1976 Toxic Substances Control Act (TSCA) is the main statute
- EPA's effort includes:
  - Support for legislative reform of TSCA
  - Enhanced chemical management program using current authorities

Toxic Substances Control Act (TSCA)

- Passed in 1976
- Grandfathered in 60,000+ existing chemicals onto the TSCA Inventory w/o evaluation
- Over 20,000 additional chemicals have been added to the Inventory since then
- Inventory now has approx. 84,000 chemicals
- TSCA is the only major environmental law that has not been updated

Challenges in Implementing TSCA

- No mandatory program to determine the safety of existing chemicals
- Difficult legal and procedural hurdles to taking regulatory action
- Significant hurdles to obtaining health and environmental effects data
- Obstacles to providing the public with information because of Confidential Business Information claims

Challenges in Implementing TSCA

- Because of hurdles to obtaining data, EPA has been able to require testing on only roughly 200 chemicals on the TSCA Inventory in the past 34 years.
- Because of obstacles to taking regulatory action, EPA has been able to take action to limit or ban chemicals only five times since 1976.
  - 1989 EPA rule phasing out most uses of asbestos in products was overturned

EPA's Enhanced Chemical Management Program

- EPA effort includes:
  - New regulatory risk management actions
  - Development of Chemical Action Plans
  - For the first time ever, using TSCA authority to create a Chemicals of Concern list
  - Requiring industry to submit information needed to understand chemical risks.
  - Increasing public access to information about chemicals.

Chemical Action Plans

- EPA has released 8 Chemical Action Plans to date.
  - Phthalates
  - Short-chain chlorinated paraffins
  - Perflourinated chemicals (PFCs)
  - Polybrominated diphenyl ethers (PBDEs)
  - Bisphenol-A (BPA)
  - Benzadine dyes
  - Hexabromocyclododecane (HBCD)
  - Nonylphenol/Nonylphenol ethoxylates (NP/NPE) mixtures
- Selection factors include use in consumer products; presence in human blood; PBT characteristics; toxicity; production volume

Chemical Action Plans

- Action Plans outline potential regulatory actions
- Also DfE alternatives analysis for some chemicals:
  - BPA in thermal paper such as receipts
  - DecaBDE in electronics, textiles, and other uses, such as plastic pallets
  - Phthalates
  - HBCD, the flame retardant for expandable polystyrene
  - Nonylphenol and nonylphenol ethoxylates, in uses such as detergents, and paper processing

EPA Design for the Environment (DfE) Program

- Features & Goals
  - Safer Products--Logo
  - Safer chemical ingredients baseline
  - Consider life cycle impacts
- DfE evaluates every ingredient in the product for a full suite of human health and environmental effects.
  - Human: acute mammalian toxicity, carcinogenicity, genetic toxicity, neurotoxicity, repeated dose toxicity, reproductive and developmental toxicity, respiratory sensitization, and skin sensitization.
  - Environmental: aquatic toxicity, bioaccumulation potential, biodegradation and eutrophication.
- Over 2,200 products to date from more than 450 manufacturers

EPA Design for the Environment (DfE) Program

- Manufacturers must sign an agreement with EPA, and are subject to regular audits.
- To ensure continuous improvement as the state of Green Chemistry advances, DfE requires renewal and reformulation of DfE-labeled products every three years.
- DfE helped reduced over 600 million pounds of chemicals last year.

EPA Green Chemistry Program

- Focuses on chemical products and processes that are designed, developed, and implemented to minimize their hazard to human health and the environment.
- Presidential Green Chemistry Challenge Awards for technologies that incorporate the principles of green chemistry into chemical design, manufacture, and use.
- Green Chemistry technologies have:
  - Prevented the use or generation of over 1 billion pounds of hazardous substances, including starting materials, solvents, waste
  - Saved tens of billions of gallons of water
  - Prevented the release of billions of pounds of CO2 equivalents

Increasing Access to Information

- Identity of more than 16,000 chemicals is currently CBI
- January 2010: Fed Reg notice limiting CBI claims for chemical identity in TSCA section 8(e) "notices of substantial risk," when the substance is on the public portion of the TSCA Inventory.
- May 2010: Fed Reg notice announcing new policy for review of CBI claims for all health and safety studies
- August 2010: Proposed Intended Use Rule further tightens limits on CBI claims
- TSCA Inventory and info on TSCA facilities now on website
- Challenge to companies to reduce old and new CBI claims

Administration's TSCA Reform Principles

1. Chemicals Should be Reviewed Against Risk-Based Safety Standards.
2. Manufacturers Should Provide EPA with Information Necessary to Make the Safety Determination.
3. Risk Management Decisions Should Take into Account Sensitive Subpopulations, Cost, Availability of Substitutes and Other Relevant Considerations.
4. EPA Should Assess and Act on Priority Chemicals in a Timely Manner.
5. Green Chemistry Should Be Encouraged and Public Access to Information Should Be Strengthened.
6. EPA Should Be Given a Sustained Source of Funding.

Congressional Action

- S. 3209
  - Safe Chemicals Act of 2010
  - Sen. Frank Lautenberg (D-N.J.)
  - Introduced April 15, 2010
- H.R. 5820
  - Toxic Chemicals Safety Act of 2010
  - Rep. Bobby Rush (D-Ill.)
  - Introduced July 22, 2010

Resources

- TSCA Reform Principles
  - http://www.epa.gov/oppt/existingchemicals/pubs/principles.html
- Enhanced Chemical Management Program
  - http://www.epa.gov/oppt/existingchemicals/pubs/enhanchems.html
- Green Chemistry
  - http://www.epa.gov/greenchemistry/
- Design for the Environment
  - http://www.epa.gov/oppt/dfe/