

US EPA ARCHIVE DOCUMENT



# EPA's Initiatives on Safer Chemicals

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# Improving EPA's Chemical Management Program

- Priority for Administrator

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- 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
- Excessive Confidential Business Information (CBI) claims limit access to information by the public and other governments

# EPA's Enhanced Chemical Management Program

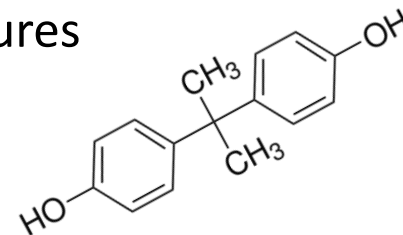
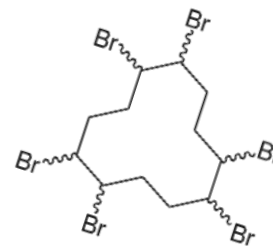
- EPA effort includes:
  - New regulatory risk management actions
  - Development of Chemical Action Plans
  - Creating a Chemicals of Concern list
  - Requiring industry to submit information needed to understand chemical risks.
  - Increasing public access to information about chemicals.



# Chemical Action Plans

- EPA has released 10 Chemical Action Plans to date:

- Phthalates
- Short-chain chlorinated paraffins
- Perfluorinated chemicals (PFCs)
- Polybrominated diphenyl ethers (PBDEs)
- Bisphenol-A (BPA)
- Benzadine dyes
- Hexabromocyclododecane (HBCD)
- Nonylphenol/Nonylphenol ethoxylates (NP/NPE) mixtures
- Methylene diphenyl diisocyanate (MDI)
- Toluene diisocyanate (TDI)

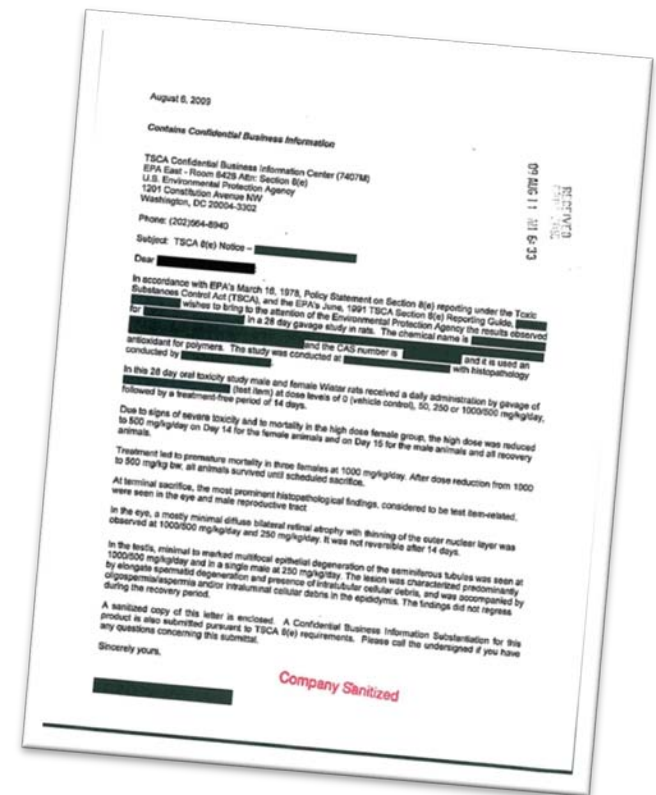


- Selection factors include use in consumer products; presence in human blood; PBT characteristics; toxicity; production volume

# Increasing Transparency

## Regulations & Policy

- Identities of nearly 17,000 chemicals on TSCA Inventory are claimed as Confidential Business Information (CBI)
- New policies issued for review of CBI claims for health & safety studies (1/10), (6/10)
- Challenge to companies and trade associations to decrease new CBI claims and declassify old claims
- Proposed Inventory Update Rule modifications
- Identities of 530 chemicals declassified on TSCA Inventory – (8/09)
- Identities of more than 150 chemicals in 104 health and safety studies declassified – (6/11)





# Increasing Transparency

- **Public Access & Tools**

- Free access to TSCA Inventory on EPA and Data.Gov websites – (3/10)
- Integrated TSCA facility and chemical information into EnviroFacts – (5/10)
- New web-based chemical data access tool (CDAT) introduced – (12/10)
- Design for the Environment (DfE) product list added to Data.Gov – (5/11)



# DfE Safer Product Labeling Program

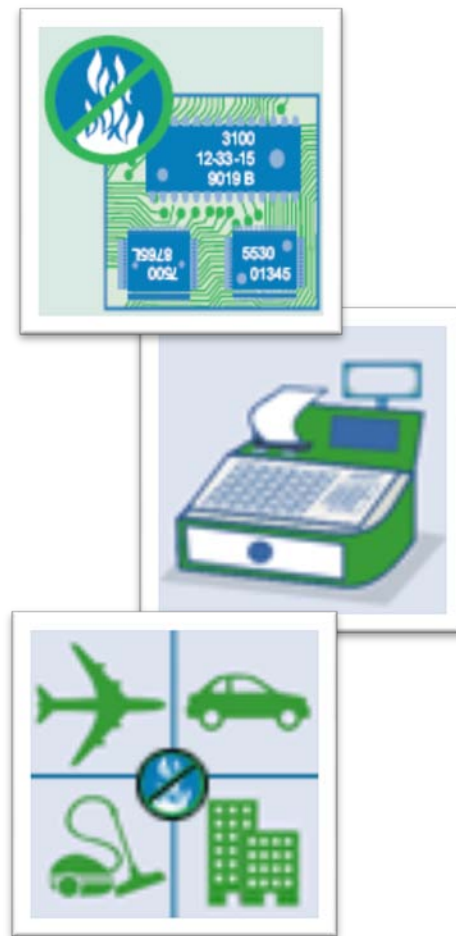
- The Design for the Environment Program (DfE) label helps consumers and industrial purchasers make wise choices by identifying safe and effective products.
- DfE has evaluated and allowed more than 2,500 products to carry the DfE logo.
- DfE evaluates every ingredient in the product for a full suite of human health and environmental effects.
- To earn the label, companies must:
  - Sign partnership agreement with EPA
  - Use only the safest ingredients
  - Disclose ingredients
  - Pass annual audits



# DfE Safer Product Labeling Program

- DfE Alternatives Assessments:

- Identify and evaluate functional alternatives
- Include diverse stakeholders who provide input and feedback on the identification and evaluation of the alternatives
- Consider potential trade-offs and green chemistry needs.
- Assessments underway:
  - BPA (in thermal paper)
  - DecaBDE
  - HBCD (in expandable polystyrene insulation foam)
  - Nonylphenol/nonylphenol ethoxylates (in uses such as detergents and paper processing)
  - Phthalates (August 2011)



# DfE and Green Chemistry

- DfE advances core green chemistry principles by identifying and promoting the use of chemicals that are:
  - Inherently less hazardous and more biodegradable
  - Derived from more sustainable feedstocks
  - Safer alternatives to protect human and environmental health
- DfE has developed criteria to define what constitutes a safer, green-chemistry-based chemical.
- DfE has sponsored a database of safer chemical alternatives that are eligible for use in DfE-labeled products.
- DfE implements green chemistry on a daily basis by labeling products whose ingredients meet its safer chemical criteria.

# Green Chemistry and Green Engineering

- **Promote Education:**

- Support educational projects aimed at promoting pollution prevention practices
- Development of materials and courses to assist in the training of professional chemists and students



- **Strengthen Outreach:**

- Communicate the benefits of pollution prevention to industry, chemical education, and scientific community
- Organize scientific meetings, publications in scientific journals, and developing and disseminating computational tools and databases



# Presidential Green Chemistry Challenge

- EPA has recognized 77 technologies with this prestigious award over the last 16 years.
- *Each year*, award-winning technologies
  - Prevent the use or generation of nearly 200 million pounds of hazardous chemicals
  - Save 21 billion gallons of water
  - Prevent 57 million pounds of CO<sub>2</sub> releases



# 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 on TSCA Reform

- 9/29/09 – Administrator Jackson announced Administration's principles on TSCA reform.
- 4/15/10 – Sen. Lautenberg introduced the "Safe Chemicals Act of 2010."
- 7/22/10 –Congressmen Waxman and Rush introduced the "Toxic Chemicals Safety Act of 2010."
- 4/14/11 – Senator Lautenberg Introduces "Safe Chemicals Act of 2011."





# Resources

- To learn more about TSCA and EPA's Enhanced Chemical Management Program:  
<http://www.epa.gov/oppt/>
- To learn more about Green Chemistry:  
<http://www.epa.gov/greenchemistry>
- To learn more about Green Engineering:  
<http://www.epa.gov/oppt/greenengineering/>
- To learn more about DfE:  
<http://www.epa.gov/dfe>

