

State Regulation for PBTs and the Role of Chemical Action Plans



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Reducing Toxic Threats

Prevention as the smartest cheapest, and healthiest approach.

- Prevent
- Manage
- Clean up

Reducing Toxic Threats

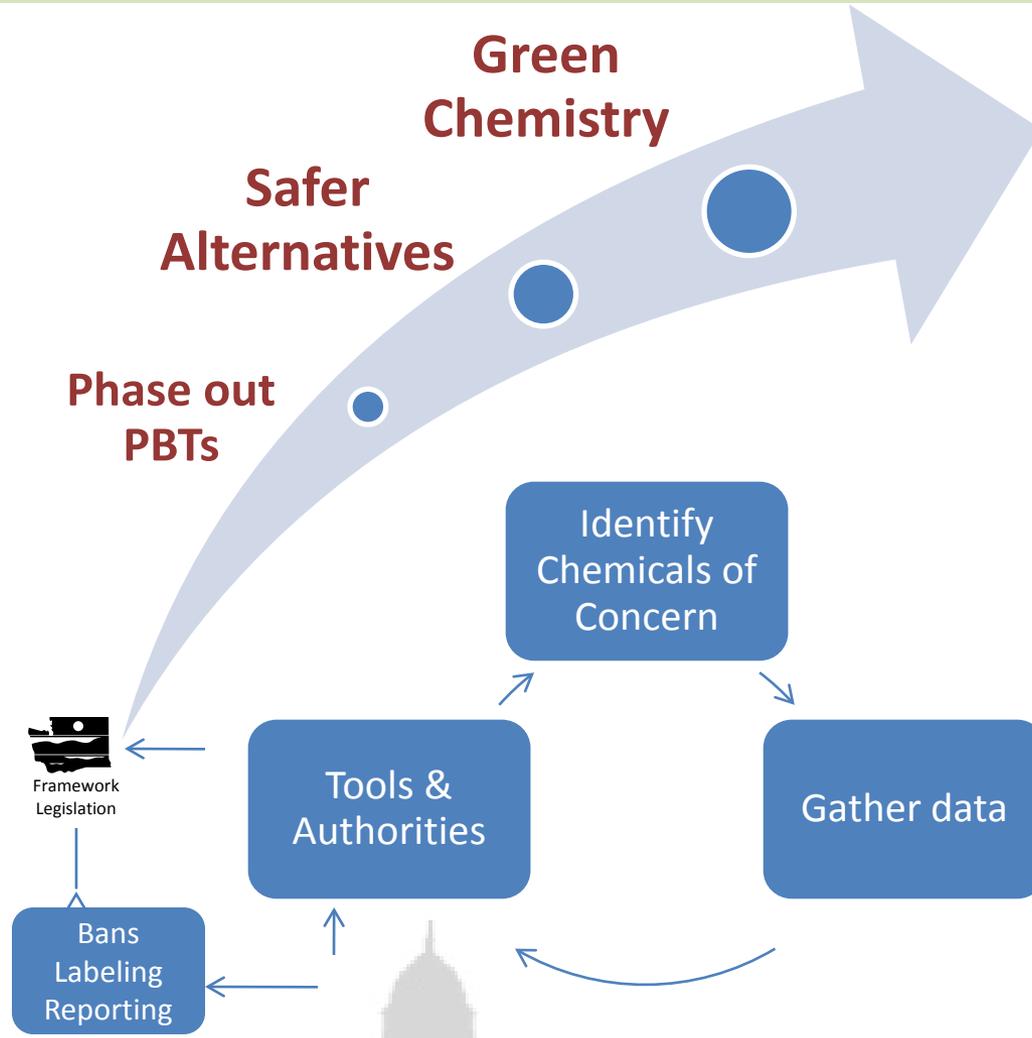
PREVENTION

SYSTEMIC CHANGE

- Build the business case
- Shared responsibility

STATUS QUO

Product by product / chemical by chemical approach



- Manufacturers routinely consider safer alternatives & green chemistry

- Benign design

- Reduce health care costs

- Avoid future costs

- Kids & environment are protected across the board

- Manufacturers share the responsibility

MANAGEMENT

CLEANUP

PBTs

- Persistent- they remain in the environment for a long time
- Bioaccumulative- they build up in organisms and in the food chain
- Toxic- they are harmful to the health of humans and/or other species. Children are especially vulnerable.

Why are PBTs a priority?

- Travel long distances and cross media
- Span the boundaries of programs, geography and generations.
- Traditional single-media approaches are less than the full solution.
- We need to address PBTs through integrated use of all agency tools and programs.

2006 PBT Rule on PBTs

(Chapter 173-333 WAC)

- Goal is to reduce and phase-out PBT uses, releases, and exposures in Washington
- List of 27 individual PBTs and groups
- Chemical Action Plans (CAPs)

PBT Rule History

- **August 1998** – Public announcement on developing a PBT Strategy.
- **August 2000** - Issued draft PBT Strategy.
- **January 2001** - Submitted proposed PBT strategy to the Legislature
- **January 2003** –Published Mercury CAP.
- **April 2003** – Legislature passes Mercury Education & Reduction Act.
- **January 2004** – Executive Order 41-01 to develop a PBT Rule
- **April 2004** – Supplemental Budget Funding from State Legislature to develop a PBT Rule and PBDE CAP
- **January 2006**- Publication of the PBT Rule and the PBDE CAP
- **March 2007**- Publication of the Multiyear CAP schedule

Chemical Action Plans (CAPs)

- Mercury CAP published 2003
- PBDEs CAP published 2006
- Lead CAP published 2009
- PAHs CAP expected 2011
- PFOS CAP expected 2013

Components of a CAP

- Chemical Information
- Presence in the Environment
- Human Health and Impacts on Wildlife
- Production, Uses, and Releases
- Current Management Approaches
- Laws and Regulations
- Policy Options
- Recommendations
- Economic Analysis
- Implementation Steps
- Performance Measures
- Research and Monitoring

Common Challenges for PBTs

- Ecology doesn't regulate many non-point sources
- Stormwater management
- Sediment cleanup
- Air deposition from out of state sources
- Alternatives assessments for uses
- Each PBT also has its own unique challenges
 - *E.g.*, the toxicity of PBDEs was less well known compared to mercury and lead

2003 Mercury CAP Results

- Legislation
 - 2003 Mercury Education and Reduction Act (RCW 70.95M) banned some uses
 - 2010 Mercury lamp recycling and product stewardship
- Agency Actions
 - Collection and proper disposal of more than 14,000 pounds of mercury
 - Lowered the detection limit for mercury that we require in priority pollution scans as part of NPDES permitting
 - An agreement with dentists to collect mercury amalgam waste
- Continued challenges
 - Air deposition from inside and outside the state
 - Continued presence of mercury in the environment, especially in fish

2006 PBDE CAP Results

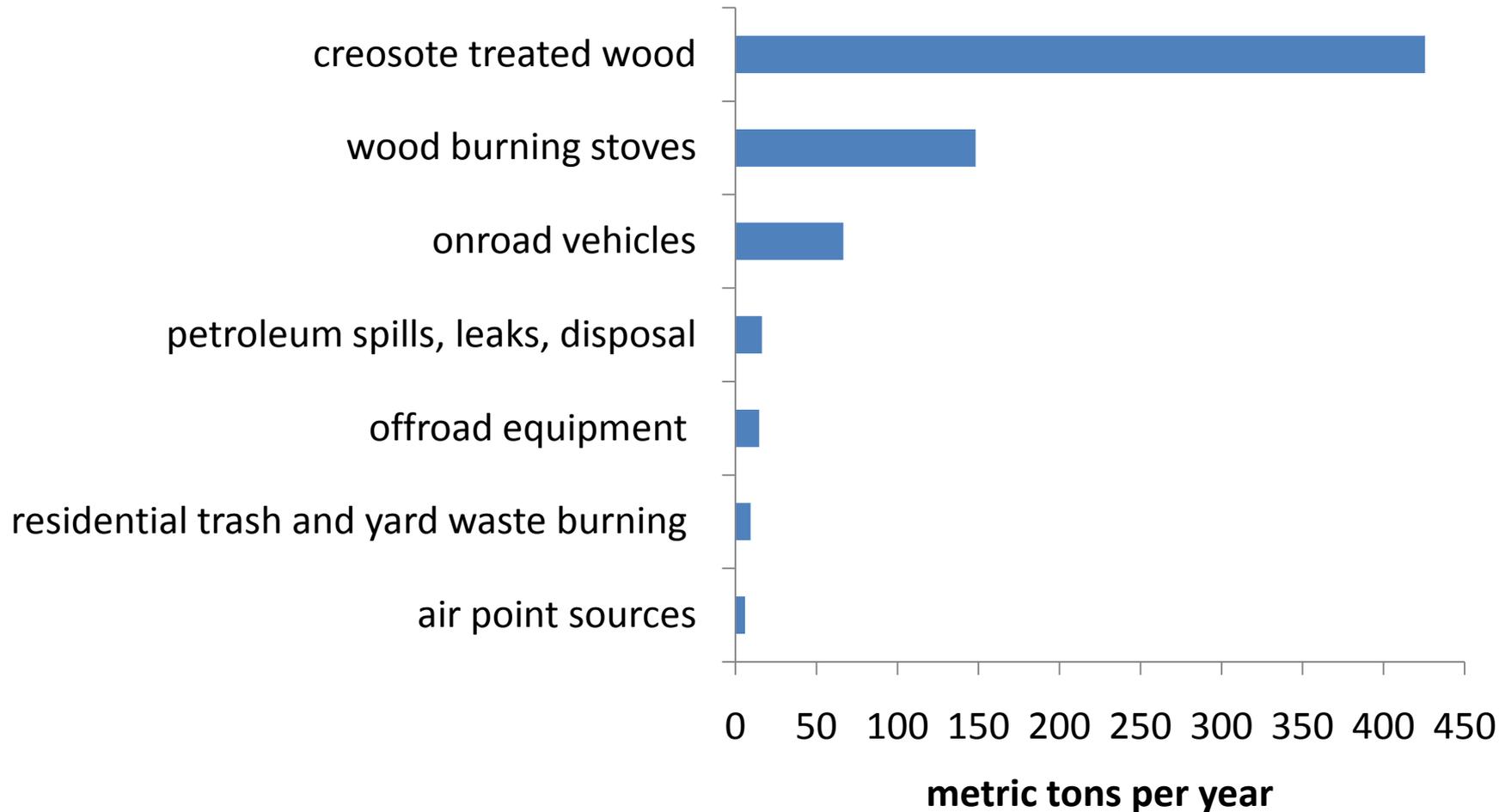
- 2007 legislation
 - Banned penta and octa
 - Nation's first ban on some uses of deca
- Continued Challenges
 - Safer alternatives
 - Continued presence of PBDEs in the environment

2009 Lead CAP Results

- Legislation
 - 2009 ban on lead wheel weights
 - 2010 Commerce requested delegation from EPA for the new rule on lead-safe renovation
- Agency Actions
 - a review of the MTCA cleanup levels for lead in soil
 - HWTR metals project focusing on lead, mercury and cadmium through our pollution prevention planning.
- Continued challenges
 - Lead-based paint is the largest exposure source for children.
 - Widespread use of lead in products.

PAH CAP (in preparation)

Major Sources



PAH Challenges

- Diesel retrofits
- Alternatives to creosote treated wood
- Reduce backyard burning
- Cleaner woodstoves

Next steps

- Monitoring
 - Baseline and trends
- Implementation
 - Lead CAP and lead-based paint
 - Product bans
 - Puget Sound
- Complete PAH CAP
 - Sources, recommended actions
- Start PFOS CAP
- Create a new multi-year schedule of CAPs
- Update the PBT Rule

More Future Steps

- Change current whack-a-mole approach
 - Specific chemical
 - Specific product(s)
- Manufacturers to share responsibility
- TSCA reform
 - Review before use

