

Governor's Toxics Reduction Package



Holly Davies
Department of Ecology
State of Washington

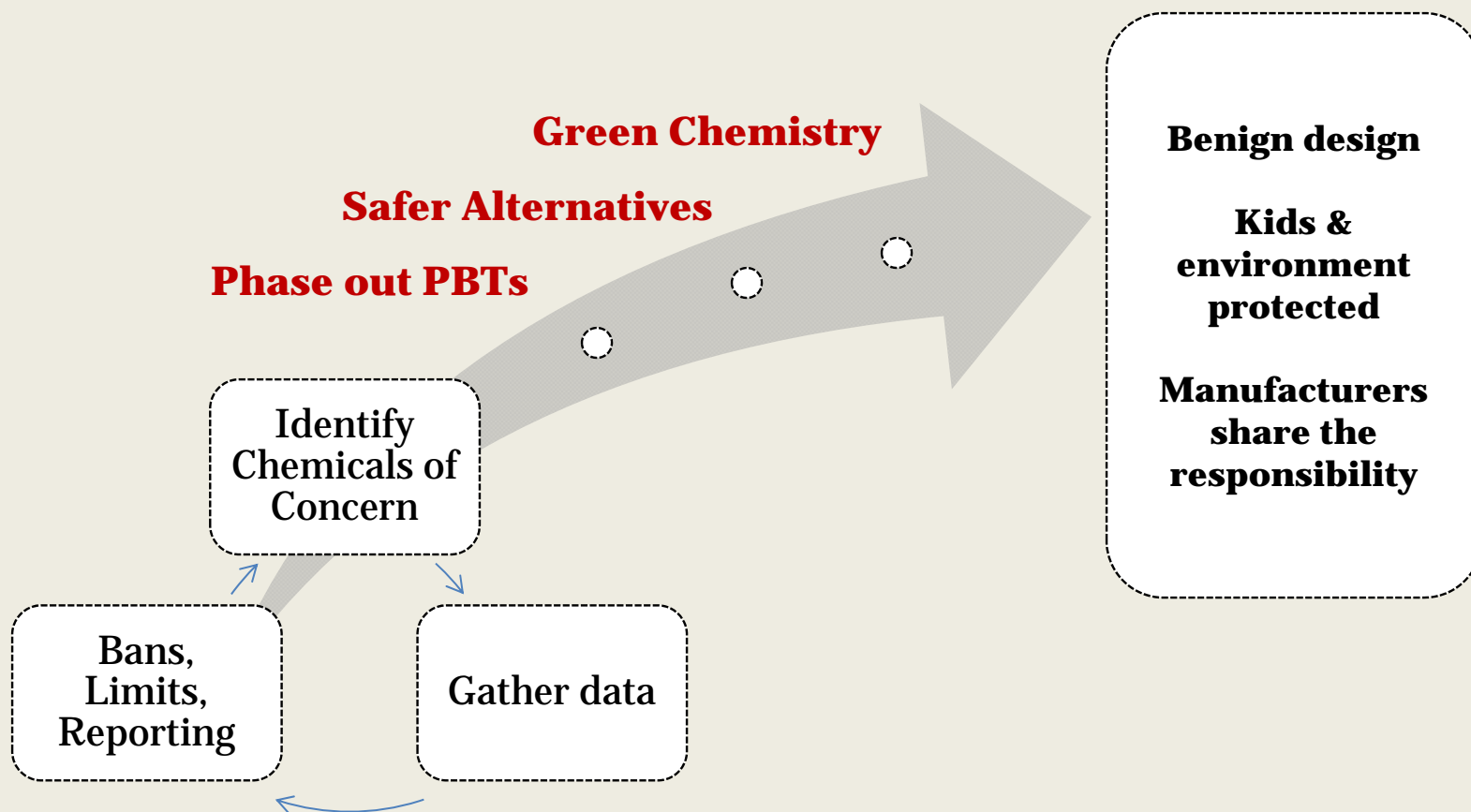
PPRC Regional Roundtable
Oct. 29, 2014



Reducing Toxic Threats



Averting toxic exposures and avoiding future costs is the smartest, cheapest, and healthiest approach.



Ecology's Efforts



>>> **BANS**

PBDEs, including deca-BDE in certain products

Bisphenol A in children's bottles/cups, sports bottles

Copper in brake pads, boat paint

Toxics in packaging

Lead in wheel weights

Coal tar sealants

>>> **DATA**

Children's Safe Product Act reporting rule

Product testing

Brake pad law

>>> **STAKEHOLDER PROCESSES**

Chemical Action Plans for Persistent, Bioaccumulative Toxics (PBTs)

Alternatives assessment guidance

Green Chemistry Center

Governor's Toxics Reduction Package



- Elements of Governor's proposed toxics reduction effort are outlined in July 9 clean water policy brief
- Updating the water quality rule alone does not get at majors sources of toxic chemicals
- Legislative policy proposal
 - WA Dept. of Ecology (Ecology) authority to require alternatives assessments and phase out chemicals by rule
- Toxics reduction work under existing authority
 - Support policy proposal, increase local source control efforts, partner with local governments and business

Toxic impacts to children's learning and behavior

The National Academies of Sciences suggest that 3% of brain development disorders are solely attributable to a toxic environmental exposure and another 25% result from a combination of genetic and environmental factors.

- Developing brain is very sensitive to chemicals early in life (fetal and infancy period)
- Examples: lead, methyl mercury, tobacco smoke, PCBs, organophosphate pesticides, bisphenol A, PBDE flame retardants.

Burden of disease Washington State children



	~Rate	Estimated children affected	Population of children included in survey Q.
Learning disability <i>(ever had)</i>	1 in 10	137,500	3-17 years old
ADD or ADHD	1 in 14	98,000	2-17 years old

Source: 2011-12 National Survey of Children's Health (parent survey of health and well being of children). Conducted by the National Center of Health Statistics Centers for Disease Control and Prevention (CDC) . Childhealthdata.org

Legislative Proposal Elements



Prioritizing Chemicals

- Ecology develops a list of priority chemicals.
- Build on existing lists from the Children's Safe Products Act (CSPA), water quality standards and the persistent, bioaccumulative toxics (PBT) rule
- Ability to add or remove chemicals from the list through rule-making.

Legislative Proposal Elements



Selecting Chemicals for Action Plans

- Select up to 20 chemicals for reporting prior to Chemical Action Plan development
- Identify up to four priority chemicals for CAP development per biennium
- Criteria based on previous laws and rules (CSPA, PBT rule), biomonitoring, environmental monitoring and Department of Health priorities

Legislative Proposal Elements



Chemical Action Plans

- Ecology has experience developing CAPs
 - Mercury, PBDEs, lead, PAHs, PCBs
- Advisory committee engaged in each CAP
- Full suite of recommendations are considered
 - Ban/alternatives assessment, use reduction, green chemistry research, outreach and education, monitoring, product stewardship, environmentally preferred state purchasing*
- Ban recommendation won't go forward without alternatives assessment
 - Existing or required by agency

Legislative Proposal Elements



Alternatives Assessment

- Alternatives assessment required if recommended in the CAP
- Alternatives assessment focuses on specific uses of a chemical
- Minimum requirements of alternatives assessment would be outlined in rule

Legislative Proposal Elements



Authority to Prohibit Sale, Distribution, or Use

- Only recommended if alternatives assessment determines that a safer and feasible alternative exists
- Rule process would be required
- If no safer alternative is available, Ecology would not propose a ban
- Other CAP recommendations would be implemented

Other Elements of the Package



Advancing Safer Products

- A process for identifying and comparing potential chemical and non-chemical alternatives
- Includes hazard, exposure, performance, and cost and availability
- Ecology will conduct alternatives assessments on chemicals where concern is already established
 - Polychlorinated biphenyls (PCBs) in pigments and dyes
 - Phthalate plasticizers

Other Elements of the Package



Green Chemistry

A process to design chemicals/products that work while minimizing hazard and waste

- A competitive process to fund green chemistry innovations
- Develop and integrate green chemistry curricula and materials into college-level chemistry programs
- Increase consumer awareness and availability of green branded products under EPA's Design for Environment program.

Other Elements of the Package



Water Quality Improvement in Watersheds

- Water bodies in Washington are already impaired
- Accelerate actions to bring impaired water bodies into compliance
- Develop control programs for permitted and non-permitted dischargers
- Conduct effectiveness monitoring to measure the success of implemented actions

Other Elements of the Package



Expanded Local Source Control

- Source control in new areas of the state via contracts with local partners
- Source tracing efforts in 3-5 watersheds in the Columbia River
- Point of discharge sampling for comparison with future conditions to assess effectiveness
- Collaboration with industry to find field-tested, cost-effective, safer products and chemicals small businesses can use in the workplace

Other Elements of the Package



Lean and Green Business Assistance

- Provide financial assistance to jump start capital improvements recommended during “lean and green” consultations
- **Examples**
 - Accra-Fab – Liberty Lake - saved more than \$179,000 a year while increasing production capacity
 - Decagon Devices – Pullman – eliminated lead solder
 - <http://www.ecy.wa.gov/programs/hwtr/lean/>

Other Elements of the Package



Stormwater Center Projects

- Continue research on runoff from roofing materials
- Evaluate techniques to reduce stormwater toxicity (e.g. porous asphalt, rain gardens and bioretention facilities),
- Identify hot-spot areas where salmon die before spawning
- Evaluate whether tires play a role in producing stormwater toxicity

Other Elements of the Package



Preventing Early Life Exposure to Toxics

(Washington State Department of Health)

- Review exposure information to assess priority chemicals
- Identify data gaps for priority chemicals
- Work with health educators on prevention
- Biomonitoring to assess effectiveness

Resources



Holly Davies

Reducing Toxic Threats
Washington State Dep. of Ecology
(360) 407-7398
holly.davies@ecy.wa.gov

Robert Duff

Governor's Legislative Affairs and Policy Office
State of Washington
(360) 902-0532
robert.duff@ecy.wa.gov

PBT Initiative and Chemical Action Plans

<http://www.ecy.wa.gov/programs/swfa/pbt/>