


A Strategy for Reducing Toxics in Oregon

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Oregon Environmental Council

Oldest statewide environmental non-profit, founded in 1968.


- We bring Oregonians together for a healthy environment.
- OEC seeks proactive solutions that benefit all Oregonians.
- Strategic Focus:
 - Protect kids from toxics
 - Stop global warming
 - Keep Oregon's rivers clean
 - Promote healthy food & farm
 - Ensure sustainable economies



Senate Bill 737:

Addressing the Discharge of Persistent Pollutants into Oregon's Waters

- June '10: DEQ finalize list of P₃ chemicals; point, nonpoint and legacy sources of P₃ chemicals; provide information on source reduction and control methods that can reduce discharges
- July '11: Municipal wastewater treatment plants develop toxics reduction plans to reduce P₃ occurring in their effluent at levels above "trigger levels" set by DEQ.



SB 737 P₃ List


Priority Persistent Pollutants

- Pesticides and Herbicides
- Consumer-Related Products
- Halogenated Flame Retardants
- Perfluorinated Surfactants
- Industrial Chemicals
- Inorganic and Organic Metals
- Polycyclic Aromatic Hydrocarbons (PAHs)
- LEGACY PERSISTENT POLLUTANTS
 - Polychlorinated Naphthalenes
 - Dioxins / Furans
 - Polychlorinated Biphenyls




What are the Sources of these chemicals?

- ✓ Products washed down the drain
- ✓ Erosion and runoff from surfaces and stream banks
- ✓ Combustion activities
- ✓ Global uses



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“Our communities use and dispose of literally thousands of chemicals resulting from manufactured goods we use and consume, choices we make in our daily routines, and products available at stores throughout the state.”

—Senate Bill 737: Development of a P³ List for Oregon *Executive Summary*



P³ Chemicals & Consumers

- *Pharmaceuticals & Personal Care Products*
 - fragrances
 - RX
 - Sunscreen



Even More— P³ Chemicals & Consumers

- Consumer related chemicals
 - Triclosan, musks
- Halogenated Flame Retardants
 - PBDEs
- Current use pesticides
- Perfluorinated Surfactants
 - (PFOS and PFOA)
- PAHs
 - Incomplete combustion: driving, wood stoves
- Metals
 - cadmium, lead, selenium, arsenic & mercury



POLLUTION IN PEOPLE

A Study of Toxic Chemicals in Oregonians

Tested 10 Oregonians for the presence of 6 classes of toxic chemicals in their bodies.

Oregon Pollution in People Project

- Biomonitoring: Directly measuring for chemicals in people's bodies.
 - Can chemicals in everyday products end up in people?
- Tested 10 Oregonians for 6 classes of toxic chemicals:
 - Phthalates
 - Mercury
 - Perfluorinated compounds (PFCs)
 - Organophosphate Pesticides
 - Bisphenol-A
 - PCBs



Key Findings

- At least 9 and as many as 16 chemicals detected
- 29 chemicals tested:
 - 6 perfluorinated chemicals (PFCs);
 - 6 phthalates;
 - Mercury;
 - 4 OP metabolites;
 - bisphenol A; and
 - PCBs
- All contaminated with PCBs, mercury, PFCs, and phthalates.



Health Effects

An example: Bisphenol A (BPA):

-Over 90% of gov. funded studies show significant negative health affects at low doses (more than 100 studies on the subject)

-All industry funded studies claim the substance is safe.

- No one can say for sure these chemicals are causing major illness.
- ...But scientific evidence is mounting.
- Exceptional changes: cancer, obesity, diabetes, autism, infertility, asthma.

When worlds (or goals) collide...

- Focus on consumer P3 chemicals
 - Reduce harm to humans
 - Reduce downstream accumulation
 - Achieve reductions without additional treatments
 - BONUS—opportunities to address multiple chemicals
 - Cleaning products
 - Household pesticides



Education, Outreach, Technical Assistance, and Policy



Education, Outreach, Technical Assistance, and Policy

- Love Your River
- Eco-Healthy Child Care Program
- Healthy Homes Check up
- Food with Your Fork
- Stormwater Workshops



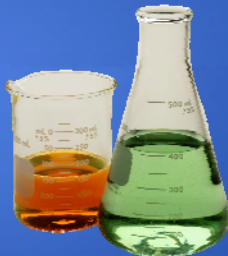
Love Your River Project

- Online toolkit coupled with a multifaceted outreach campaign to urban and suburban residents, fishers, boaters, and other members of the public.
- Website launch in September
 - REI is donating gear incentive prizes & including the tips in their monthly e-newsletter
 - Tips range from proper RX disposal, warnings on triclosan use, reduce driving, etc
- Partnership opportunities
 - Include monthly Love Your River tips in print or electronic newsletter, or in bill inserts
 - Link to the LoveYourRiver.org website
 - Host a presentation
- http://www.youtube.com/watch?v=pw6YqeDZp_g



Education, Outreach, Technical Assistance, and Policy

- Green chemistry reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemicals and chemical products.
- Green chemistry is used to create products and processes that are safer for workers, the public, and the environment.



Education, Outreach, Technical Assistance, and Policy



Upstream Approaches to Toxic Reduction



Chemical Policy Reform

- Take immediate action on the most dangerous chemicals
- Hold industry responsible for the safety of their chemicals & products
- Require chemical ingredient disclosure all along the supply chain
- Use the best science to protect all people and vulnerable groups



Additional Strategies to Reduce Use and Release of P3 chemicals

- Procurement policies: child cares, schools, local governments, businesses
 - Contract preference for SB737 "free" products
 - Preferred vendor status for SB 737 "free" product lines
- Targeted consumer education campaigns and projects
 - Point of purchase displays with stores
 - Partnering with law enforcement on drug take-back programs
- Community pledges/challenges:
 - "Salem businesses and neighborhoods support toxic-free products"



Upstream Approaches to Toxic Reduction

