



# Precautionary Principle

Implications for PBDE regulation in the EU & beyond

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Renee Hackenmiller-Paradis, MPH, PhD  
Environmental Health Program Director  
Oregon Environmental Council

Columbia River Toxics Reduction Workshop - Feb. 25, 2010  
Reducing Flame Retardants/PBDEs in the Columbia River Basin

*The Oregon Environmental Council advances innovative, collaborative solutions to Oregon's environmental challenges for today and future generations.*



# What is the Precautionary Principle?

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- "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."
- *The Wingspread Statement on the Precautionary Principle*  
*January 1998*

# Precautionary Principle – *Translation*

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# What is REACH?

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- European Union regulation in effect June 2007
  - Registration, Evaluation, Authorisation & restriction of Chemicals.
  - June 2007
- Requires producers & users of chemicals to register them and provide information on their:
  - Production
  - Use
  - Hazard
  - Exposure potential
- For chemicals identified as substances of very high concern, will only allow their use if explicitly authorized.



# REACH:

## No data = no market

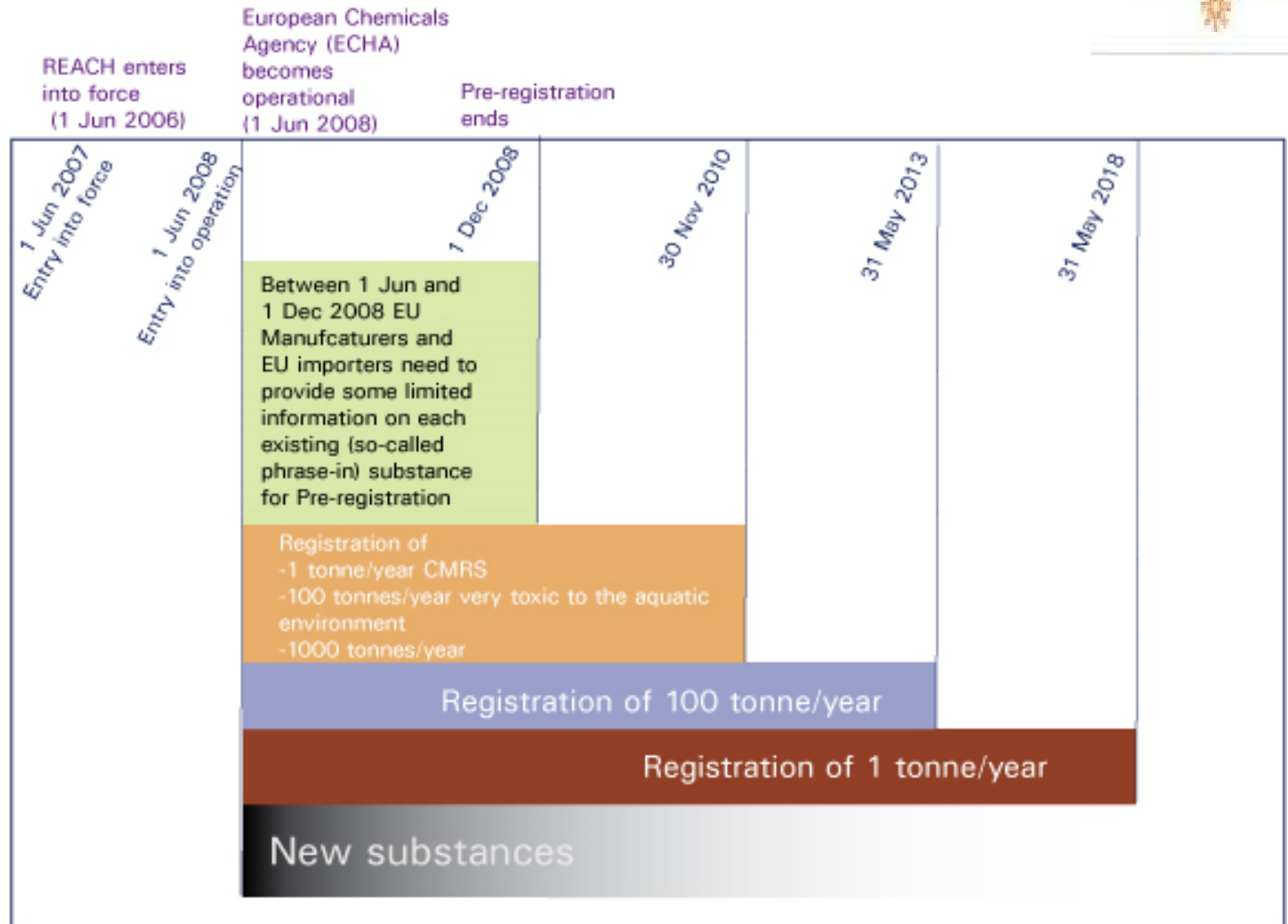
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- Amount of data required is proportionate to amount of substance manufactured or supplied
  - Additional data required for certain classes of chemicals.
- No registration = no data = no market!

# REACH Timeline



REACH requires registration of all substances manufactured in, or imported into, the EU market in quantities of 1 tonne or more per year.  
Pre-registration period: 1 Jun to 2007 to 30 Nov 2008





# Is REACH a precautionary policy?

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- European Commission states that REACH is *underpinned by the Precautionary Principle*.
- However, not evident how this is crystallized in the REACH process
- Additionally, not clear how REACH proactively supports development of safer alternatives, a key component of precaution.



# Key goals of the Precautionary Principle

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- *Taking precautionary action before scientific certainty of cause and effect.*
- *Setting goals.*
- *Seeking out and evaluating alternatives.*
- *Shifting burdens of proof.*
- *Financial responsibility.*
- *The duty to monitor, understand, investigate, inform, and act.*
- *Developing more democratic and thorough decision-making criteria and methods.*





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# EU and PBDEs

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- As of August 2004 (pre-REACH) has banned the use of penta- and octa-BDEs in all products, following earlier individual phase-outs and restrictions
  - Sweden
  - Denmark
  - Germany
  - Netherlands
- Phased out the use of deca-BDE in electronics as of July of 2006.

# Deca-BDE phase out in electronics...

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- **Deca-BDE in consumer electronics represents approximately 80 % of the chemical's commercial use**
- **BUT Deca-BDE is also used in...**
  - **Plastics**
    - coffee makers, plastic automotive parts, lighting panels, PVC wire and cables, electrical connectors, fuses, housings, boxes and switches, lamp sockets, waste-water pipes, underground junction boxes, circuit boards, smoke detectors
  - **Textiles**
    - industrial drapes, carpets, automotive seating, aircraft and train seating
  - **Rubber**
    - Conveyor belts, foamed pipes for insulation, rubber cables
  - **Paints and lacquers**
    - Marine and industry protective lacquers and paints



# Deca-BDE as a “substance of equivalent concern” under REACH

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- The Environment Agency of England and Wales has asked the EU’s Advisory Committee on Hazardous Substances to consider whether there is a case for treating deca-BDE as a “substance of equivalent concern” as defined by the REACH Regulation.
  - February 2010
- The fact that deca-BDE has been shown to break down to substances that are known to be toxic (penta-, octa-), could be sufficient to control it under this REACH clause.



Are there policy mechanisms that can address breakdown products in single chemical bans or restrictions?



# Summary

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- Better Safe than Sorry
- REACH will address some precautionary tenets
  - Compare to Canada and US
- PBDEs more closely scrutinized in EU-
  - Is this enough to move the market?

# Thank You.

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[www.oeconline.org](http://www.oeconline.org)

Renee Hackenmiller-Paradis, MPH, PhD  
Environmental Health Program Director

[reneep@oeconline.org](mailto:reneep@oeconline.org)

503.222.1963 x110

**Not That Innocent:** A Comparative Analysis of Canadian, European Union and United States Policies on Industrial Chemicals.

APRIL 2007

RICHARD A. DENISON, PH.D.

[http://www.edf.org/documents/6149\\_NotThatInnocent\\_Fullreport.pdf](http://www.edf.org/documents/6149_NotThatInnocent_Fullreport.pdf)

