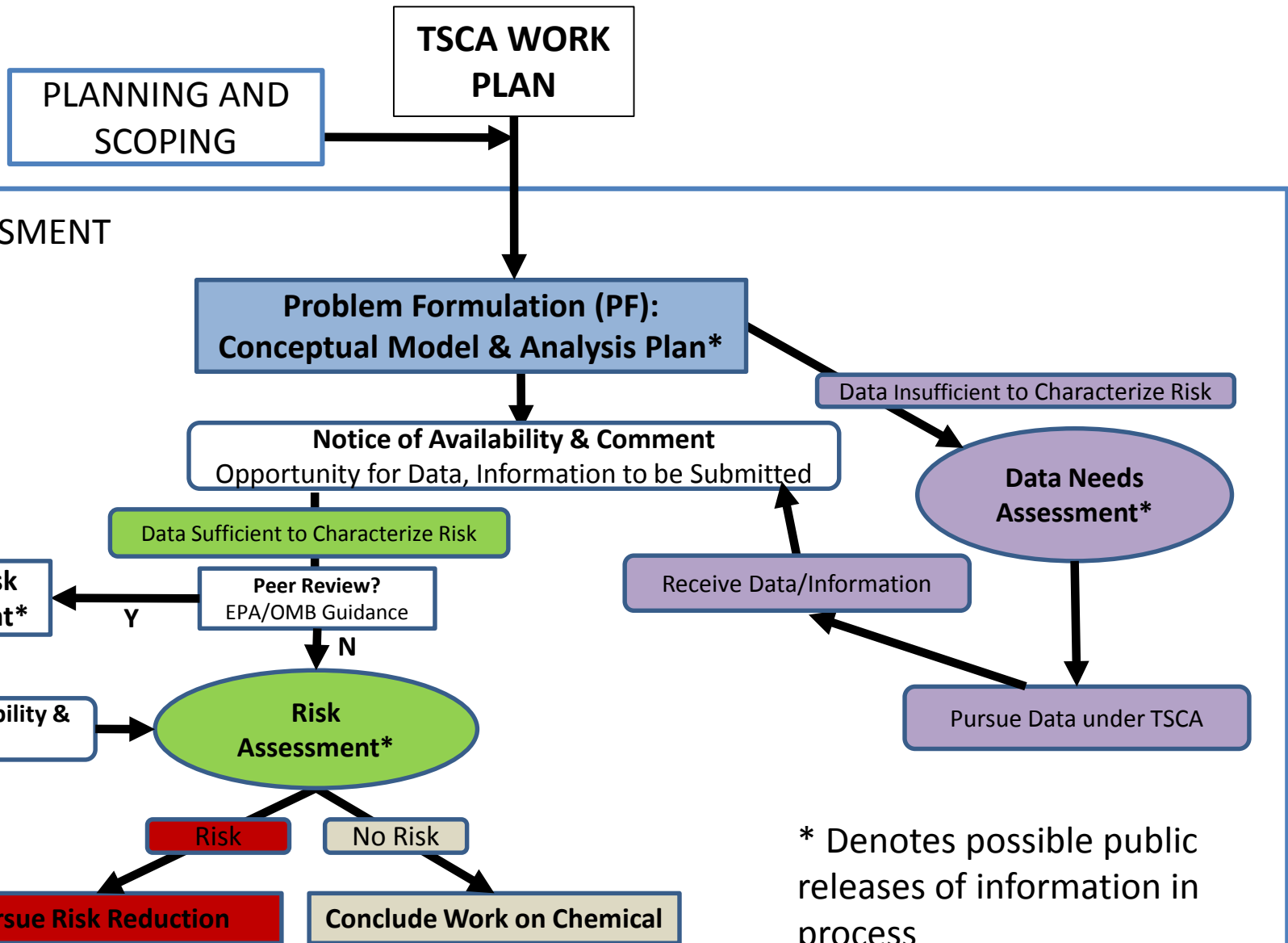


# Resource Needs and Policy Reform Working Group

- *EPA Public comment period on flame retardant risk assessments*
- *TSCA Reform*

**October 6, 2015 – Columbia River Toxics Reduction  
Working Group Meeting, The Dalles, Oregon**  
- Dianne Barton, CRITFC Water Quality Coordinator

# TSCA Work Plan Assessment Process



\* Denotes possible public releases of information in process

# FLAME RETARDANTS - OVERVIEW

“General population” exposure to different flame retardants clusters includes assessment of oral exposure.

- Oral exposures will include estimates of central tendency and high end (95<sup>th</sup> percentile)
- OPPT will use Agency guidance on fish consumption for different populations
- **High end exposure scenarios are derived to represent subsistence fish eaters.**
- In addition to fish consumption OPPT plans to aggregate exposure from drinking water, incidental dust ingestion taking into account hand to mouth behavior and for children also aggregating mouthing of potential FR containing foam products.

# EPA Assessment for TSCA

- Seeking public comment on **Problem Formulation and Initial Assessment** – the analytical phase of the assessment. The problem is defined and a plan for analyzing risk is determined:
  - Three flame retardant clusters
    - Chlorinated Phosphate Esters – in furniture foams, textiles, paints and coatings
    - Cyclic Aliphatic Bromides – polystyrene foams, products, textiles, paints, coatings
    - Tetrabromobisphenol A (TBBPA) flame retardant in plastics and electronics
  - Comments due October 19, 2015 – Irina Myers  
[myers.irina@epa.gov](mailto:myers.irina@epa.gov)

# Problem Formulation: Cyclic Aliphatic Bromides Cluster (HBCD)

- One principal cluster member HBCD has sufficient data to evaluate existing sources, exposures and hazards
- Sources: Manufacturing and processing; commercial and consumer use of extruded and expanded polystyrene foams (EPS/XPS), polystyrene (PS) products, textiles, paints and coatings
- Exposure Pathways: workers exposed to dust (oral) during manufacture; general population exposed to dust (oral) and water/fish impacted by manufacture; consumers exposed (oral) to dust PS consumer products;
- Exposure Analysis: Modeling of aggregate exposures fish, water, dust and mouthing also considered as high-end scenario
- Human Health Hazards: noncancer
- Ecological Hazards: aquatic, soil and avian organisms

# EPA Assessment for TSCA

- Seeking public comment on **Data Needs Assessment** – data gaps so significant as to prevent conducting meaningful risk assessment:
  - Brominated Phthalates (TBB and TBPH)
    - Chlorinated Phosphate Esters – in furniture foams, textiles, paints and coatings
    - Cyclic Aliphatic Bromides – polystyrene foams, products, textiles, paints, coatings
    - Tetrabromobisphenol A (TBBPA) flame retardant in plastics and electronics
  - Comments due October 19, 2015 – Irina Myers  
[myers.irina@epa.gov](mailto:myers.irina@epa.gov)

# Data Needs Assessment: Brominated Phthalates Cluster (TBB\*/TBPH)

- 7 Cluster members: TBB & TBPH are on the TSCA Work Plan; 5 additional chemicals considered in problem formulation; very little or no data from these chemicals help inform assessment of TBB or TBPH
- Sources: Manufacturing and processing; commercial and consumer use of polyurethane foams (PUF)
- Exposure Pathways: workers exposed to dust (oral) during manufacture; general population exposed to dust (oral) and water/fish impacted by manufacture; commercial workers and consumers exposed (oral) to dust from PUF installation and use
- Exposure Analysis: primarily dust exposure pathways
- Human Health Hazards: noncancer; but data insufficient to quantify
- Ecological Hazards: aquatic, soil and avian organisms; but data insufficient
- **Data Needs Assessment:**
  - Numerous gaps in toxicity data and exposure data
  - Testing conducted on limited commercial mixtures and not all constituents of mixtures; attribution of toxicity uncertain for commercial mixtures (e.g., Fire master 550)

\*Regulated under Section 5



# FLAME RETARDANTS: RELEASES

- Data Needs Assessment 2015
  - Brominated Phthalates Cluster (TBB/TBPH)
  - Public comment closes December 16, 2015
- Problem Formulation 2015:
  - TBBPA (Tetrabromobisphenol A)
  - CPEs (Chlorinated Phosphate Esters Cluster (TCEP))
  - HBCD (Hexabromocyclododecane)
  - Public comment closes October 19, 2015
- Listed additional non-halogenated flame retardants on TSCA work plan in 2015 --TPP and ITPP
- Rollout: 2015
  - Opportunity to comment or provide input on each of these chemicals or clusters through consultation.



# TSCA Reform

- S. 697: Frank R. Lautenberg Chemical Safety for the 21st Century Act. Senator Tom Udall.
- As of September 28, 2015 the bill has 55 cosponsors (33 Republicans, 22 Democrats).
- H.R. 2576: TSCA Modernization Act of 2015 Rep. John Shimkus [R-IL15]
- Introduced: May 26, 2015
- Passed House: Jun 23, 2015