



Contaminants of Emerging Concern



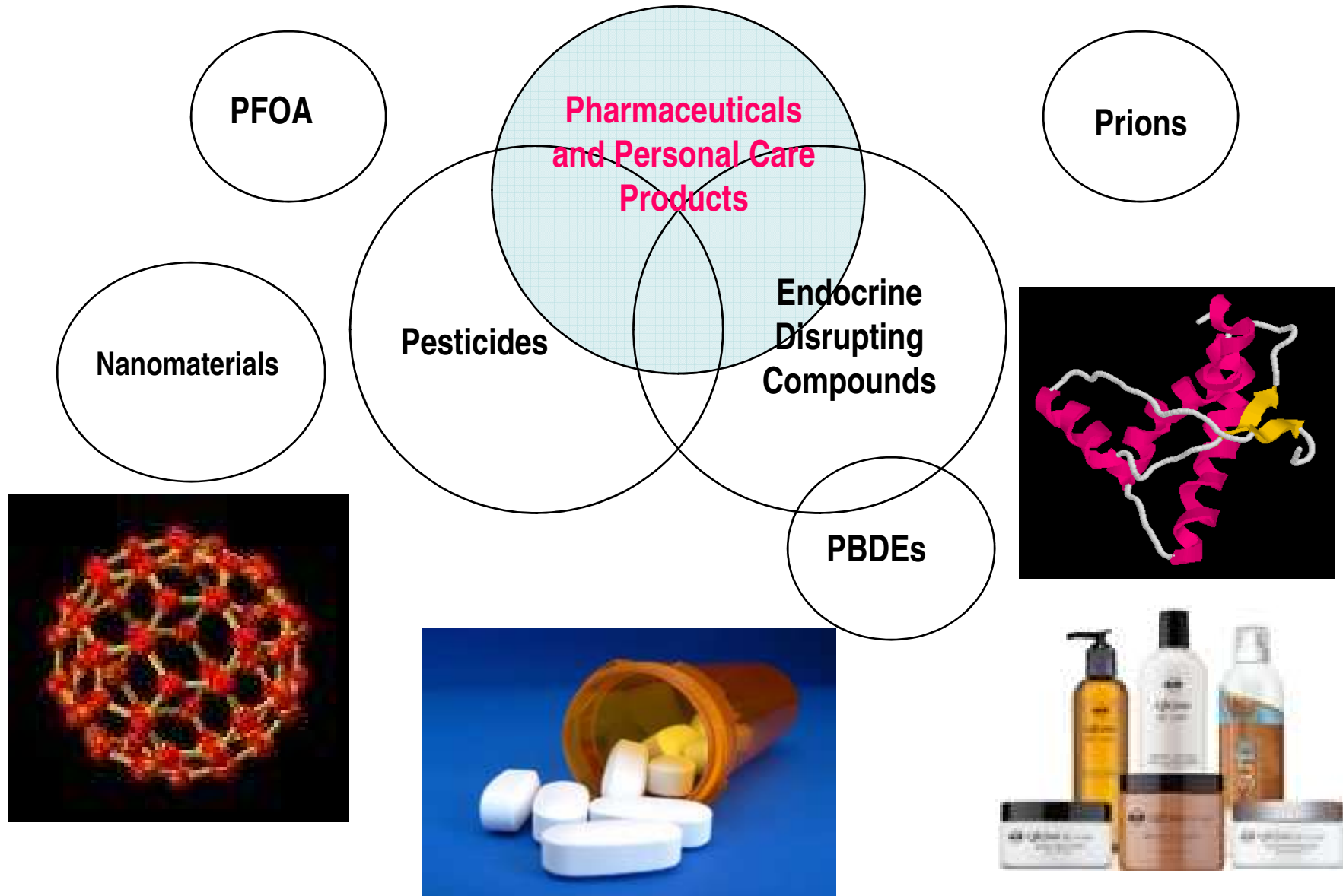
Environmental Health Summit

November 10, 2008

Suzanne Rudzinski, Deputy Director
U. S. Environmental Protection Agency
Office of Water
Office of Science and Technology
Washington, DC



Contaminants of Emerging Concern in Water*



*Not an exhaustive list.

EPA's Strategy

EPA is pursuing a four-pronged strategy:

1) Strengthening Science

- Identifying potential contaminants of concern in surface water and drinking water
- Identifying information gaps and targeting collection of needed effects, concentration, risk, methods, and occurrence information

2) Improving Public Understanding

- Providing information to help the public understand the issues and inform policy choices

3) Identifying Partnerships and Promoting Stewardship Opportunities

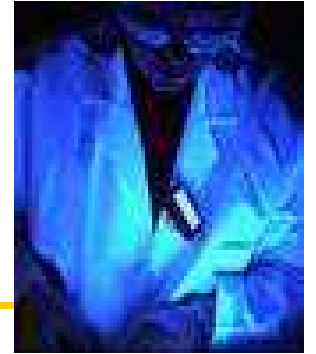
- Working to prevent pharmaceuticals from entering water

4) Taking Regulatory Action When Appropriate

- Using EPA's regulatory tools when sufficient information exists



Strengthening Science Methods Development



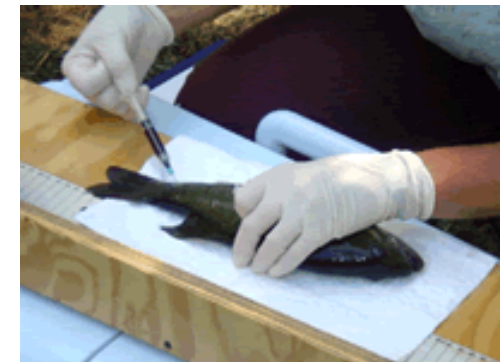
- Analytical methods are lacking for many contaminants of emerging concern
- EPA Office of Water developed and released analytical methods for ~100 pharmaceuticals, personal care products, steroids, and hormones in water and biosolids.
- Currently developing drinking water analytical methods



Strengthening Science Occurrence



- EPA is conducting studies to understand the potential occurrence of pharmaceuticals in wastewater influent, effluent, biosolids, and fish tissue:
 - Publicly Owned Treatment Works (POTW) Study (2009)
 - Fish Tissue Pilot Study of PPCPs in (2008)
 - Expanded Fish Tissue Study (2011)
 - National Targeted Sewage Sludge Survey (2008)
 - Grants
 - Duke University (results undergoing review)
 - University of Florida (2010)



Strengthening Science

Risk to Human Health and Aquatic Life

- National Academy of Sciences (NAS) to address potential risks to human health.
 - NAS Workshop: December 11 – 12, 2008.
- SAB review of methodology for Aquatic Life Criteria for Endocrine Disruption



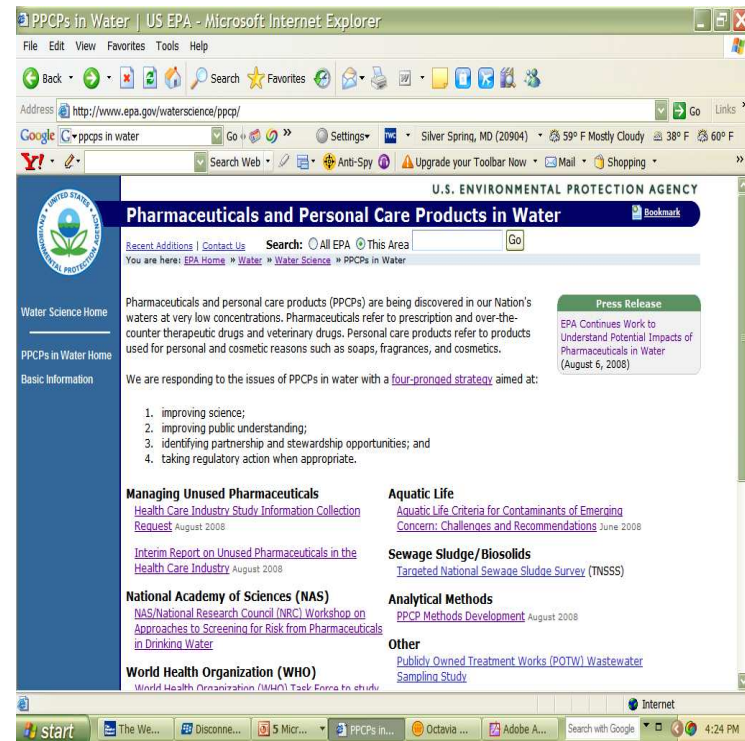
Improving Public Understanding

- Important to get information to the public as it becomes available

- Launched PPCPs In Water website

(www.epa.gov/waterscience/ppcp)

-- links with PPCP Research website (www.epa.gov/ppcp)



Identifying Partnerships and Opportunities for Stewardship

- ONDCP/EPA/HHS issued drug disposal guidelines (2/07) – currently being revised
- Stewardship examples supported by EPA:
 - Grant to ARCHS in St. Louis (\$150K) for take-back of non-controlled, unused medicines at pharmacies
 - Grant to University of Maine (\$150K) for mail-back of unused medicines w/law enforcement involvement
- Pharmaceuticals in the Environment (PiE)
Workgroup to coordinate federal research efforts



Identifying Partnerships and Opportunities for Stewardship

- Letters to state environmental & public health directors)
- Stakeholder listening sessions
 - Environmental groups/NGOs
 - Drinking water/Wastewater Utilities
 - State Environment and Public Health Associations
 - Agricultural Associations
- Major Stakeholders' Recommendations/Concerns
 - Human Health Effects
 - Risk Communication
 - Take Back Programs
 - Drug Disposal Policy
 - Monitoring programs





Taking Regulatory Action when appropriate

- If sufficient information exists, we are taking action
 - Health Care Industry Study
 - Interim Report on Unused Pharmaceuticals in the Health Care Industry (August 2008)
 - Issued FR on intent to conduct broad survey of health care industry
 - Ambient Water Quality Criteria for Aquatic Life
 - National Primary Drinking Water Standards
 - Third Contaminant Candidate List (CCL3)
 - Unregulated Contaminant Monitoring Rule





Contaminant Candidate List 3

- Draft CCL3 published on February 21, 2008
 - 104 contaminants
- 90 day comment period closed on May 21, 2008
- Public commenters identified PPCPs as one of key issues
- OW solicited comments on pharmaceuticals from State Departments of Health and Environment
- OW is evaluating the data provided by commenters
- Final CCL3 scheduled for publication in August 2009

Unregulated Contaminant Monitoring Rule

- Drinking Water Occurrence
 - Statistical survey of systems
 - Limited to no more than 30 contaminants
 - Monitoring: January 2008 – January 2010
- EPA is evaluating contaminants for inclusion on UCMR3



Unique Challenges Ahead

- Analytical methods
- Risk assessment
- Mixtures
- Intersex fish

