CONTAMINANTS OF CONCERN IN THE COLUMBIA RIVER BASIN

January 29, 2020

Willamette River Toxics Reduction Partnership Meeting

INTRODUCTION

Columbia R. Basin Restoration Act Working Group –
Contaminants of Concern (CoC) Subgroup

Agenda:

1. Background on 2007 prioritization work
2. Overview of effort to update contaminants of concern (Aug. 2019 – Present)
3. Feedback & discussion

2007 PRIORITIZATION FACTORS

1. Is it recognized as an existing problem?

(See "Evidence of the Problem" column in accompanying Excel spreadsheet)

- Is it listed on the 303 (d) list?
- Does a TMDL exist for this contaminant?
- Is a Persistent, Bioaccumulative and Toxic Chemical Action Plan being developed?
- Have concentrations of concern been detected in the Columbia River Basin?
- Is emerging science identifying this contaminant as a "new" concern?

2. Is it an ecological threat, a human health threat, or both?

(See "Biological Effects" column in accompanying Excel spreadsheet)

- Are there fish advisories associated with this contaminant?
- Is there evidence of this contaminant in fish and wildlife?
- Is it identified as persistent, bioaccumulative and toxic?
- Is the contaminant a suspected or known carcinogen?
- Is the contaminant identified as a suspected or known endocrine disrupter?
- Are noncancer effects associated with this contaminant?

3. Is there an implementation plan/reduction strategy in place?

(See "Reduction Strategies" column in accompanying Excel spreadsheet)

- Does a TMDL exist for this contaminant?
- Is a Persistent, Bioaccumulative and Toxic Chemical Action Plan being developed for it?
- Is there a Pesticide Stewardship Program developed to address it?
- Has the contaminant been addressed under EPA's Toxic Substances Control Act (TSCA)?
- Is this contaminant included in EPA's National Strategic Plan for the Columbia River?
- Are there other implementation/reduction strategies taking place for this contaminant?

2007 PRIORITIZATION OF TOXICS

Tier I (highest priority)	Tier II	Tier III
• DDT (and metabolites) • PCBs • Mercury (including methylmercury) • PBDEs	• PAHs • Arsenic • Dioxins/furans • Lead • Organophospate Insecticides (azinphos methyl, chlorpyrifos, diazinon) • Copper • Estrogenic compounds (Bisphenol A, AHTN, natural and synthetic estrogens, Nonylphenol)	• Organochlorines (including alpha BHC, aldrin, dieldrin, chlordane) • Trace elements • Current use pesticides (including carbamates, triazine herbicides, fipronil) • Pharmaceuticals and Personal Care Products • Other wastewater compounds (plasticizers, detergents, surfactants) • Hormones • Synthetic pyrethroids • Phthalates

Goal:

Identify highest priority toxics for the Columbia River Toxics Reduction Working Group.

The 2009 State of the River Report summarized existing information on the Tier I pollutants.

Source: https://www.epa.gov/columbiariver/prioritization-toxics-columbia-river#documents

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THANKS TO THE COLUMBIA RIVER CONTAMINANTS OF CONCERN SUBGROUP

BENEFITS OF UPDATING THE COC LIST

- Align with state priority lists
- Help prioritize monitoring, outreach, or clean-up projects
- Communicate to management/the public
- Guide collaboration with partners on the ground
- Connect to TMDL implementation efforts
- Identify current data gaps/needs

Pathways	Actions				
	Keep Sediment in Place	Reduce Runoff/Discharges	Source Reductions	Clean-up Contamination	Other?
Agriculture	DDT				
Forestry		Glyphosate			
Mining			Cyanide		
Urban/Stormwater				PAHs	
Wastewater Treatment Plants			PFAS		
Industrial Use		PCBs			
Air Deposition	Mercury				

Note: the above graphic for example purposes only.

UPDATED FRAMEWORK STRUCTURE

NEXT STEPS

- Incorporate updates/additions
- Final subgroup call – February (TBD)
- Finalize framework & supplemental spreadsheet
- Present framework at Columbia River Basin Restoration Act Working Group Meeting in May

FEEDBACK & DISCUSSION

WHAT DO YOU LIKE ABOUT THE FRAMEWORK?

WHAT GIVES YOU HEARTBURN?

WOULD YOU USE THE LIST?
IF SO, HOW?

THANKS FOR YOUR TIME AND ENGAGEMENT!

We want to hear from you:

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