TSCA Allowable PCBs "an unreasonable risk to health or the environment?"



#### PAPER COMPANY

Papermakers since 1911.

# **Federal Regulations**

SUBCHAPTER R - TOXIC SUBSTANCES CONTROL ACT, PART 761

- Manufacturing and processing of PCBs was banned under TSCA in 1979
- Image: pigments that contain 50 ppm or greater PCB may be processed, distributed in commerce, and used in a manner other than a totally enclosed manner until January 1, 1982...40 C.F.R. § 761.3 (g), Reserved after 1999
- The concentration of inadvertently generated PCBs in products leaving any manufacturing site or imported into the United States must have an annual average of less than 25 ppm, with a 50 ppm maximum" 40 C.F.R. § 761.3 (1)

### **PCB Regulatory Paradox**

Reference	PCB Concentration (ppm)	Magnitude Difference		
Federal TSCA Allowance	50			
EPA WQS Imposed on WA	0.00000007	7,142,857,143		
*Spokane Tribe WQS	0.000000013	38,461,538,462		

\*Adopted a Fish Consumption Rate of 865 grams/day (1.9 pounds per day), currently the most stringent water quality standard in the nation

# **Past Efforts**

- 1. Ad-Hoc Advocacy Coalition (Ongoing)
- 2. TSCA Advanced Notice of Proposed Rulemaking (2010)
- 3. Congressional Engagement (2011 Present)
- 4. State & Tribal Petitions (2012 to Present)
- 5. SRRTTF & iPCB/TSCA Workgroup
- 6. SB 6086, Procurement Policy (2014)
- 7. Government Accountability Office (2016)
- 8. Engagement with EPA (Ongoing)
- 9. SB 5369, WA to Petition EPA (2023)



Resolution Number 12-9 Approved August 28, 2012 Colorado Springs, Colorado

As certified by R. Steven Brown Executive Director

#### PCBs IN PRODUCTS

NOW, THEREFORE, BE IT RESOLVED THAT THE ENVIRONMENTAL COUNCIL OF THE STATES (ECOS):

Recommends that U.S. EPA, industry, and states work together on alternatives to chlorinated solvents used in pigment and ink manufacturing to develop manufacturing processes in the next five years that do not generate PCBs, while making sure the alternatives do not themselves cause significant environmental impacts of their own;

Supports U.S. EPA's proposed rulemaking to reassess the current use authorizations for PCBs, which includes products with PCBs and products with inadvertently-generated PCBs.<sup>6</sup> U.S. EPA should move forward with this rulemaking to better protect human health and the environment.



#### 2014 Winter Convention Ferndale, WA

**RESOLUTION #14 - 17** 

#### "URGING THE ENVIRONMENTAL PROTECTION AGENCY TO PROHIBIT THE USE OF PCBs in any Amount in New Products"

THEREFORE BE IT RESOLVED, that ATNI opposes the EPA's continuing policy allowing up to 50 ppm of PCBs in new sources; and

**BE IT FINALLY RESOLVED**, that EPA should revise its rules so that the amount of PCBs authorized for commercial use is zero (0), and should seize every opportunity to reduce the use and production of toxics, before they are released into the environment.



#### NATIONAL CONGRESS OF AMERICAN INDIANS

The National Congress of American Indians Resolution #ANC-14-024

TITLE: Urging the U.S. Environmental Protection Agency to Prohibit the Use of PCBs in New Products

NOW THEREFORE BE IT RESOLVED, that NCAI opposes EPA's continuing policy allowing up to 50 ppm of PCBs in new sources and EPA should revise its rule so that the amount of PCBs authorized for commercial use is zero (0), and should seize every opportunity to reduce the use and production of toxics *before* they are released into the environment; and

Confederated Tribes of the Umatilla Indian Reservation

Board of Trustees & General Council



46411 Timíne Way • Pendleton, OR 97801 (541) 276-3165 • fax (541) 276-3095 info@ctuir.org • www.umatilla.nsn.us

Continuing to permit PCBs in amounts of up to 50 ppm is not supported by any public health-based rationale. The existing rules are more than thirty years old and by EPA's own admission, are "based almost entirely on economic considerations."<sup>4</sup> PCBs already contaminate our fish and our water. They are a serious problem in the Pacific Northwest and throughout the nation. Only a few months ago another fish advisory was issued warning of PCBs in the Columbia River, in the primary zone where tribal fishing takes place. PCBs bioaccumulate. They do not degrade, nor do they dissipate. No amount is "too small" or safe. Any new sources merely exacerbate the already-existing problem of excessive PCBs in the environment. Allowing more only adds to the overall burden, and does nothing to diminish that burden.

# TSCA Section 9 Relationship to Other Federal Laws

Section 9 of the Toxic Substances Control Act provides that the EPA Administrator shall consult and coordinate with the heads of other appropriate federal executive departments or agencies to achieve maximum enforcement of TSCA while imposing the least burden of duplicative requirements. The Administrator is also directed to coordinate actions taken under TSCA with actions taken under other federal laws administered by the EPA, such as the <u>Clean Air Act</u> and the <u>Clean Water Act</u>. If risk is already managed effectively under a different statute, regulation under TSCA is not necessary.

# TSCA Section 9 Relationship to Other Federal Laws

With regard to other statutes administered by the Agency, Section 9 directs that if the Administrator determines that a risk to health or the environment associated with a chemical substance or mixture could be eliminated or reduced to a sufficient extent by actions taken under those other federal laws, the Administrator shall use those other laws <u>unless the Administrator determines, in the Administrator's discretion,</u> <u>that it is in the public interest to protect against such risk by actions</u> <u>taken under TSCA.</u>

# **TSCA Section 21 Petition**

Under TSCA section 21, any person may petition EPA to initiate a proceeding for the issuance, amendment, or repeal of a rule or or order under:

Section 4 -- rules or orders requiring chemical testing; Section 6 -- rules imposing regulatory controls on chemicals; Section 8 -- rules requiring information; or

Section 5(e) or (f) -- orders affecting new chemical substances. The petition must be filed in EPA's Office of the Administrator, and set forth the facts that are claimed to establish the necessity for the action requested. EPA is required to grant or deny the petition within 90 days from the day the petition is filed with EPA. If EPA grants the petition, EPA must promptly commence an appropriate proceeding. If EPA denies the petition, the reasons for denial must be published in the Federal Register.

# **TSCA Section 21 Petition**

The risk evaluation process has the following components:

- a scope document that provides the public with information on the focus of the risk evaluation;
- hazard and exposure assessments and a risk characterization to inform the risk determination; and
- a risk determination stating whether or not a chemical substance presents an unreasonable risk to health or the environment under its conditions of use.

#### Health Effects of PCBs Per EPA Website

PCBs have been demonstrated to cause a variety of adverse health effects.

They have been shown to cause cancer in animals as well as a number of serious non-cancer health effects in animals, including: effects on the immune system, reproductive system, nervous system, endocrine system and other health effects.

Studies in humans support evidence for potential carcinogenic and non-carcinogenic effects of PCBs.

#### **EPA Fact Sheet**

"The U.S. Environmental Protection Agency (EPA) treats <u>all</u> PCBs as being potentially hazardous based on results from some formulations."

# **PCBs in Pigments**

From Hu and Hornbuckle, 2010



FIGURE 2. Examples of PCB profiles in paint pigments (top two plots) and the frequency of congener detection in the 15 pigments with detected PCBs (bottom plot).

# PCB Analysis at IEP (prior to Membranes)



# IEP BMP's

- Do not produce PCBs
  - End-of-pipe removal
    - IEP has most advanced WWTS in P & P
    - +99.9% Removal of PCBs
    - iPCBs are soluble
    - No known technologies to attain WQS
  - Elimination of Recycling
    - Have not Solved the Problem!

# **PCBs in Spokane River**



### Inadvertent PCBs in Consumer Products EPA

PCB-11 in Products



\* Concentration below the lowest calibration but above the instrument detection limit

# Inadvertent PCBs in Consumer Products WA Ecology

Table 4. Summary of Total PCB Results for Each Product Category

Category	Number	No. < MRL*	< 1	1 to <10	10 to <100	≥100	Min.	Max.	Avg.
	of samples		ppb						
Caulk <sup>1</sup>	8	7	0	0	0	1	0.04	390.0	N/A
Children's Products	14	2	4	5	2	1	<0.08	1,060.0	79.6
Clothing	5	0	0	3	2	0	1.3	16.6	8.5
Comic Books	10	0	0	10	0	0	1.1	5.0	2.7
Containers/Boxes	31	0	0	4	24	3	2.7	226.0	47.5
Cosmetics/Body Care	11	0	8	3	0	0	0.1	7.8	1.4
Labels	35	0	0	13	21	1	3.8	138.0	17.2
Misc. <sup>1</sup>	2	0	2	0	0	0	0.05	0.2	N/A
Office	17	4	2	6	3	2	0.2	2310.0	108.1
Paints/Colorants/Dyes	24	4	5	9	5	1	0.06	339.0	22.0
Lawn & Road Care	19	4	10	5	0	0	0.03	7.0	1.1
Plastics	17	1	3	9	3	1	2.0	2,320.0	144.4
Printed materials/Newsprint	12	0	0	8	4	0	2.4	53.5	16.5
Road Paints	11	1	3	5	2	0	<0.08	102.0	14.9
TOTAL Count	216	23	37	80	66	10			
TOTAL Percentage	99.9	10.6	17.1	37.0	30.6	4.6			

https://apps.ecology.wa.gov/publications/documents/1604014.pdf

# Inadvertent PCBs in Consumer Products WA Ecology

#### Conclusions

PCBs are widespread and found in consumer products. 72% of the samples (156 out of 216) contained total PCB concentrations above 1 ppb

Organic pigments and dyes contribute to PCB contamination

PCB-11 is found in a majority of samples above 0.5 ppb

One product designed specifically for children, the yellow sidewalk chalk, contained PCB-11 at the ppm level

https://apps.ecology.wa.gov/publications/documents/1604014.pdf

# Recap

- 1. According to EPA, all PCBs are considered hazardous
- 2. TSCA allowable PCBs (iPCBs) are getting into the environment
- 3. iPCBs widespread in consumer products, including children's products
- 4. iPCBs exceed WQS, so WA cannot achieve WQS
- 5. No technologies to meet WQS
- 6. Threat to the future of paper recycling

# **TSCA Section 21 Petition**

Do TSCA Allowable PCBs pose

"an unreasonable risk to health or the environment?"