Company Background

- Manufacturing paper products in Millwood since 1911
- Own and manage 121,000 acres of timberland in Eastern Washington and Northern Idaho
- Plant over 500,000 trees annually
Circles of Sustainability

Wood Basket

Recycle Paper
Federal Regulations

SUBCHAPTER R - TOXIC SUBSTANCES CONTROL ACT, PART 761

- Manufacturing and processing of PCBs was banned under TSCA in 1979

- ...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

<table>
<thead>
<tr>
<th>Reference</th>
<th>PCB Concentration (ppm)</th>
<th>Magnitude Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal TSCA Allowance</td>
<td>50 (max.)</td>
<td>----</td>
</tr>
<tr>
<td>EPA/WA Current HHWQC</td>
<td>0.0000000007</td>
<td>7,142,857,143</td>
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<tr>
<td>Spokane Tribal WQS</td>
<td>0.00000000137</td>
<td>38,461,538,462</td>
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<tr>
<td>IEP's Effluent</td>
<td>0.00000024</td>
<td>20,833,333</td>
</tr>
</tbody>
</table>
PCBs in Pigments

From Hu and Hornbuckle, 2010

![Graph showing PCB profiles and frequency of detection](image)
PCB Analysis at IEP

PCB Congener Analysis of IEP Effluent

PCB Concentration (pg/L)

PCB Congener
Water column dominated by PCB-11
But Not Fish!
IEP BMP’s

– Very limited due to primary source from inadvertent generation in inks and pigments:

• Investigate TSCA/iPCB Strategies to reduce or eliminate source
• End-of-pipe removal
  • No known technologies to attain WQS
• Elimination of Recycling
  • Have not Solved the Problem!
Solutions?

- Technical:
  - Use/Develop alternative (non-chlorinated) products
  - Use/Develop products w/reduced levels of PCBs
  - Develop new end-of-pipe treatments
  - Other Technical Solutions?
Solutions?

- **Regulatory/Policy:**
  - Perform risk assessment of iPCB congeners
  - Do not regulate lower congener PCBs
  - Regulate only the 12 Dioxin like PCBs
  - Establish lower TSCA thresholds
  - Rulemaking to bring CWA & TSCA regulations on PCBs into conformity, if environmental or health risk is demonstrated
  - Provide NPDES permit Offsets/Exclusions for iPCBs
  - Encourage End-Users to use lower or non-chlorinated containing products (Publishers, Printers, Packaging, State’s, etc.)
  - Incentivize competitive marketing advantage with use of non-PCB containing products
  - Other Regulatory/Policy Solutions?
Questions?