Toxic Contaminants Workgroup Meeting

April 14, 2021

Discussion on the feasibility and scope of projects related to PCBs in schools

Why the “PCBs in Schools” Issue?

- ERG report from TCW-sponsored GIT funding project – Voluntary Programs Feasibility Study – June 2019
  - Report focus on transformers, FLBs with pre-1980 T12 ballasts, paints / caulks
- Watershed big picture estimate - see Table 8. Estimates of the Number of Pre-1980 Buildings That May Contain PCB FLBs, and Number of FLBs (2012)
  - 1,699,255 buildings in watershed
  - Estimated total Number of FLBs - 1,012,710,266 – 10-24 grams PCBs / FLB fixture
  - Estimate for schools only – 650,000 FLBs with estimated range 14,842 - 31,434 lbs PCBs

Why the “PCBs in Schools” Issue? (cont.)

- Nationwide big picture estimate (from The ABCs of PCBs: A Toxic Threat to America’s Schools, Office of Sen. Markey (D-MA), October 2016)
  - Up to 14 million students nationwide, representing nearly 30% of the school-aged population, may be exposed to PCBs in their schools.
  - A 2016 Harvard School of Public Health study estimates that between 12,960 and 25,920 schools have PCB-containing caulk.
  - Report has 6 Key Findings and 6 Recommendations.
  - Recommendation #4 – “The EPA should immediately develop and implement guidance to enhance consistency in recordkeeping, sharing of best practices and other information, outreach to states and school districts, and enforcement activities related to PCB hazards in schools across all EPA regions. EPA regional offices should increase their outreach to states and local education agencies to make them aware of available EPA’s PCB regulations, guidance and resources. ”

Exposure Pathways

- Direct Exposure
  - Leaking, dripping, smoking ballasts – direct contact
  - Off-gassing from caulk, paint, floor coverings – indoor air quality
- Indirect Exposure
  - Long-term degradation of materials into general environment
  - Renovation, demolition, lighting replacement - disposal concerns
- “Whole schools” outlook – FLBs, caulks, paints
  - Certainty of proper disposal to insure complete segegration of PCBs

Cross - GIT Advantages

- **Toxic Contaminants Workgroup** (Water Quality GIT)
    - Voluntary Programs Management Approach 3.0
        - Explore the feasibility of a fluorescent light ballast (FLB) removal program in schools and other building types.
- **Sustainable Schools Outcome** (Fostering Chesapeake Stewardship GIT)
    - “Continually increase the number of schools in the region that reduce the impact of their buildings and grounds on their local watershed, environment and human health through best practices, including student-led protection and restoration projects.”
- **Maintain Healthy Watershed GIT**
    - Land-use mapping results late summer – pre-1985 schools inventory
- **Supportive of DEIJ Initiatives**

State and Local Actions (outside watershed)

New York City School System

- surveys, concluding in June of 2011, found 754 school buildings had light fixtures with potentially-PCB-containing ballast
- set a ten-year timeline (by December 31, 2021) for the replacement of all PCB-containing light fixtures in the public school buildings
- suit for a faster remediation timeline (December 31, 2016)
- as of August 18, 2016, 697 school buildings had completed their lighting fixture replacements
- estimated total cost of replacement was approximately $1 billion

State and Local Actions (cont.)

- Minnesota Pollution Control Agency PCBs Equipment in Schools Project, started 2010-2011 – as part of Great Lakes Binational Toxics Strategy, targeted District 709 (Duluth), has the most students and the most schools of any district in the Lake Superior basin.
  - Expected Environmental Results (need to confirm status)
    - Improved knowledge of school and health care facility administrators in the identification and disposal of PCB bearing equipment.
    - Proper disposal of an estimated 700 lb/yr of PCB ballasts.

Recent Development

- New York Times article, 3/22/2021:
  - “Mr. Biden’s proposal appears to aim funds toward communities of color and regions of the country that need the most help and have suffered most from pollution. It features $100 billion to invest in building or renovating schools, child-care centers and community colleges, echoing a campaign plan that promised Mr. Biden’s top priority for such spending would be “modernizing schools in the most economically underserved communities in our nation — all too often in Black and Brown communities.” (emphasis added)

Fact Sheets and Information

- The ABCs of PCBs: A Toxic Threat to America's Schools, Office of Sen. Markey (D-MA), October 2016 (39 pages) (https://www.ewg.org/sites/default/files/u381/2016-10-05-Markey-PCB-Report-ABCsofPCBs.pdf)

- Practical Actions for Reducing Exposure to PCBs in Schools and Other Buildings - Guidance for school administrators and other building owners and managers – July 28, 2015 (4 pages) (https://www.epa.gov/sites/production/files/2016-03/documents/practical_actions_for_reducing_exposure_to_pcbs_in_schools_and_other_buildings.pdf)

- PCBs in Building Materials—Questions & Answers -July 28, 2015 (18 pages) (https://www.epa.gov/sites/production/files/2016-03/documents/pcbs_in_building_materials_questions_and_answers.pdf)

Fact Sheets and Information (cont.)

- PCBs in School Buildings: Sources, Environmental Levels, and Exosure, September 30, 2012 (150 pages) (Polychlorinated Biphenyls (PCBs) in School Buildings: Sources, Environmental Levels, and Exposures (epa.gov))

- PCBs in Building Materials—Questions & Answers -July 28, 2015 (18 pages) (https://www.epa.gov/sites/production/files/2016-03/documents/pcbs_in_building_materials_questions_and_answers.pdf)

Discussion on Path Forward

- Risk communication
  - Education and outreach
    - To whom? – school superintendents, facility managers
    - How? – fact sheet, infographic, more “creative” avenues
    - PCBs alone or address through wholistic checklist? (Pb/Cu, asbestos)
    - Request reduction “pledges?”
  - Survey
    - In conjunction with education and awareness?
    - Ground-truth ERG report?

- Use upcoming land-use data (available late summer)

- Gold standard
    - Actual PCB removals (with financial help)
    - TMDL credit