Management of PCB Bulk Product Waste

3rd Annual Landfill Operators Conference

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What are PCBs?

Polychlorinated Biphenyl (PCBs) are a class of 209 toxic man-made chemicals that persist in the environment and bioaccumulate in animals and humans.

- Used extensively in industrial products from the 1950’s through 1978
- Added to caulk, sealants, mastic, and paint to make them more flexible and longer lasting
What is the Concern with “Current” PCB Management Policy in Minnesota?

• Current MPCA guidance causes several problems
  – Countless hazardous waste violations for contractors, haulers, and disposal companies;
  – Enforcement challenges due to scope of guidance document.

• Inconsistent with federal regulations;

• No documented PCB contamination, historical or current, in leachate of four lined Minnesota metro-area Landfills that were sampled.
Minnesota Regulations & Guidance

• Minnesota Rule 7045.0135 – Lists of Hazardous Wastes
  – “PCB” means substance with ≥ 50 ppm;
  – PCB materials are hazardous waste when they are discarded.

• MPCA Fact Sheet Released March 2012
  – MPCA regulates caulking wastes ≥ 50 ppm as hazardous waste;
  – Assumption that ALL caulking waste from pre-1979 buildings is hazardous caulking waste material unless tested;
  – **May not dispose of hazardous caulking waste materials at ANY landfill in Minnesota**, regardless if it is separated or attached to demolition debris;
Federal EPA Regulations

The disposal and cleanup requirements for PCB-contaminated building material depend on whether the material is classified as PCB Bulk Product Waste or PCB Remediation Waste.
Definition of PCB Bulk Product Waste
40 CFR 761.3

PCB bulk product waste means waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal was \( \geq 50 \) ppm PCBs. PCB bulk product waste includes, but is not limited to:

1. Non-liquid bulk wastes or debris from the demolition of buildings and other man-made structures manufactured, coated, or serviced with PCBs. PCB bulk product waste does not include debris from the demolition of buildings or other man-made structures that is contaminated by spills from regulated PCBs which have not been disposed of, decontaminated, or otherwise cleaned up in accordance with subpart D of this part.

2. PCB-containing wastes from the shredding of automobiles, household appliances, or industrial appliances.

3. Plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; adhesives; paper; Galbestos; sound deadening or other types of insulation; and felt or fabric products such as gaskets.
Definition of PCB Remediation Waste
40 CFR 761.3

• PCB remediation waste is defined as “waste containing PCBs as a result of a spill, release, or other unauthorized disposal ...”

• Previous EPA guidance stated that building material contaminated by the migration of PCBs from PCB bulk product waste, such as caulk or paint, is considered a PCB remediation waste;

• On October 24, 2012, EPA signed a PCB Bulk Product Waste Reinterpretation
The Problem? - Inconsistency

• PCB caulking, paint, mastics, and sealants, which as the source of contamination contain the higher levels of PCBs, are allowed to be disposed of as **Bulk Product Waste**.

• PCB contaminated building materials are required to be managed as **Remediation Waste**.
EPA PCB Guidance Reinterpretation – In a nutshell...

— Allows building material (i.e., substrate) “coated or serviced” with PCB bulk product waste (e.g., caulk, paint, mastics, sealants) at the time of disposal to be managed as a PCB bulk product waste, **even if the PCBs have migrated from the overlying bulk product waste into the substrate.**
Reason for Reinterpretation?

— “Critical for reducing exposure potential, such as in schools or other locations where such PCB-contaminated building materials are currently in place.”

— “Maintains existing environmental and human health protections and removes unnecessary burdens to allow for more expedient cleanups, thus reducing potential exposures, for example, in schools and commercial buildings. In particular, protecting children's health from environmental risks is fundamental to EPA's mission”.

— “Caulks and paints containing PCBs were used in building some schools from 1950 to 1978. The proposed reinterpretation will help to promote healthy school environments by reducing exposure to PCBs in schools.”
PCB Bulk Product Waste Disposal (40 CFR 761.62)

Disposal in solid waste landfills:

Certain PCB bulk product waste, such as PCB-containing caulk, even if the concentration of PCBs in the caulk is > 50 ppm, may be disposed of “in a facility permitted, licensed, or registered by a State as a municipal or non-municipal non-hazardous waste landfill”
What If Caulking Is Removed?

• If the substrate is not "coated or serviced" (i.e., the PCB bulk product waste, such as caulk or paint has been removed from the building material) at the time of disposal and the substrate is contaminated with PCBs that have migrated from the bulk product waste (or from another unauthorized disposal), the substrate would be considered a PCB remediation waste.

• Note: In many ways it is similar to the MPCA Lead Paint disposal policy:
  – If “firmly bonded to the substrate” - Demolition Debris;
  – If “not attached to the substrate” – Industrial or Hazardous Waste Debris
Status of EPA Reinterpretation

• Published Federal Register Notification on February 29, 2012;

• Public comment period ended March 30, 2012;

• Final Approval on October 24, 2012.
Status of Solutions for Minnesota

• Collaborative effort between industry group and the MPCA to revise guidance document and issue a memorandum stating the MPCA position;

• Latest draft memorandum from MPCA submitted for industry comment on February 12, 2013;

• Still some outstanding questions to be addressed, but very close to finalizing document.
Minnesota Solution
In a Nutshell.....

- MPCA will allow demolition debris containing PCB contaminated caulk, paint, and related construction materials, and debris contaminated by contact with such materials, to be disposed without hazardous waste evaluation for PCBs into any solid waste landfill permitted by the MPCA or by its state of location, including in permitted demolition, municipal solid waste, and industrial waste landfills.
Minnesota Solution ...cont.

• Any other PCB-contaminated waste such as fluorescent lighting ballasts, motor start capacitors, and electrical transformers, auto shredder fluff, oil stained concrete, etc. are not part of this allowance and must be evaluated and managed accordingly;

• Allowance is only for PCB wastes to be disposed of in a permitted landfill and does not apply to reuse or beneficial use applications;

• Allowance does not include controlled burns – materials need to be removed from building prior to burn;

• MPCA reserves the right to modify position on policy but WILL NOT require subsequent characterization or removal of materials disposed of while allowance was in effect.
Outstanding Questions

• What information does the MPCA have regarding the leaching of materials excluded from this allowance?

• Has the March 2012 MPCA guidance document been revised? Remove from website?
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