Alternate PCB Extraction Methods: U.S. Environmental Protection Agency Proposed Revisions to Cleanup/Disposal Regulations

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The United States Environmental Protection Agency ("EPA") published a proposed rule in the October 22nd Federal Register addressing the polychlorinated biphenyls ("PCBs") cleanup and disposal regulations. See 86 Fed. Reg. 58730.

EPA states that the proposed rule would expand the available options for extraction and determinative methods used to characterize and verify the cleanup of PCBs.

PCBs are a group of man-made chemicals that have been used in a variety of products which include electrical equipment, plasticizers and dyes/pigments. They were produced in the United States from 1929 until banned in 1979.

PCBs released into the environment can persist for extended periods of time and also bioaccumulate in small organisms and fish. Studies have indicated that they can be carcinogenic and also impact the following systems:

- Reproductive
- Nervous
- Endocrine

EPA regulates the investigation and remediation of PCBs through its authority under the Toxic Substances Control Act. See Section 6(e). The federal agency has promulgated regulations addressing (among other things) the disposal of PCBs. See 40 CFR 761.

EPA states that the revisions proposed in the October 22nd Federal Register are:

. . . expected to greatly reduce the amount of solvent used in PCB extraction processes, thereby conserving resources and reducing waste.

The federal agency also states that the proposed changes could result in:

. . . quicker, more efficient, and less costly cleanups, due to greater flexibility in the cleanup and disposal of PCB waste, while still being equally protective of human health and the environment.

The proposed rule would undertake the following:

- Expand the list of extraction and determinative methods in the PCB regulations
- Amend the performance-based cleanup options for PCB remediation waste under § 761.61(b)

- Remove the provision allowing PCB bulk product waste to be disposed as roadbed material
- Add what the agency describes as more flexible provisions for cleanup of spills that occur during emergency situations (citing hurricane or flood)
- Harmonize the general disposal requirements for PCB remediation waste
- Revise the regulations to clarify ambiguity and correct technical errors/outdated information

EPA cites what it describes as “several developments” that have occurred warranting these revisions. They are stated to include:

- Emergence of new science
- Advancement of analytical methods and technology
- Repeated requests from the regulated community to address concerns/confusion

The preamble to the proposed rule provides a discussion of the actions it is undertaking:

- Expand available extraction methods for PCBs
- Background on extraction methods for PCBs
- Technical summary of relevant extraction methods
- What is EPA proposing for allowable extraction methods?
- Remove ultrasonic extraction method from the PCB regulations
- Add determinative methods for the PCB regulations
- Revise performance-based disposal under § 761.61(b)
- Remove regulatory provision allowing disposal of PCB bulk product waste as roadbed
- Add flexible provisions for emergency situations
- Definition of “emergency situation”
- Additional flexibilities under the spill cleanup policy for spills caused by emergency situations
- Waiver from various sampling, extraction, analysis, cleanup, storage, and disposal requirements in emergency situations
- Harmonize general disposal requirements for PCB remediation waste
- Make changes to improve regulatory implementation
- Medium density plastics as non-porous surfaces
- Temporary storage in containers at the site of generation
- Language modification for financial assurance instruments
- Remove manifest tracking numbers from annual reports
- Mandatory form for annual reports
- PCB waste categories on the manifest
- Define “as-found concentrations”
- Clarify § 761.61(a)
- Cleanups must comply with all applicable requirements
- Harmonize PCB concentration language regarding CAP material
- Clarify applicability of deed restrictions
- Include alternate extraction and analysis under § 761.61(c)
- Include alternate extraction and analysis under § 761.62(c)
- Include alternate extraction and analysis under § 761.79(h)
- Clarify sampling procedure for non-porous surfaces
- Add unit to concentration in § 761.1(b)(3)
- Update ASTM methods
- Require a wipe sample under § 761.30(i)(4)
- Mailing address for annual reports
- Update address for submission of EPA Form 7710-53
- Add a field for facility email address and EPA PCB email address to EPA Form 7710-53
- Sample site selection instructions for pipelines
- Remove reference to Method 3500B

- Correct references to SW-846
- Correct reference to EPA's PCB website
- Correct reference to methods for standard wipe test samples

A copy of the Federal Register Notice can be downloaded here.