



# Environmental Guidance Regulatory Bulletin

Office of Environmental Policy and Assistance · TSCA Regulatory Bulletin

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## PCB Disposal Amendments: Final Rule

**Effective Date: August 28, 1998**

This regulatory bulletin has been updated to take into account the Technical Corrections to the Final Rule [[64 FR 33755](#) of June 24, 1999] and Parts I and II of the Questions and Answers for the PCB Disposal Amendments of June 1999.

### SYNOPSIS

On June 29, 1998, the U.S. Environmental Protection Agency (EPA) issued a final rule at [63 FR 35383](#) amending 40 CFR Part 761, which implements the Toxic Substance Control Act (TSCA), Section 6(e), regulating polychlorinated biphenyls (PCBs). Although most of the final rule deals with amendments to 40 CFR Part 761, subpart D, "Disposal," the rule also makes other changes that span the gamut from definitions to recordkeeping. The final rule is expected to result in an overall net cost savings because of streamlining and added flexibility. For example, new self-implementing (minimal EPA involvement) options are provided for research and development into disposal of PCBs, PCB remediation waste, decontamination, and continued use of contaminated (1) porous surfaces and (2) air compressors.

This regulatory bulletin describes immediate concerns; background for the rule; changes in the basics; changes in the authorizations for processing and distribution in commerce; changes in use authorizations; changes in marking; changes in storage for reuse; changes in storage for disposal; new waste categories and other changes affecting disposal; new provisions for PCB/radioactive waste; changes in decontamination; new provisions for TSCA PCB Coordinated Approvals; and changes in recordkeeping, reporting, manifesting, and notification.

### IMMEDIATE CONCERNS

Although the rule has for the most part streamlined certain provisions and allowed more flexibility in others, there are a few provisions that have been added or revised which are more stringent. This regulatory bulletin identifies nine immediate concerns in the final rule affecting U.S. Department of Energy (DOE) facilities:

- PCB Transformers must be re-registered by December 28, 1998; units that are not re-registered are unauthorized and must be disposed. A copy of the re-registration should be kept with the Annual Records [[40 CFR 761.30\(a\)\(1\)\(vi\)](#)].
- PCB Large Low Voltage Capacitors, their protected locations, and/or equipment in which they are installed must be marked by April 26, 1999 [[40 CFR 761.40\(k\)](#)].
- Air compressors containing PCBs must have their PCB concentration reduced to < 50 ppm by August 30, 1999, or within one year of discovering PCBs  $\geq$  50 ppm [[40 CFR 761.30\(s\)](#)].

- Voltage regulators with  $\geq 3$  lb of  $\geq 500$  ppm of PCBs are now subject to same use conditions as PCB Transformers with respect to notification of fire-related incidents, inspection, recordkeeping, and marking. Locations (vaults, machine rooms, hallways, access doors, etc.) as well as the equipment itself must be marked. One such voltage regulator triggers the requirement for preparing an Annual Document Log and Annual Records [40 CFR 761.30(h)(1)(ii) and 761.180(a)(4) and (b)(5)].
- PCB Article Containers (in addition to PCB Containers and PCB Articles) stored for disposal must now be dated with the day of removal from service and checked for leaks every 30 days [40 CFR 761.65(c)(5) and (8)]. Previously, only PCB Containers and PCB Articles were required to be dated and checked while stored for disposal.
- Liquids with  $\geq 50$  ppm of PCBs in temporary storage must be under a Spill Prevention Control and Countermeasures Plan and in containers meeting U.S. Department of Transportation regulations [40 CFR 761.65(c)(1)(iv)].
- The carcasses from fully drained PCB-Contaminated Articles may be disposed at only certain facilities (such as scrap metal recovery ovens) [40 CFR 761.60(b)(6)(ii)(A)]. Such articles are exempt from the requirements for storage, recordkeeping, and notification [40 CFR 761.60(b)(ii)(B)&(C)].
- PCB Items (except small capacitors) with  $\geq 50$  ppm of PCBs when sold or otherwise transferred must now be recorded in the Annual Document Log [40 CFR 761.180(a)(2)(ix)].

In order to assist field personnel throughout the complex in learning the details of the 90-page final rule, DOE's National Environmental Training Center, in cooperation with DOE's Office of Environmental Policy and Assistance (EH-413), is sponsoring a series of three-day PCB training courses during calendar year 1999. For more information about these training courses, visit the web site at [www.em.doe.gov/neto/](http://www.em.doe.gov/neto/) or call (803) 725-0814.

In addition to this regulatory bulletin, EH-413 will be distributing the *Guidance Booklet on the Storage and Disposal of PCB Waste* and updating information briefs on topics affected by this final rule.

- Workers must don personal protective equipment (gloves and/or respirators) when flushing transformers, draining PCB-Contaminated Electrical Equipment, or performing decontamination [40 CFR 761.60(b)(1)(i)(B), 761.60(b)(8), and 761.79(e)(2)].

## BACKGROUND

On June 10, 1991, the U.S. Environmental Protection Agency (EPA) issued at 56 FR 26738 an Advanced Notice of Proposed Rulemaking to solicit comments on 16 issues pertaining to amendments to 40 CFR Part 761, Subpart D, "Disposal." The intent of the rulemaking was to provide flexibility for PCB waste disposal where specific conditions could justify different waste management activities from those allowed at the time.

After taking into account more than 90 comments (including many not germane to disposal), EPA published at 59 FR 62788 (December 6, 1994)

a Notice of Proposed Rulemaking. In addition, EPA conducted two public hearings in June 1995 on the proposed amendments.

Almost all commenters supported EPA's objectives for streamlining the PCB disposal provisions and adding flexibility, but they also provided numerous suggestions on achieving those objectives. After careful consideration, EPA prepared a comprehensive Response to Comments document (OPPTS docket control number 66009A) available at EPA Headquarters.

Three important issues were not resolved during the PCB Disposal Amendments rulemaking and are deferred to future rulemakings:

- Re-assessment of the toxicity of PCBs,
- Corrective actions involving PCBs under the Resource Conservation and Recovery Act (RCRA), and
- Authorized use of non-liquid PCBs.

Each of these issues is discussed below.

EPA completed a re-assessment of PCB toxicity in September 1996. It finds PCBs to be carcinogenic but not as potent as previously determined. EPA did not take these findings into account in this particular final rule because it would have (1) delayed issuance of the rule, which has significantly large cost savings, and (2) resulted in marginal benefits. EPA will take these findings into account in future rulemakings.

In the Notice of Proposed Rulemaking at 59 FR 62794 (December 6, 1994), EPA solicited comments on the appropriate levels for corrective action of PCB contamination under RCRA. EPA has already announced at 61 FR 19432 (May 1, 1996) that it will finalize these levels in the final rule for RCRA corrective actions.

In the Notice of Proposed Rulemaking at 59 FR 62809 (December 6, 1994), EPA solicited comments on authorizing the use of non-liquid PCBs. Many commenters, including DOE, indicated that the use conditions (inspection, marking, record-keeping, etc.) to be imposed by EPA were too burdensome in contrast to the risk. EPA needs more time to review risk assessments and collect additional data to make a determination of whether the use of non-liquid PCBs poses an unreasonable risk.

EPA plans to publish in 1999 a Supplemental Notice to solicit additional data on risks of exposure to non-liquid PCBs currently in use. The data needed cover PCB levels in (1) wipe samples for each class of non-liquid PCBs, (2) transfer of non-liquid PCBs from surfaces to skin, and (3) air monitoring of spaces with non-liquid PCBs. Examples of the classes of non-liquid PCBs on which the above data are needed include paints, caulking, and coal-tar enamel coatings.

## ***CHANGES IN THE BASICS***

In the final rule, EPA clarified the applicability of the PCB regulations, codified certain relationships and assumptions, and revised and added definitions.

The most basic changes come from EPA's intent to ensure consistent and reproducible basis for determining PCB concentrations. EPA revised 40 CFR 761.1(b)(4) to specify how PCB levels are to be determined for liquid, non-liquids, and multi-phasic mixtures. New definitions appear at 40 CFR 761.3 for "dry weight," "liquid PCBs," "non-liquid PCBs," and "wet weight." In new 40 CFR 761.1(b)(6), EPA clarifies the "Weight and Volume Rule." Unless otherwise specified, a weight or volume refers to the total weight or volume of the

material (oil, soil, debris, etc.) containing the regulated PCBs – not the calculated amount of pure PCBs present. Note that the Weight and Volume Rule does not apply to the Reportable Quantity (RQ) in the event of a spill. RQ is a term defined by the Comprehensive Environmental Response, Compensation, and Liability Act that refers to the amount of the pure substance spilled.

Certain relationships and assumptions are now codified. In new 40 CFR 761.1(b)(3), EPA codifies the relationship (so-called “Equivalency Rule”) between surface contamination ( $\mu\text{g}/100\text{ cm}^2$ ) and contamination based on parts per million (ppm). The definition [40 CFR 761.3] for PCB-Contaminated Electrical Equipment is revised to reflect this relationship.

In newly added 40 CFR 761.2, EPA codifies the PCB Assumptions Rules, which have been a policy for 19 years since the “Ban Rule” of 1979. 40 CFR 761.2 dictates what PCB concentration assumptions **must** or **may be** made for PCB Transformers, PCB-Contaminated Electrical Equipment, or PCB Capacitors, given data about year of manufacture, weight of dielectric fluid, type of dielectric fluid, etc. The PCB Assumptions Rules apply only for purposes of authorized use activities – not for purposes of disposal. With few exceptions, the actual concentration must be ascertained for purposes of disposal.

EPA has added a new requirement to 40 CFR 761.60(g)(1)(iii) and (g)(2)(iii) mandating the use of gas chromatography in conducting chemical analysis of waste oil containing PCBs (e.g., mineral oil dielectric fluid).

EPA revised five definitions, deleted two definitions, and added 36 new definitions in 40 CFR 761.3. Some of them have already been discussed. One revised definition of significance to DOE facilities is “commercial storer of PCB waste.”

Because EPA did not incorporate the small quantity exemption for non-liquid PCBs, the threshold for a DOE site to be classified as a commercial storer is now a total of 500 gallons of liquid and/or non-liquid PCB waste generated by non-DOE activities. Many of the new definitions are due to the establishment of new categories for PCB waste (e.g., PCB remediation waste, high occupancy, low occupancy, porous surface, and non-porous surface, etc.).

The Anti-Dilution Rule appears at 40 CFR 761.1(b)(5), otherwise unchanged, because EPA did not find the arguments compelling for changing the wording. However, new 40 CFR 761.64(b) allows wastes generated from research and development (including chemical analysis) to be disposed at their **existing** PCB concentration. Also, 40 CFR 761.79(g) allows decontamination wastes and residues to be disposed at their **existing** PCB concentrations unless otherwise specified. At 40 CFR 761.1(b)(4)(iv), EPA allows for multi-phasic wastes to be separated and disposed based on the concentration of each phase.

## **CHANGES IN AUTHORIZATIONS FOR PROCESSING AND DISTRIBUTION IN COMMERCE**

Changes occur in the authorizations for (1) processing for disposal of PCBs and (2) distribution in commerce (i.e., sale or otherwise transfer) of decontaminated items.

By revising 40 CFR 761.20(c)(2), EPA clarifies the kinds of processing for disposal that do not require approval and the kinds that require approval. Processing for disposal activities that primarily facilitate storage or transportation do not require a PCB Disposal Approval. For example, such processing includes draining, pumping, dismantling,

disassembling, and packaging/repackaging. Processing for disposal activities that primarily facilitate treatment requires a PCB Disposal Approval. For example, such processing includes microencapsulation, pulverization, particle size separation, and methods directly introducing PCBs from containers into a disposal unit.

By revising 40 CFR 761.20(c)(5), EPA clarifies that equipment, structures, or materials that are decontaminated may be distributed in commerce. This authorization also applies to items that were not previously decontaminated but now meet an applicable decontamination standard [40 CFR 761.79]. An analogous authorization for the use of such decontaminated items appears at newly added 40 CFR 761.30(u).

## **CHANGES IN AUTHORIZATIONS FOR USE**

Revisions to the authorized use of PCB Transformers [40 CFR 761.30(a)(1)(vi)] and voltage regulators with  $\geq 3$  lb of  $\geq 500$  ppm of PCBs [40 CFR 761.30(h)(1)(ii)] have already been discussed in the section, **IMMEDIATE CONCERNS**. The final rule adds authorized uses of PCBs for scientific research and development, and continued use of contaminated porous surfaces. There is also a revision for the authorized use of air compressors.

The new 40 CFR 761.30(j) broadens the types of activities authorized for the use of PCBs for scientific research and development. Pure PCBs and samples from PCB waste may be used to examine PCB concentration, physical properties, toxicity/health effects, environmental fate, transport properties, and metabolic properties. A separate authorization is given at new 40 CFR 761.60(j) for use of PCBs for the specific purpose of research and development into disposal methods.

EPA combined the former three use authorizations for PCBs in microscopy mounting media, microscopy immersion oil, and optical liquids into the new 40 CFR 761.30(k). It now covers the use of PCBs in all scientific instruments and does not limit the quantity of PCBs used.

EPA added 40 CFR 761.30(p) to authorize the use of contaminated porous surfaces for the remainder of their useful life under the following self-implemented conditions: (1) removing the contamination source; (2) washing/rinsing; (3) applying two coats of solvent-resistant, water-repellant sealants of contrasting colors or barricading; and (4) marking. Previously, the only choice would be to remove and dispose concrete or wood contaminated by a spill.

The use of rectifiers containing PCBs at any concentration for the remainder of their useful life is now authorized under newly added 40 CFR 761.30(r). EPA recognized that oil-filled and solid state rectifiers with PCBs have been in use without authorization.

Because air compressors are not unique to the natural gas pipeline industry, EPA separated the two topics. The authorized use of air compressors appears in new 40 CFR 761.30(s). Under this new provision, air compressors with  $\geq 50$  ppm of PCBs may be used under the following conditions: decontamination of components, flushing of piping, and meeting a level of  $< 50$  ppm of PCBs by August 30, 1999, or within one year of discovery, whichever is later.

## **CHANGES IN MARKING**

Two additions were made to 40 CFR Part 761, subpart C affecting PCB Large Low Voltage Capacitors and PCB Equipment.

The marking requirement [40 CFR 761.40(k)] for PCB Large Low Voltage Capacitors, their protected locations (pole, fence, or enclosure), and equipment with such a unit was discussed in **IMMEDIATE CONCERNS**. This change moves the time when such a unit must be marked from the moment of removal from service for disposal to April 26, 1999. The change was prompted by concerns over the expiration of the non-PCB marking requirement, the ease of confusing unmarked, non-PCB units with such units, a finding that such units are being disposed improperly due to being unmarked, and the increasing number of such units being disposed. Because the new marking requirement is consistent with that for PCB Large High Voltage Capacitors, all PCB Large Capacitors will have the same marking requirement, obviating the need to discern between low and high voltage units.

A requirement has been added to mark any equipment containing a PCB Transformer, PCB Large Low Voltage Capacitor, or a PCB Large High Voltage Capacitor at 40 CFR 761.40(k)(2). Previously, marking was required at the time of manufacture, distribution in commerce if not already marked, and removal if not already marked. The new requirement covers all other situations, such as installing a PCB Large Capacitor into an existing piece of equipment, and is intended to reduce confusion at disposal.

## **CHANGES IN STORAGE FOR REUSE**

Prior to the final rule, storage for reuse was minimally restricted as to location and unrestricted as to duration. Three types of storage for reuse are now allowed for PCB Articles as the result of the new 40 CFR 761.35.

Storage for reuse is allowed for  $\leq 5$  years outside a facility meeting the storage for disposal requirements of revised 40 CFR 761.65(b) provided the:

- Use conditions (e.g., inspection) in 40 CFR Part 761.30 are met;
- Marking requirements in 40 CFR Part 761, subpart C are met; and
- Records are kept on the date removed from use, due date for servicing (if applicable), and projected location and future use.

Storage for reuse for  $> 5$  years is allowed outside a facility meeting the storage for disposal requirements of revised 40 CFR 761.65(b) if written approval is obtained from the appropriate EPA Region.

Storage for reuse is allowed indefinitely in a facility meeting the storage for disposal requirements of revised 40 CFR 761.65(b).

## **CHANGES IN STORAGE FOR DISPOSAL**

The final rule changes numerous provisions for storage for disposal, ranging from extensions to the one-year storage limit to addition of 180-day storage of PCB remediation waste and bulk product waste. While these are summarized below, more details are provided in Chapter 3 of EH-413's *Guidance Booklet on the Storage and Disposal of PCB Waste*. Special exceptions pertaining to PCB/radioactive waste are discussed in a separate section below.

Newly added 40 CFR 761.65(a)(2) and (3) allows an extension to the one-year storage limit and additional extensions beyond the one-year limit when the reasons are justified and information about the types, volumes, and locations of PCB waste is provided.

New 40 CFR 761.65(b)(2) broadens the types of storage units allowed for PCBs by adding alternate storage units. Such units include RCRA storage facilities (1) permitted by EPA, (2) permitted by an authorized State, or (3) operated under interim status provided that the unit meets RCRA containment standards for storage of containers. Other allowed alternate storage units include units (1) regulated by a State TSCA-look-alike program, (2) covered by a TSCA waste management approval, or (3) covered by a TSCA PCB Coordinated Approval. The PCB Spill Cleanup Policy [40 CFR Part 761, subpart G] now governs PCB spills in all RCRA alternate storage units.

EPA revised 40 CFR 761.65(c)(1)(iv) to allow temporary storage of liquids with > 500 ppm of PCBs. However, the revision requires temporary storage of all liquids with  $\geq$  50 ppm of PCBs to be:

- Under a Spill Prevention Control and Countermeasures Plan and
- In containers meeting U.S. Department of Transportation (DOT) regulations (see next paragraph).

EPA revised 40 CFR 761.65(c)(6) in order to incorporate the performance-oriented packaging standards that went into effect under DOT regulations on October 1, 1996. These container standards apply to all PCB waste.

The final rule closes a loophole by revising 40 CFR 761.65(c)(5) and (c)(8). These two sections previously required the dating and inspecting of PCB Containers and PCB Articles only. By referring to PCB Items instead, the revised sections now require PCB Article Containers also to be subject to dating and inspecting.

As requested by DOE, EPA did not delete 40 CFR 761.65(c)(2) allowing palletized storage of PCB Large High Voltage Capacitors or PCB Contaminated Electrical Equipment.

EPA adds new 40 CFR 761.65(c)(9) to provide for 180-day on-site storage of PCB remediation waste or PCB bulk product waste protected by a cover, liner, and run-on control.

## **NEW PROVISIONS FOR PCB/ RADIOACTIVE WASTE**

The final rule defines a new PCB waste category, PCB/radioactive waste, at 40 CFR 761.3. This is defined as PCB waste that contains any kind of radioactive material, regardless of whether regulated under the Atomic Energy Act. The final rule adds new provisions for PCB/radioactive waste under 40 CFR Part 761, subpart D. While these are summarized below, more details are provided in Sections 3.6 and 4.6 of EH-413's *Guidance Booklet on the Storage and Disposal of PCB Waste*.

PCB/radioactive waste is exempt from the one-year storage limitation when unsuccessful disposal attempts are documented, the documentation is made available to EPA upon request, and the waste is managed in accordance with all other applicable requirements for the management of radioactive material [40 CFR 761.65(a)(1)]. Such waste that is exempt from the one-year storage limitation is also exempt from one-year exception reporting [40 CFR 761.215(c), (d), and (e)].

PCB/radioactive waste is exempt from the minimum 6-inch-high curbing requirement for general storage units (as requested by DOE) although the general storage unit must still meet all other requirements [40 CFR 761.65(b)(1)(ii)].

PCB/radioactive waste is exempt from containers required to meet current DOT regulations under certain conditions, as requested by DOE. Obsolete DOT Specification (5, 5B, 6D, 17C, or 17E) containers may be used for such waste if not moved over public roads or filled prior to October 1, 1996, without emptying and refilling after that date [40 CFR 761.65(c)(6)(ii)]. Non-DOT containers may also be used for such waste if they (1) meet nuclear criticality requirements, (2) prevent buildup of liquids when storing non-liquids, and (3) do not leak when storing liquids [40 CFR 761.65(c)(6)(i)].

Disposers of PCB/radioactive waste must take into account both the PCB concentration and radioactive properties of the waste, according to new 40 CFR 761.50(b)(7). For instance, PCB/radioactive waste may be disposed in a DOE radioactive waste landfill if the landfill meets the criteria under the Atomic Energy Act (DOE Order 435.1) and has less than 50 ppm of PCBs. In addition, other PCB/radioactive waste that may be placed into a landfill without **further** regard to PCB concentration includes:

- Dewatered bulk PCB remediation waste with < 50 ppm of PCBs,
- Drained carcasses of PCB-Contaminated Articles,
- PCB bulk product waste leaching < 10 µg PCBs/L, and
- Certain non-liquid cleaning material and personal protective equipment.

## **NEW WASTE CATEGORIES AND OTHER CHANGES AFFECTING DISPOSAL**

New categories of PCB waste have been added by the final rule:

- PCB remediation waste (essentially contaminated media from spills) appears at 40 CFR 761.61.
- PCB bulk product waste (essentially bulk, non-liquid PCB waste, including some fluorescent light fixtures and shredder fluff from automobiles and appliances) is given at 40 CFR 761.62.
- Waste from research and development (including chemical analysis of PCBs) is provided for by 40 CFR 761.64.
- Decontamination waste and residue are regulated at 40 CFR 761.79(g).

New section, 40 CFR 761.50, consolidates the general prohibitions (such as the ban on open burning) and provides a road map to the reorganized sections of 40 CFR Part 761, subpart D, that apply to specific kinds of waste and activities.

The regulatory status of PCB waste  $\geq$  50 ppm placed in a landfill or spilled prior to April 18, 1978, is clarified at new 40 CFR 761.50(b)(3).

In addition, many disposal requirements [40 CFR 761.60] have been revised. EH-413's *Guidance Booklet on the Storage and Disposal of PCB Waste* explains the new and revised provisions in more detail. Highlights of the new or revised provisions of particular interest to DOE are presented in the following subsections.

### ***Disposal of Liquid PCBs and PCB Items***

The final rule deletes the provision allowing PCB-contaminated liquids to be disposed in a chemical waste landfill if stabilized to a non-flowing consistency. However, the disposal of PCB-contaminated liquids from other incidental sources such as precipitation, condensation, leachate, or load separation associated with PCB Articles or non-liquid PCB wastes, is allowed [40 CFR 761.(a)(3)].

The final rule ends the previously unregulated status of drained carcasses of PCB-Contaminated Electrical Equipment. Revised 40 CFR 761.60(b)(6)(ii)(A) restricts their disposal to certain facilities, including those for scrap metal recovery or municipal waste landfills. If radioactively contaminated, they may be placed in a DOE low-level radioactive waste facility that meets the criteria in DOE Order 435.1.

In addition, under the newly added 40 CFR 761.72 EPA has established operating conditions for scrap metal recovery and smelting to control open burning.

### ***Research and Development into PCB Disposal***

Newly added 40 CFR 761.60(j) outlines self-implementing procedures for conducting research and development studies for disposing PCBs. In such instances, EPA, state, and local jurisdictions need only to be notified. However, use of PCBs in excess of prescribed quantity or time limits require EPA Regional approval. EPA did not increase the quantity limits for PCB waste used (500 gallons of liquid, 70 ft<sup>3</sup> of non-liquid PCB waste, and 10,000 ppm of PCBs), pure PCBs disposed (1 kg), or time limit (one year), as DOE requested.

### ***PCB Remediation Waste***

New 40 CFR 761.61 addresses the cleanup and disposal of PCB remediation waste. The new part is applicable to all PCB cleanups, including spills. [The *Guidance Booklet on the Storage and Disposal of PCB Waste* explains when to use the PCB Spill Cleanup Policy (40 CFR Part 761, subpart G) and the new 40 CFR 761.61.] Three options for the cleanup and disposal of PCB remediation waste are provided: self-implementing, performance-based, and risk-based.

Under the self-implementing option, the final rule defines five types of PCB remediation waste:

- Bulk PCB remediation waste,
- Porous surfaces,
- Non-porous surfaces,
- Liquid remediation waste, and
- Cleanup waste.

The self-implementing option [40 CFR 761.61(a)] specifies procedures for cleanup of sites with and disposal of the five types of PCB remediation waste without EPA approval. The procedures cover:

- Site characterization,
- Notification and certification,
- Cleanup levels,
- Disposal methods,
- Verification,
- Capping,
- Deed restrictions, and
- Recordkeeping.

The detailed steps of many of these procedures are described in new subparts to 40 CFR Part 761. Subpart N provides the steps for site characterization and sampling of liquid remediation waste. Subpart O delineates the steps for sampling bulk PCB remediation waste and porous surfaces to verify completion of cleanup. Subpart P gives the steps for sampling non-porous surfaces to verify completion of cleanup. Subpart Q offers a method for validating alternative extraction and chemical analysis for non-liquid PCB remediation waste. Subpart R enumerates the steps for verifying cleanup of non-liquid, non-metal PCB remediation waste for off-site disposal.

Cleanup levels for each of the five types of PCB remediation waste are given based on the type of occupancy (high or low) and the type of institutional controls [(1) capping, (2) fencing and marking, or (3) none]. Disposal techniques are also prescribed for each of the five types of PCB remediation waste.

The performance-based option [40 CFR 761.61(b)(1)] allows the disposal of PCB remediation waste using pre-approved methods or pre-approved facilities.

The risk-based option [40 CFR 761.61(c)] provides for EPA to approve alternatives to the self-implementing or performance-based options. EPA will consider each application on a case-by-case basis.

### ***PCB Bulk Product Waste***

New section 40 CFR 761.62 provides four disposal options for PCB bulk product waste: (1) performance-based, (2) solid waste landfill, (3) landfill cover or roadbed, and (4) risk-based option.

The performance-based option [40 CFR 761.62(a)] provides seven pre-approved methods or facilities for disposal of PCB bulk product waste.

The solid waste landfill option [40 CFR 761.62(b)] allows disposal of PCB bulk product waste in non-hazardous landfills. Such wastes leaching  $\geq 10 \mu\text{g}$  of PCBs/L are subject to slightly more stringent landfill requirements including separation of organics, leachate collection, and more frequent notification.

PCB bulk product waste leaching  $< 10 \mu\text{g}$  of PCBs/L may be disposed as landfill cover (provided dispersal is controlled) or roadbed material (under asphalt) [40 CFR 761.62(d)].

The risk-based option [40 CFR 761.62(c)] offers an alternative to the three above options for PCB bulk product waste.

## ***CHANGES IN DECONTAMINATION***

Far-reaching changes are made by the final rule by incorporating self-implementing options. Prior to the final rule, the majority of decontamination activities required a PCB Disposal Approval. Now, a PCB Disposal Approval is not required for use of methods such as chopping, distillation, filtration, oil/water separation, spraying, soaking, stripping, scraping, scarification, or use of solvents or abrasives [40 CFR 761.79(b) and (h)]. In addition, the following items may be decontaminated without a PCB Disposal Approval under the self-implementing procedures in 40 CFR 761.79(c) and (f)(2):

- PCB containers,
- Movable equipment, tools, and sampling equipment,
- Non-porous surfaces in contact with free-flowing mineral oil dielectric fluid (MODEF) with  $\leq 10,000$  ppm of PCBs,
- Non-porous surfaces in contact with free-flowing MODEF with  $> 10,000$  ppm of PCBs or with askarel PCB ( $\leq 70\%$  PCB in a mixture of  $\text{C}_6\text{H}_3\text{Cl}_3$  and  $\text{C}_6\text{H}_2\text{Cl}_4$ ), and
- Air compressor piping and lines.

Many procedures require the use of a Performance-based Organic Decontamination Fluid (PODF). Four pre-approved PODFs are listed in 40 CFR 761.79(c), and others may be validated via self-implementing procedures in 40 CFR Part 761, subpart T.

New provisions at 40 CFR 761.79(b) establish performance-based decontamination standards (cleanup levels for liquids, non-porous surfaces, and concrete). When using the performance-based decontamination standards, confirmatory sampling and analysis is required (e.g., wipe sampling at locations per 40 CFR Part 761, subpart P). Keep records of confirmatory sampling for three years.

Workers performing decontamination must now don personal protective equipment (gloves and respirators) and prevent releases to the environment [40 CFR 761.79(e)].

### **NEW PROVISIONS FOR TSCA PCB COORDINATED APPROVALS**

The final rule adds new 40 CFR 761.77 to provide for the recognition under TSCA of other Federal or State permits, approvals, or actions for managing PCB waste. Persons owning/operating landfill, combustion, or storage facilities and persons conducting research and development into PCB disposal methods may request a TSCA PCB Coordinated Approval in lieu of applying for an ordinary TSCA PCB Disposal Approval if they possess or obtain another Federal or State permit, approval, or action document for a PCB waste activity. For example, if an owner/operator has a RCRA permit that allows a hazardous waste incinerator to burn PCBs as underlying hazardous constituents, the owner/operator may use the RCRA permit to request a TSCA PCB Coordinated Approval instead of applying for a TSCA PCB Disposal Approval for the incinerator to burn PCBs in the absence of RCRA hazardous constituents.

The purpose for this recognition is to reduce duplication and to foster communication. The TSCA PCB Coordinated Approval is completely voluntary. It is not required for CERCLA cleanups, does not affect any self-implementing options, and

does not pre-empt any State rules. Neither are States required to establish TSCA look-alike programs nor is EPA delegating TSCA Section 6(e) responsibility to the States.

### **CHANGES IN RECORDKEEPING, REPORTING, MANIFESTING, AND NOTIFICATION**

Newly added 40 CFR 761.180(a)(2)(ix) requires that the sale or other transfer of PCB Items with  $\geq 50$  ppm of PCBs (except small capacitors) be recorded in the Annual Document Log (if one is required) with recipient's name, address, and telephone number; date of transfer; and unique identification number.

Records of inspections and spill cleanup must now be kept with the Annual Records [40 CFR 761.180(a)(1)(iii) and (b)(1)(iii)].

EPA revised 40 CFR 761.180(b)(3) to clarify which disposers must submit Annual Reports. Disposers are defined by their activities and not whether they receive or generate manifests. Thus, previously excluded self-disposers must now submit Annual Reports.

EPA revised 40 CFR 761.205(f) to require that Form 7710-53 be re-submitted within 30 days of a change in location or in a PCB waste handling activity. An example of a change in waste handling activity is a storer changing to a storer and disposer.

EPA revised 40 CFR 761.207(j) to clarify the applicability of manifesting requirements to PCB wastes. Manifesting is not required for materials currently with  $< 50$  ppm of PCBs from pre-April 18, 1978, spills, materials at any existing PCB level from spills of  $< 500$  ppm of PCBs occurring between April 18, 1979, and July 1, 1979, and materials at any existing PCB level from spills of  $< 50$  ppm of PCBs occurring on or after July 2, 1979.

However, waste with < 50 ppm of PCBs resulting from dilution of materials  $\geq$  50 ppm of PCBs must be manifested. DOT does not regulate transport of PCBs < 20 ppm or < 1 lb. However, such PCBs are subject to manifesting if they result from dilution. They should be noted as “Non-DOT regulated PCBs” [40 CFR 761.65(c)(6)].

Previously, no time limit was imposed for submission of Exception Reports and One-Year Exception Reports to EPA. The final rule revises 40 CFR 761.215(b), (c), and (d) to make this time limit 45 days.

EPA also revised 40 CFR 761.218 to set the default time limit for sending the Certificate of Disposal as 30 days from the disposal date unless the disposer and generator make contractual arrangements.

**UNITED STATES DEPARTMENT OF ENERGY**  
EH-413  
WASHINGTON, DC 20585

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Questions of policy or questions requiring policy decisions will not be dealt with in EH-41 Regulatory Bulletins unless that policy has already been established through appropriate documentation. Please refer any questions covered in this Regulatory Bulletin to:

**Beverly Whitehead,**  
[beverly.whitehead@eh.doe.gov](mailto:beverly.whitehead@eh.doe.gov)  
(202) 586-6073

Office of Environmental Policy and Assistance,  
RCRA/CERCLA Division, EH-41  
U.S. Department of Energy  
1000 Independence Ave., S.W.  
Washington D.C. 20585

