

(Contact: 1st part Ellis Merschoff, 404-331-5179 and 2nd part Frank Gillespie, 301-504-1275)

2:00 p.m.

Briefing on Status of Reactor Pressure Vessels in Commercial Nuclear Power Plants (Public Meeting)

(Contact: Brian Sheron, 301-504-2722)

Thursday, December 8

2:00 p.m.

Briefing on Proposed Rule—Revision to Appendix J to 10 CFR Part 50 (Public Meeting)

Contact: Joseph Murphy, 301-425-5670

3:30 p.m.

Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of December 12—Tentative

There are no Commission meetings scheduled for the Week of December 12.

Week of December 19—Tentative

Monday, December 19

10:00 a.m. DOE Briefing on Status of High Level Waste Program (Public Meeting)

Tuesday, December 20

10:00 a.m.

Briefing on Progress of Design Certification Review and Implementation (Public Meeting)

(Contact: Dennis Crutchfield, 301-504-1199)

Wednesday, December 21

10:00 a.m.

Briefing by International Programs (Closed—Ex. 1)

2:00 P.M.

Briefing by Nuclear Energy Institute (NEI) on Their Nuclear Regulatory Review Study (Public Meeting)

3:30 p.m.

Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of December 26—Tentative

There are no Commission meetings scheduled for the Week of December 26.

Note: Affirmation sessions are initially scheduled and announced to the public on a time-reserved basis. Supplementary notice is provided in accordance with the Sunshine Act as specific items are identified and added to the meeting agenda. If there is no specific subject listed for affirmation, this means that no item has as yet been identified as requiring any Commission vote on this date.

THE SCHEDULE FOR COMMISSION MEETINGS IS SUBJECT TO CHANGE ON SHORT NOTICE. TO VERIFY THE STATUS OF MEETINGS CALL (RECORDING)—(301) 504-1292.

CONTACT PERSON FOR MORE INFORMATION:
Dr. Andrew Bates (301) 504-1963.

Dated: December 1, 1994.

Andrew L. Bates,

Chief, Operations Branch, Office of the Secretary.

[FR Doc. 94-30050 Filed 12-2-94; 8:45 am]

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Federal Register

Tuesday
December 6, 1994

Part II

**Environmental
Protection Agency**

40 CFR Part 761

Disposal of Polychlorinated Biphenyls;
Manufacturing, Processing, and
Distribution in Commerce; Proposed
Decision on Exemption Petitions;
Proposed Rules

**ENVIRONMENTAL PROTECTION
AGENCY**
40 CFR Part 761
[OPPTS-66009A; FRL-4167-1]
RIN 2070-AC01
Disposal of Polychlorinated Biphenyls
AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed Rule.

SUMMARY: EPA is proposing amendments to its rules under the Toxic Substances Control Act (TSCA) for polychlorinated biphenyls (PCBs). Changes are being proposed for the requirements for determining PCB concentration; marking, storage, and disposal; decontamination levels and procedures; and the reporting and recordkeeping requirements for PCBs, PCB Items, environmental media (e.g., soil, sediments, rivers, and lakes) contaminated with PCBs or PCBs in association with radioactive materials. In addition, EPA proposes to insert additional definitions and references, include new authorizations and exemptions, require the registration of certain electrical transformers, regulate combustion in industrial furnaces, regulate the disposal of liquids in landfills, coordinate PCB disposal approvals with other Federal and State programs, and revise the reportable quantity in the spill cleanup policy. EPA is also proposing to coordinate strategies for the remediation of PCB spills and other disposal sites, including cleanup under the Resource Conservation and Recovery Act (RCRA) Corrective Action provisions and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) remedial programs.

DATES: Written comments must be received by April 6, 1995. Any comment received after the close of the comment period will be considered "late" and may not receive full consideration. EPA intends to conduct one or more informal public hearings in the Washington, DC area on the different parts of the proposal which will take place after closure of the comment period. The exact time and location of the informal public hearings will be announced in a separate **Federal Register** Notice and may also be obtained by telephoning the Environmental Assistance Division at the telephone number listed under **FOR FURTHER INFORMATION CONTACT**. Written requests to make a short (less than 15 minutes) presentation at the informal public hearing must be

received by the Environmental Assistance Division not later than 21 days prior to the scheduled dates of the informal public hearings. Please refer to the **Federal Register** Notice announcing the informal public hearings for more details.

ADDRESSES: Three copies of comments identified with the document control number (OPPTS-66009A; FRL-4167-1) must be submitted to: TSCA

Nonconfidential Information Center, ATTN: TSCA Docket Receipts (7407), Office of Pollution Prevention and Toxics, Rm. B-607 Northeast Mall, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. A public record has been established and is available in the TSCA Public Docket Office at the above address from 12 noon to 4 p.m., Monday through Friday, except legal holidays.

Please submit comments separately on the RCRA portion of today's proposed rules. EPA is requesting comment on the proposed rule only to the extent that it would amend or change existing regulations. EPA is not soliciting comment on provisions of existing regulations that would not be changed by this proposal. Unit V of this preamble explains how commenters may make claims of business confidentiality for information included in comments.

FOR FURTHER INFORMATION CONTACT: Susan B. Hazen, Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Rm. E-543B, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, (202) 554-1404, TDD (202) 554-0551. For general information relating to the RCRA Corrective Action and CERCLA Remedial Programs which are discussed at Unit II.A.7. of this document, contact the RCRA/Superfund Hotline at (800) 424-9346 or (703) 412-9810. For technical information relating to Unit II.A.4. of this document, contact Lisa Askari, Corrective Action Programs Branch, Office of Solid Waste (5303W), at the address listed above or by telephone at (703) 308-8654.

SUPPLEMENTARY INFORMATION:
I. Background
A. Purpose of this Proposed Rule

On June 10, 1991 (56 FR 26738), EPA published an Advance Notice of Proposed Rulemaking (ANPRM) to solicit comments on possible changes to the PCB disposal regulations promulgated under the authority of TSCA section 6(e) and codified in 40 CFR part 761. Comments and supporting data on the issues outlined

in the ANPRM, a number of other topics pertaining to the PCB regulations, and the interface between those regulations and other Federal and State programs affecting PCBs were received from more than 90 respondents. EPA has considered all of the comments. Based on these comments, EPA is including in this proposal changes in a number of areas of the PCB regulations that were not addressed in the ANPRM.

Several commenters submitted information concerning the toxicity of PCBs and the methods used by EPA to determine exposure to PCBs. EPA is currently conducting a review of the toxicity and mechanisms of action associated with PCBs and several structurally related chemicals. This review may not be complete until after the promulgation of these amendments. Since EPA cannot predict the outcome of the toxicity review and does not want to delay the promulgation of these rules, it is proposing flexibility in certain disposal regulations to allow for changes in EPA's position on PCB toxicity. In a similar fashion, EPA is proposing flexibility in certain disposal regulations to allow site-specific exposure data and changes in EPA's risk assessment methods to serve as the basis for making a determination regarding the selection of acceptable disposal technologies for certain PCB wastes.

B. Reproposal of Dry Weight Measurement

On April 6, 1990, EPA issued a proposed rule in the **Federal Register** ("Polychlorinated Biphenyls; Wet Weight/Dry Weight Clarification, 55 FR 12866) to amend a portion of the PCB regulations codified at 40 CFR 761.1(b) that addresses the analysis of PCBs on a dry weight basis. The comment period for the April 6, 1990 proposal ended on May 7, 1990. Comments on that proposal were received from 16 respondents. In today's **Federal Register**, EPA is issuing a reproposal of the wet weight/dry weight rule. All comments received on the April 6, 1990 proposal were considered in the preparation of this proposed rule, and those comments are included in the rulemaking record for this proposed rulemaking. The comments received for the April 6, 1990 proposal and any comments received on this proposed rule will be considered in the final rule. Today's reproposal would clarify the requirements for determining PCB concentrations in liquids, non-liquids, and multiphasic combinations of liquids and non-liquids (see unit III. M. of this preamble).

C. Waste Minimization and Combustion Strategy

On May 18, 1993, EPA announced a draft strategy to address waste minimization and combustion of hazardous waste under RCRA. The strategy is designed to stimulate a broad national dialogue on how:

- (1) To better integrate waste minimization into EPA's hazardous waste management program.
- (2) To determine the appropriate role of combustion in that program.
- (3) To ensure that hazardous waste combustion standards are fully protective of human health and the environment. The draft strategy sets forth a series of short- and long-term activities that EPA would undertake in pursuing these three areas, among which are rulemakings to address technical standards for hazardous waste combustion and public participation in the RCRA permitting process. The draft strategy also sets forth EPA's intention to use RCRA's case-by-case omnibus permitting authority where necessary to protect health and the environment, and to impose upgraded permit conditions in newly issued permits. In addition to other potential areas, these permit conditions may address emissions of dioxins, furans, and particulate matter. Finally, the draft strategy announced EPA's intentions over the succeeding 18 months to give permitting priority to existing, operating RCRA combustion units.

The PCB program under TSCA is different from RCRA in several aspects. The manufacture of PCBs is generally banned, and the use of PCBs is heavily restricted. Therefore, any disposal issues are limited to a finite, although widely dispersed, universe. The PCB program mandates the burning of certain high-risk wastes. It also allows wastes, such as low concentration liquids and drained transformer carcasses, with a lower potential risk of exposure, to be disposed of in other types of combustion units (e.g., industrial boilers) to provide disposal capacity.

EPA proposes to make the following adjustments in the PCB disposal program under TSCA in response to issues raised in the combustion strategy. For fixed-site incinerators, approval conditions (for new units or at the time of renewal) would be adjusted to reflect new standards and procedural requirements adopted under RCRA. For mobile incinerators, approval conditions (for new units or at the time of renewal) would be adjusted to reflect new standards and procedural requirements adopted under RCRA

where applicable. Unique to the PCB disposal program under TSCA is the concept of mobile incinerators. A single multi-year approval, that imposes the same technical standards applicable to fixed-site incinerators, is issued to these units. State and local governments receive prior notification and can impose additional restrictions on the mobile units using their own authorities. The TSCA approval generally limits the operating time at any one site unless additional assessment of risk and public notice are conducted. However, EPA has not adopted site-specific risk assessments and public participation in the permit development process for mobile incinerators because EPA and the public would lose the considerable benefits derived from mobile disposal units considering these units allow only minimal exposure due to their high destruction efficiency and limited operating time at each site.

The current industrial boiler rules at 40 CFR 761.60(a)(2)(iii) and 761.60(a)(3)(iii) and industrial furnace rules, proposed at §761.60(a)(4), limit both the concentration and volume of PCBs which can be treated in these units. Industrial boilers and furnaces are units that were built to perform other functions such as power generation or materials recycling, with the combustion of PCBs and hazardous wastes as a secondary function. The primary function poses a separate risk which should be considered when addressing the overall risk posed by the combustion of low concentration, low volume PCBs in industrial boilers and furnaces. Therefore, EPA proposes to impose uniform technology-based standards, instead of site-specific permit conditions, on industrial boilers and furnaces due to the low risk posed from the combustion of low concentration, low volume PCBs and because these units are constructed and operated for other purposes. EPA specifically requests comment on how best to implement the combustion strategy given the controls already imposed, or proposed in this rulemaking on the quantities and concentrations of PCBs which can be disposed of in industrial boilers and furnaces.

EPA believes that the regulations that currently apply to PCBs, along with those proposed, are sufficient under TSCA to protect the public and the environment from unreasonable risk of injury. Although EPA's May 18, 1993, draft strategy on waste minimization and combustion of waste extends only to RCRA hazardous wastes, its overall objectives were carefully considered in the development of this proposed rule.

EPA requests comment on its overall plan for implementing the Agency's combustion strategy for the PCB program under TSCA.

D. Coordination of Programs

PCBs are regulated under several statutes administered by EPA. In particular, PCBs are subject to the corrective action provisions of RCRA. In an effort to harmonize standards for the cleanup of PCBs under both RCRA and TSCA, EPA is today proposing cleanup programs under both statutes for comparison and comment. The Agency's goal is to harmonize action levels for PCBs under RCRA with the target standards for approval of risk-based remediation actions under proposed §761.61(c). (See Unit II.A.7. for the RCRA proposal.)

E. Statutory Authorities

The TSCA portion of this proposed rule is issued pursuant to sections 6(e)(1), 6(e)(2)(B), 6(e)(3)(B) and 18(b) of TSCA. Section 6(e)(1)(A) gives EPA the authority to promulgate rules prescribing the methods for the disposal of PCBs (15 U.S.C. 2605(e)(1)(A)). TSCA section 6(e)(1)(B) provides broad authority for EPA to promulgate rules that would require PCBs to be marked with clear and adequate warnings (15 U.S.C. 2605(e)(1)(B)). TSCA section 6(e)(2)(B) gives EPA the authority to authorize the manufacture, processing, distribution in commerce, and use of PCBs in other than a totally enclosed manner (15 U.S.C. 2605(e)(2)(B)). TSCA section 6(e)(3)(B) provides that any person may petition EPA for an exemption from the prohibition on the manufacture, processing, and distribution in commerce of PCBs (15 U.S.C. 2605(e)(3)(B)). EPA may by rule grant an exemption if the Administrator finds that: "(i) an unreasonable risk of injury to health or the environment would not result, and (ii) good faith efforts have been made to develop a chemical substance which does not present an unreasonable risk of injury to health or the environment and which may be substituted for such polychlorinated biphenyl." TSCA section 18(b) gives EPA the authority to exempt, by rule, any State from subsection (a)(2) (15 U.S.C. 2617(b)). EPA may by rule grant a State the authority to, among other things, regulate any aspect of PCBs in use, such as requiring a notification of that use.

The RCRA portion of this rule (discussed in Unit II.A.7. of this preamble) is issued pursuant to sections 1006, 2002(a), 3004(u), 3004(v), 3005(c) and 3007 of the Solid Waste Disposal Act as amended by the Resource

Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments of 1984 (42 U.S.C. 6924).

No additions or changes are proposed at 40 CFR part 300 in this rule under CERCLA (42 U.S.C. 9601-9657).

F. Summary of Proposal

Consistent with these authorities described in Unit I.E., EPA is proposing a number of modifications to the PCB disposal rules to provide flexibility in addressing the disposal of PCBs where specific conditions would allow for different waste management activities than are currently available under the regulations, while still providing protection from unreasonable risk of injury. EPA is also proposing modifications to the disposal regulations that would allow for the recognition of PCB waste management activities undertaken under other Federal or State authorities. Furthermore, EPA is proposing a number of changes to the regulations to delete out-of-date provisions, modify the regulations to address problems in their applicability or implementation, make certain policies and provisions consistent with the requirements of other Federal statutes, and reduce requirements for PCB disposal activities which present a *de minimis* risk. Finally, EPA is proposing certain authorizations and exemptions which would address the need for the scientific community to conduct research as well as health and environmental studies on PCBs and on media contaminated by PCBs (to include processing and distribution in commerce of PCBs) for the development of innovative disposal technologies which otherwise would require issuance of a disposal approval.

The topics to be addressed through this proposed rulemaking include the 16 issues identified in the ANPRM plus a number of additional issues that have either come to the Agency's attention through the submission of comments or from experience in implementing the PCB Notification and Manifesting Rule (40 CFR part 761 subparts A, D, J, and K) published in the *Federal Register* of December 21, 1989 (54 FR 52716). Several changes to the PCB regulations proposed today are in support of EPA's effort to significantly reduce the risk of release to the environment posed by PCBs still in use. The provisions affected include the 1-year time limit for storage and disposal, State enhancement provisions, restrictions on storage for reuse, decontamination, and the previously proposed changes to transformer reclassification procedures

(58 FR 60970, November 18, 1993). EPA's efforts to promote the phase-out of PCBs still in use, especially those in electrical equipment, go beyond changes in the PCB rules. They include contemplated changes to various compliance monitoring and enforcement strategies and policies, a greater effort to inform the regulated community of the Agency's position on PCBs still in use, and expanded cooperation with other Federal and State agencies and departments. EPA is also proposing a definition at §761.3 of the term "PCB-Contaminated" that would apply across the PCB program. PCB-Contaminated would mean anything that contains or contacts PCBs at concentrations of 50 parts per million (ppm) to less than 500 parts per million (ppm). In the event that no PCB liquids or non-liquids are present on surfaces for measurement, then surfaces with PCB concentrations greater than 10 micrograms per 100 square centimeters (>10 µg/100 cm²) and less than 100 micrograms per 100 square centimeters (<100 µg/100 cm²), would be defined as PCB-Contaminated. EPA would also apply the term "PCB-Contaminated" to classes of PCBs or PCB items meeting the levels of contamination specified in the definition.

The following outline is provided to assist the reader in locating topics of interest in the preamble.

II. Notice of Proposed Rulemaking

- A. Large Volume, PCB Wastes
 - 1. Anti-dilution
 - 2. Status of pre-1978 Disposal
 - 3. Alternatives to landfilling
 - 4. Proposed remediation strategy for PCBs, including cleanup under the RCRA corrective action and CERCLA remedial programs
 - a. Background
 - b. CERCLA program policy for cleanup of PCBs
 - c. Proposed approach for cleanup of PCBs under RCRA
 - d. Today's proposed remediation strategy for PCB spills under TSCA
 - i. Self-implementing option
 - ii. Performance-based option
 - iii. Risk-based option
 - e. Implementation of PCB remediation programs
 - 5. PCB remediation wastes
 - 6. PCB non-remediation wastes
 - a. Risk-based disposal
 - b. Leachability-based disposal
 - c. Performance-based disposal
 - 7. Decontamination standards and procedures
 - 8. Distribution in commerce and use of decontaminated equipment, structures, and materials
 - 9. Processing for disposal
- B. Large Volume PCB Articles
 - 1. Disposal
 - 2. Open burning and industrial furnaces
 - 3. Characterization of PCB articles

- 4. Characterization of natural gas pipelines
- C. PCB/Radioactive Wastes
- D. Issues Not Addressed When the Rules Were Originally Promulgated
 - 1. Household waste exemption
 - a. Broadly define exemption
 - b. Impact on recycling activities
 - c. Limit scope of the exemption
 - d. Other disposal considerations
 - 2. Unauthorized use
 - a. PCB-impregnated materials used in duct systems
 - b. PCB-impregnated insulation materials
 - c. Agency experience
 - d. Reuse of natural gas pipelines
 - 3. Disposal issues
 - a. Disposal of PCB-bound material
 - b. Disposal of cable insulation containing PCBs
 - c. Disposal of small capacitors
 - d. Large volume PCB liquids
 - e. Abandonment and disposal of natural gas pipeline
 - f. Disposal of solvents
 - g. Disposal of waste generated during the chemical analysis of PCBs
 - h. Transboundary Movement of PCBs for disposal
 - i. Landfilling of liquid PCBs
- III. Other Regulatory Changes and Clarifications
 - A. Marking
 - B. DOT Containers for Storage of PCB Waste
 - C. Definition of PCB Transformer and PCB-Contaminated Equipment
 - D. Drained PCB-Contaminated Transformers
 - E. Transfer of Totally Enclosed PCBs
 - F. Change in the Reportable Quantity—Spill Cleanup Policy
 - G. PCB Storage Requirements
 - 1. Indefinite storage of PCB articles designated for reuse
 - 2. Clarification of the 1-year time limit for storage and disposal
 - 3. Situations which warrant an extension, or waiver of the 1-year time limit for storage and disposal
 - 4. Temporary storage of PCB liquid at 500 ppm or greater
 - 5. Storage of large PCB capacitors and PCB-contaminated equipment on pallets next to a qualified storage area
 - 6. Alternate storage of PCBs
 - 7. Storage requirements for PCB article containers
 - 8. Recordkeeping requirements for storage unit operators
 - 9. Revision to storage unit criteria
 - H. ASTM References
 - I. Manufacture of PCBs for Disposal-Related Studies
 - J. PCB Samples and Standards
 - 1. Use authorization
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 - K. State Enhancement Activities
 - 1. Coordinated approval
 - a. Interactive approach
 - b. Self-implementing approach
 - 2. PCB state enhancement grants
 - L. Clarification of Requirement to Request Approval for Alternate Methods of Disposal
 - M. Wet Weight/Dry Weight Clarification
 - 1. Liquids, including organic liquids and wastewater
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- 3. Mixtures of liquids and/or non-liquids
- N. Oil-filled Equipment Manufactured After the Ban
- O. PCB Voltage Regulators
- P. Registration Requirement for PCB Transformers \geq 500 ppm PCBs
- Q. Rectifiers
- R. Use of PCBs in Scientific Equipment
- S. Remove Outdated CFR Material
- T. Chart of Marking and Recordkeeping Requirements

IV. Proposed Amendments to the Notification and Manifesting Rule

- A. Small Quantity Exemption for Solids
- B. Clarification of Exception Reporting
- C. Timing for Submission of the Certificate of Disposal
- D. Manifest Requirements for Pre-1978 <50 ppm PCB Spills
- E. Notification by Transporters
- F. Renotification for Changes in Facility Operations
- G. Transfer of Ownership of Commercial Storage Facilities
- H. Modifications to Storage Facilities
- I. Clarification of Which Disposers Must Submit an Annual Report
- J. Financial Assurance Mechanism: Non-Parent Corporate Guarantee
- K. Notification and Manifesting Samples
 - 1. General
 - 2. Definitions
- L. Clarification of the Term "Facility"
- V. Confidentiality
- VI. Official Rulemaking Record
- VII. Regulatory Assessment Requirements

II. Notice of Proposed Rulemaking

A. Large Volume PCB Wastes

Background. The current PCB regulations generally establish a concentration of 50 parts per million (ppm) as the regulatory threshold for authorized PCBs in use (i.e., in service). This was based, in part, on the economic impact of the regulations on electrical transformers, but 50 ppm has been extended to include all authorized PCBs and PCB Articles, as defined in these proposed rules at §761.3, unless otherwise noted (e.g., PCB concentration of less than 50 ppm resulting from dilution). Where liquid samples could not be collected, such as on contaminated surfaces, surface sampling and concentration levels were developed (see part 761, subpart G, The PCB Spill Cleanup Policy). The surface concentrations, which were based on dermal exposure, were equated to the existing PCB regulations which included economic considerations. As a result, the regulations established for PCBs at concentrations of 50 to less than 500 ppm were applied to contaminated surfaces at concentrations of greater than 10 to less than 100 micrograms per 100 square centimeters ($>10 - <100 \mu\text{g}/100\text{cm}^2$). The regulations that EPA is proposing, in several sections of this

notice, codify the relationship between surface contamination and the existing regulations based on milligrams of PCBs per liter of liquid on a dry weight basis.

In the ANPRM, EPA requested comments on the effectiveness of the current PCB regulations in preventing an unreasonable risk of injury to health and the environment from the disposal of "large volume, non-liquid PCB wastes" such as wastes from the shredding of automobiles, white goods, and industrial scrap, and certain classes of soils, sludges, and sediments. Currently, large volume wastes derived from an authorized original source containing \geq 50 ppm PCBs may only be disposed of in an incinerator that complies with 40 CFR 761.70, in a chemical waste landfill that complies with 40 CFR 761.75, or pursuant to an approved alternate method of destruction equivalent to incineration at 40 CFR 761.60(e), regardless of their current PCB concentration or the risk of exposure they may pose. The Agency believes that there are additional disposal methods and other waste management techniques for large volume wastes that would not pose an unreasonable risk of injury to health and the environment. These additional disposal methods and other waste management techniques are the subject of this section of today's proposed rule. For different kinds of large volume waste, such as soils, liquids, and surfaces contaminated with PCBs, EPA is proposing several self-implementing disposal options at §§761.61, 761.62 and 761.79. If followed exactly as written, the self-implementing disposal options would not require prior approval from EPA. These options are detailed and specific. The sampling portions of the self-implementing procedures appear in Appendices I-III. Placement of the proposed sampling procedures in appendices is intended to provide better continuity and should facilitate understanding of the overall self-implementing procedures of which they are a part.

The term "large volume" is used to describe wastes that, in general, are generated or managed in greater volumes than when they were originally placed in service. Large volume wastes would include dredged materials, contaminated environmental media, municipal sewage treatment sludges, industrial waste water treatment sludges, auto shredder waste, demolition wastes, and specifically listed materials containing PCBs that may not be authorized for use, such as PCB impregnated insulation or gaskets.

Large volume PCB wastes would not include wastes that are PCB Items, PCB

Articles, and PCB liquids being removed from service. PCB liquids include, but are not limited to, dielectric fluid and solvents used to flush PCB Transformers prior to landfilling (GE Solvent Distillation Case [Docket No. TSCA-IV-890016]). Large volume PCB wastes would not include the more traditional PCB wastes which are typically generated and managed in discrete, relatively small volumes associated with individual pieces of electrical, mechanical, heat transfer, or other equipment.

Large volume PCB wastes are frequently heterogenous in nature and contaminated with low (i.e., <50 ppm) or varying levels of PCBs and other constituents. Although these wastes may now pose little environmental risk, under the current PCB regulations, they are usually required to be disposed of, based on their original PCB concentration, in either a TSCA chemical waste landfill or TSCA incinerator. Second, as the name of the category implies, "large volume" wastes may be generated each year in enormous amounts. However, the actual magnitude of the problem is not well documented. EPA requested information about historic PCB disposal sites, including areas of major or longterm spills (46 FR 22144, April 15, 1981) and included these data in its listing of sites known as the Comprehensive Environmental Response, Compensation and Liability Act Information System or CERCLIS. While EPA does not have information characterizing every site where PCBs were spilled or disposed of, the Agency does have estimates of the number of sites contaminated with PCBs. In 1991, EPA's Office of Emergency and Remedial Response completed a characterization of 1,218 sites associated with the National Priorities List (NPL) and 29,461 sites associated with CERCLIS. At approximately 20 percent of the NPL sites and approximately 7 percent of the CERCLIS sites, PCBs were characterized as a "predominant" waste type. The NPL sites alone contain approximately 34,070,000 cubic yards of material contaminated with PCBs and other substances. Similarly, the weight of shredder waste produced annually by metal recyclers is approximately 3 million tons. Commercial disposal costs of these types of large volume wastes at PCB incinerators or landfills have been as high as \$2,300 per cubic yard for incineration, and \$550 per cubic yard for chemical waste landfilling. Based on this information concerning large volume PCB waste generation, the number of old PCB disposal sites, and

the cost of disposal, EPA believes that it is appropriate to commence rulemaking to address the management and disposal of large volume PCB wastes and propose alternatives to the current available disposal options.

Therefore, for PCB remediation wastes, EPA is proposing to allow alternatives to the regulatory mandate that PCB wastes must be managed based on the requirements for disposal at the time the contaminating PCBs came out of service (i.e., based on the original PCB concentration of the material (see unit II.A.4. of this preamble). The remediation requirements proposed in §761.61(a) address indirect exposure issues by limiting the applicability of the section to environmental settings which are less likely to allow migration and therefore should be easier to characterize and remediate. All other environmental settings are addressed under the proposed "risk-based" option (§761.61(c)) where EPA could require a site-specific indirect exposure as well as direct exposure risk assessment. As a point of clarification, since spills result in an illegal release of PCBs to the environment, only those wastes cleaned up and disposed of in accordance with the PCB Spill Cleanup Policy (40 CFR part 761, subpart G) will be entitled to the presumption against enforcement of a disposal violation for that spill.

PCB non-remediation wastes (Unit II.A.6. of this preamble provides further discussion) are often found in large volumes and in a physical state that tends to limit the mobility of the PCBs (e.g., PCBs used as a plasticizer). In this instance, EPA is recognizing the reduced risk of direct or indirect exposure and the overall volume of this category of waste when it considers additional options for disposal.

Elsewhere in today's notice, EPA is also reproposing a process for determining the concentration of PCBs in a multiphase media such as sludges or sediments (see Unit III. M. of this preamble). EPA would require that this process be followed by those using the provisions established for the disposal of large volume wastes and, in general, for determining the concentration of PCBs.

1. *Anti-dilution.* The current rule at 40 CFR 761.1(b), commonly known as the "anti-dilution" rule, prohibits the avoidance of specific disposal requirements because a PCB concentration was reduced or shifted from one material or environmental medium to another as the result of adding a diluent, or separating or concentrating the PCBs. This provision remains in effect. EPA is not promoting intentional or fortuitous dilution in

either its rules or enforcement policies. However, EPA is proposing greater flexibility in choosing a disposal option for this category of large volume PCB wastes. EPA remains committed to a policy of stringent regulation of the disposal of PCB wastes. EPA is simply recognizing that where PCBs have already been released into the environment the critical disposal issue becomes one of mitigating the damage from the release, especially those aspects of indirect exposure such as bioaccumulation.

2. *Status of pre-1978 disposal.* Several commenters asked for clarification of the rules under TSCA governing the regulatory status and remediation of PCB spills and disposal sites in light of the ruling by EPA's Chief Judicial Officer in Re: Standard Scrap Metal Company, TSCA-V-C-288, Appeal No. 87-4, August 2, 1990 (Standard Scrap).

The Chief Judicial Officer (CJO) held that spilled PCBs found in soil are not necessarily in a "disposal site" for purposes of the prefatory note exclusion to §761.60. "Soil does not become a disposal site merely because PCBs are spilled onto it" (CJO's ruling page 13, paragraph 1). In this decision, the CJO limited the effect of the prefatory note to pre-1978 landfills or dumps, i.e., only those PCBs disposed in landfills and dumps may be considered "in-service" and do not require proper disposal according to 40 CFR part 761, subpart D. EPA is proposing to delete the prefatory note to §761.60, which states that PCBs disposed of prior to the effective date of the regulations were considered to be "in use" and therefore did not need to be cleaned up under these rules, and substitute language on the disposition of PCB waste disposed of before 1978 as introductory text to this section. Under the proposed rule, PCBs disposed of, placed in a land disposal facility (such as a dump, landfill, waste pile, or land treatment unit) or PCBs spilled or otherwise released to the environment, including areas contaminated by spills and releases such as sediments, prior to April 18, 1978, would be presumed to be disposed of in a manner that does not present a risk of exposure, and would not necessarily require further disposal action.

This proposed provision would allow the Regional Administrator, on a case-by-case basis, to make a finding that any pre-1978 disposal site does present a risk of exposure, whether the site be a spill, dump, land treatment unit, waste pile, stream, river, pond, lake, any sediment (or dredge material from a stream, river, pond, or lake), ground water, surface water, landfill, or any other type of disposal site. In such a

case, the Regional Administrator could then require the submission of an application for approval of a risk-based disposal method under proposed §761.61(c) (see Unit II.A.4. of this preamble). Failure to submit a complete application, in the timeframe stipulated in the Regional Administrator's "call-in" letter, would be a violation, and the violations would accrue from that day forward. EPA believes that pre-1978 PCB disposal units or areas of contamination should not be allowed to remain "in-service" and thus unaddressed, as the existing prefatory note currently allows, if there is a risk of exposure from these sites.

Sites that could be considered an immediate exposure risk include, but are not limited to, school yards, food or feed areas, residential areas, underground or surface waters, well head protection areas, and certain stream, river, or lake sediments. In such cases where the Regional Administrator has made a determination that there is a risk of exposure, the site would have to be cleaned up, based on the exposure risk finding.

Also, in the introductory paragraph at §761.60, EPA is proposing to add language to instruct those whose waste is subject to the disposal provisions of subpart D to refer back to both the authorizations section at §761.30 and the prohibitions section at §761.20 and to coordinate their disposal activities with other agencies where appropriate for all PCB wastes. It is important for members of the regulated community to be cognizant of the fact that the disposal options in subpart D hinge on certain prohibitions as well as authorizations. For example, not all PCB items would be required to be disposed of. Some items, such as natural gas pipelines containing PCBs, if properly decontaminated, could be reused.

Many other Federal, State, and local laws and regulations apply to the disposal of PCBs. Although EPA attempts to coordinate with the various Federal, State, and local programs controlling PCBs, the ultimate responsibility for coordination and compliance rests with the regulated community.

3. *Alternatives to landfilling.* On June 10, 1991, EPA also published a notice of availability of a draft guidance document outlining several alternative methods of treatment for certain classes of media containing PCBs (56 FR 26745). That document is entitled "Interim Guidance on Non-Liquid PCB Disposal Methods to be Used as Alternatives to a 40 CFR 761.75 Chemical Waste Landfill (CWL)." Generally, commenters to the ANPRM

who addressed the issue of alternative methods of treatment and commenters to the draft interim guidance, stated that a wider range of options would not only provide much needed disposal flexibility, but would provide an incentive for developing alternative methods of PCB disposal.

In response to these comments, the proposed rule at §761.61(c) would authorize the Regional Administrator, based on a site-specific risk assessment, to approve an application for different cleanup and disposal requirements provided that they would not pose an unreasonable risk of injury to health or the environment. The wide range of different methods of disposal that could be approved by the Regional Administrator upon application include thermal destruction such as infrared thermal treatment or circulating bed combustor; physical separation such as thermal treatment (rotary thermal desorber and fluidized bed) and solvent extraction (soil washing and liquified gas); solidification/stabilization such as chemical fixation (encapsulation, *in-situ* inorganic polymer, and silicates); *in-situ* vitrification; biological treatment; and chemical dechlorination. These are not the only treatment methods that could be approved by the Regional Administrator upon application; but are the methods currently being used with varying degrees of success.

Commenters suggested several potentially viable alternatives for the disposal of large volume PCB wastes, some of which were not listed in the draft alternative disposal document that accompanied the June 10, 1991, publication of the ANPRM. As indicated in this proposed rule, upon application to the Regional Administrator, each proposed option would be considered on a case-by-case basis. Some commenters suggested that the need to obtain a disposal permit was an impediment to developing and utilizing alternative methods of destruction and containment. EPA's position is that adequate controls must be imposed to ensure the safety of all disposal technologies, especially those being operated on a commercial scale. EPA does, however, anticipate that as individual or combinations of technologies are used repeatedly, the permitting process will become streamlined. Once out of the research and development (R&D) phase, new technologies will receive the same level of scrutiny as those already fully developed to ensure adequate environmental controls of specific technologies. In certain instances, specific standards, technologies, or procedures could also be promulgated

in future rulemakings as additional decontamination activities at §761.79 or added to the self-implementing remediation techniques in §761.61(a) (see Unit II.A.3. of this preamble).

4. *Proposed remediation strategy for PCBs, including cleanup under the RCRA corrective action and CERCLA remedial programs.* The 1987 TSCA PCB Spill Cleanup Policy, published on April 2, 1987 (52 FR 10688), codified at part 761, subpart G, applied only to certain releases of PCBs occurring after May 4, 1987. Thus, other spills of PCBs (i.e., most notably those which occurred prior to May 4, 1987), were not intended to be subject to the provisions of the Policy. The issue of whether the Agency should develop a cleanup policy for historic PCB spills, and how such a policy might differ from the existing policy for new spills, was addressed in the ANPRM. In response to this discussion, several commenters on the ANPRM strongly supported the idea of developing an EPA policy on historic PCB spills. Those commenters suggested that such a policy could achieve considerable benefits at historic PCB spill sites, similar to those that have been obtained for new PCB spills under the 1987 policy.

In light of these comments, and in consideration of the Agency's experience with implementing the 1987 cleanup policy for new spills, EPA is today proposing a strategy under TSCA for cleanup of all PCBs in the environment. The following preamble also discusses how PCBs would be addressed under the remedial authorities of RCRA and CERCLA. In addition, EPA is today proposing to clarify the concentration level for soil contaminated with PCBs that was identified as an "action level" in the proposed RCRA Corrective Action Regulations (55 FR 30798, July 27, 1990).

a. *Background.* As part of the development of the 1987 TSCA PCB Spill Cleanup Policy, EPA evaluated the frequency, amount, and nature of PCB spills from electrical equipment, the different routes of exposure to PCBs (i.e., ingestion, dermal, and inhalation), the risks posed by spills in different locations, and the costs of cleanup. After evaluating this information and considering a spill cleanup proposal submitted to EPA by the Environmental Defense Fund (EDF), the Natural Resources Defense Council (NRDC), the Edison Electric Institute (EEI), the Chemical Manufacturers Association (CMA), and the National Electrical Manufacturers Association (NEMA), EPA developed cleanup goals for PCBs in soil and on surfaces.

The TSCA PCB Spill Cleanup Policy requires cleanup of PCBs to different levels depending upon spill location, the potential for exposure to residual PCBs remaining after cleanup, the concentration of PCBs initially spilled (high concentration or low), and the nature and size of the population potentially at risk of exposure to residual PCBs. Thus, the TSCA PCB Spill Cleanup Policy applies the most stringent requirements for PCB spill cleanup to non-restricted access areas where there is a greater potential for human exposures to spilled PCBs. The TSCA PCB Spill Cleanup Policy applies less stringent requirements for cleanup of PCB spills in restricted access areas where the nature and degree of human contact present a lower potential for significant exposure. Finally, even less stringent requirements apply to restricted access areas where there is little potential for human exposures.

Implementation of the 1987 TSCA PCB Spill Cleanup Policy has, in EPA's estimation, yielded highly favorable environmental results. Large numbers of PCB spills have been cleaned up expeditiously and safely with minimum administrative burdens to regulatory agencies or responsible parties. This success is in large part attributable to the self-implementing nature of the policy; the clear, numeric cleanup goals specified in the policy; and the straightforward sampling and notification procedures required of those responding to PCB spills.

Although the 1987 policy was intended to be applicable to "new" spills of PCBs, the policy has also been used in the cleanup of historic spills, particularly in the context of CERCLA remediations. As discussed below, since 1990 the Superfund program has adopted an approach to cleanup of PCBs that relies heavily on the 1987 TSCA policy. Although the CERCLA (and RCRA) remedial process generates large volumes of site-specific information that can be used to "fine tune" cleanup decisions for PCBs, as well as other hazardous substances, it has been the Agency's experience that the essential features of the 1987 TSCA policy are workable and yield protective cleanup results for historic spills of PCBs.

The following discussion summarizes the approach that the CERCLA program has taken in adapting the 1987 PCB Spill Cleanup Policy to Superfund cleanups. It also outlines a similar proposed approach for the RCRA corrective action program.

b. *CERCLA program policy for cleanup of PCBs.* Because the TSCA PCB Spill Cleanup Policy is not a binding regulation, it is not a potentially

applicable or relevant and appropriate requirement (i.e., an ARAR) for Superfund response actions. However, as a codified policy reflecting substantial scientific and technical evaluation, it has been considered as important guidance in developing cleanup levels at Superfund sites.

In August 1990, EPA issued several CERCLA guidance documents regarding remediation of PCBs at Superfund sites. Among other provisions, these guidance documents establish guidelines for the CERCLA Program to follow in setting preliminary remediation goals for PCBs for soil, ground water, and sediment contaminated with PCBs at Superfund sites. (See "A Guide on Remedial Actions at Superfund Sites with PCB Contamination", OSWER Directive No. 9355.4-01 FS (August 1990) ["PCB Guide"].)

Preliminary remediation goals (PRGs) in the Superfund program are specific statements of the desired endpoint concentrations of contaminants, or risk levels for each exposure route, that are believed to provide adequate protection of health and the environment based on preliminary site information. (See preamble to the National Contingency Plan (NCP), 55 FR 8666, 8712 and 8713 (March 8, 1992).) These goals are also used in setting parameters for the purpose of developing remedial alternatives. Because PRGs are formulated early in the remedial evaluation process, they are typically based on readily available information, such as environmental or health-based ARAR's other reliable guidance or information, commonly referred to in the CERCLA program as To Be Considered or (TBCs), or the "point of departure" risk level of 10^{-6} . As additional information becomes available during the Remedial Investigation/Feasibility Study (RI/FS) process, the PRGs may be modified due to consideration of exposure, technical, or other factors (55 FR 8713 and 8717). The use of PRGs does not preclude development and consideration or selection for alternatives that attain risk levels other than those represented by the PRG. Final selection of the appropriate level of risk is made based on the balancing of criteria in the remedy selection step of the process.

Along the same lines, the 1990 CERCLA PCB guidance documents explain that exceedance of a PRG for PCBs does not mean that action is required. Rather, once the CERCLA program decides that action is necessary at a site, the PRGs for PCBs should be used to identify areas at which response action should be considered. "These goals may be refined throughout the RI/

FS process; final remediation goals are determined in the remedy selection." (PCB Guide, p.2).

According to the CERCLA PCB guidance, the concentration of concern for PCBs in soil differs depending on the type of exposure that is expected (e.g. residential or industrial) The guidance documents point out that site-specific conditions may warrant departure from the basic framework outlined in the guidance, due to factors such as the potential for PCBs to migrate to groundwater and to affect environmental receptors. The guidance recommends that in most cases, the preliminary remediation goals (or "analytical starting points" for setting remedial levels) for PCBs in soil under CERCLA are as follows:

The TSCA PCB Spill Policy at §761.120, recommends PCB spills be cleaned up to the following levels: For current and reasonably-expected future residential and other non-restricted access areas: less than 1 ppm on the surface to a depth of 10 inches and 10 ppm at depths below 10 inches; for industrial and other restricted access areas: 25 ppm; and for outdoor electrical substations: 25 ppm, or 50 ppm with labelling warning of presence of PCBs (not expected at CERCLA sites). In the case of remediation for residential, unrestricted land use at CERCLA sites, 1 ppm soil PCBs at the surface is recommended by the Superfund program as a PRG to address threats posed by direct contact. Where soil with concentrations greater than 1 ppm PCBs is left in place for residential land use, the depth of soil cover is determined by site-specific conditions. In such cases, appropriate deed restrictions or other institutional controls are generally implemented.

In the case of remediating for industrial, restricted land use at CERCLA sites, a range of 10 ppm soil PCBs to 25 ppm soil PCBs at the surface is recommended by the Superfund program as a PRG to address threats posed by direct contact.

c. *Proposed approach for cleanup of PCBs under RCRA corrective action authorities.* In the July 27, 1990, proposed RCRA Corrective Action Rule, 55 FR 30798, EPA introduced the concept of "action levels" as trigger levels for further study and subsequent remediation at RCRA facilities. In the RCRA Corrective Action Program, a remedial investigation may indicate that levels of contamination from a past release are unlikely to present a threat to health and the environment. EPA proposed that measured levels in the environment be compared to action levels, and that in situations where

measured levels are below action levels, EPA would not normally require either further study (i.e., a Corrective Measures Study) or remediation.

In the proposed RCRA Corrective Action Rule, EPA proposed using maximum contaminant levels (MCLs) promulgated under the Safe Drinking Water Act as action levels for ground water. For other media (including soils) and for constituents in ground water that do not have established MCLs, the following criteria were proposed for establishing action levels. First, the concentration for a hazardous constituent must be derived in a manner consistent with Agency guidelines for risk assessment. Second, the studies used to derive action levels must be scientifically valid. Third, the concentrations used as action levels would be (for carcinogens) associated with a 1×10^{-6} upperbound excess cancer risk for Class A and B carcinogens (PCBs are Class B carcinogens), and a 1×10^{-5} risk level for Class C carcinogens. For systemic toxicants, the action level would be a concentration to which humans could be exposed on a daily basis without appreciable risk of adverse effects during a lifetime. The exposure scenario used for calculating the action levels was direct contact (i.e., ingestion), assuming residential land use. EPA's proposal included in §264.521(d) a separate provision establishing criteria for establishing action levels for soil, assuming exposure through consumption of the soil contaminated with a hazardous constituent. However, EPA proposed to make an exception to this approach where EPA has already established standards for remediation of spilled PCBs under the TSCA PCB Spill Cleanup Policy. In the preamble, EPA explained that the Agency had determined that the standards in the TSCA PCB Spill Cleanup Policy should be used as action levels and cleanup standards for soil in RCRA corrective actions (55 FR 30819).

Proposed Appendix A, to part 264, subpart S, provided examples of concentration levels that meet the above criteria for action levels for more than 150 hazardous constituents. However, EPA erred in setting out the concentration level for PCBs in soil in Appendix A (55 FR 30867). EPA had intended to list 1 ppm, the cleanup goal recommended by the TSCA PCB Spill Cleanup Policy for residential land use, as the action level for PCBs. Instead the action level listed in Appendix A for PCBs in soil was 0.09 ppm. EPA is requesting comment on correcting this erroneous listing. EPA believes that adding the following clarifying language

to the end of §264.521(d): "Action levels for PCBs in soils shall be defined as 1 ppm consistent with the TSCA PCB Spill Cleanup Policy at part 761 subpart G," would correct the error.

EPA believes that it is appropriate to adopt the TSCA 1 ppm level for PCBs as the action level for use under the RCRA corrective action program. As previously discussed, 1 ppm is the cleanup goal recommended by the PCB Spill Cleanup Policy for residential land use. Thus, the TSCA spill cleanup level is approximately one order of magnitude greater than the action level identified in the subpart S preamble. However, the Agency believes that adopting the 1 ppm level for RCRA may be appropriate, for several reasons. For one thing, the 1 ppm TSCA level is based on the same residential land use scenario and essentially the same exposure assumptions used in deriving the RCRA action levels. It also represents the same general "conservativeness" as an action level, in that it equates to a 10^{-5} excess lifetime cancer risk. In addition, the TSCA level was developed based on substantial studies conducted by the Agency that focused specifically on the risks posed by PCBs, as well as other relevant factors relating to cleanup of PCBs. Finally, 1 ppm is close to the analytical detection limit for soil, whereas the action level of 0.09 ppm identified in the subpart S proposal may often be below detection limits.

The Agency recognizes that adopting the TSCA 1 ppm level as an action level under RCRA would depart somewhat from how other soil action levels are set. It would be a level established under another regulatory program and, as such, may reflect certain factors that were not otherwise considered in developing the action level concept under RCRA. On the other hand, adopting the TSCA level for soils would be very much analogous to using MCLs as action levels for ground water as discussed in the July 27, 1990 proposal (see 55 FR 30819 and 30853).

It should also be noted that adopting the 1 ppm action level for PCBs requires certain explicit revisions to the proposed subpart S regulations. Specifically, as discussed above, the proposed criteria for soil action levels that were specified in proposed §264.521(d) would need to be revised to explicitly identify the 1 ppm level for PCBs. In addition, Appendix A to part 264 subpart S would require an amendment to identify the new PCB action level.

The Agency solicits comment on today's proposal for adopting 1 ppm as the action level for PCBs in soil for the

purpose of implementing corrective actions at RCRA regulated facilities.

Although the PCB Spill Cleanup Policy identifies other numbers that are generally appropriate for certain land use settings, the Agency believes that these levels are inappropriate for use as action levels, because they may often require substantial site-specific information and determinations by the Agency about current and future land use and exposure potential. This is inconsistent with the action level concept, which requires identifying conservative, presumptive levels that can be established without this type of site-specific information.

However, the Agency believes that many of the provisions of the PCB Spill Cleanup Policy may be appropriate in making decisions regarding cleanup levels in the context of RCRA corrective action. In the preamble to the proposed subpart S regulations, EPA stated that the cleanup levels and practices in the PCB Spill Cleanup Policy would generally be appropriate for use in addressing PCB releases under RCRA corrective actions. The Agency wishes to reaffirm its intention to use the 1987 spill policy as guidance for cleanup of PCBs in the corrective action program in essentially the same manner as has been identified in the Superfund guidance discussed above.

It should be noted that the Superfund guidance on PCBs focused primarily on the use of the PCB Spill Cleanup Policy in establishing preliminary remediation goals, or PRGs. The subpart S proposal did not provide an explicit regulatory framework for setting PRGs during the corrective action process; however, the preamble to the proposal did acknowledge that establishing such preliminary cleanup goals may often be appropriate in a RCRA context. The Agency may address this issue more thoroughly in subsequent RCRA rulemakings. In any case, EPA intends to use the general approach outlined in the Superfund PCB guidance in establishing preliminary cleanup goals (when appropriate), as well as "final" cleanup levels for PCB contamination at RCRA facilities. As explained in the CERCLA guidance, the levels specified in the TSCA PCB Spill Cleanup Policy would generally be examined in light of site-specific information, and that the Agency would preserve the flexibility inherent in the subpart S provisions for establishing cleanup standards, to select a cleanup level for PCBs that may depart from the TSCA PCB Spill Cleanup Policy, when appropriate. (See proposed §264.525(d), 55 FR 30877, July 27, 1990.)

The Agency solicits comment on the concept, as outlined above, of using the TSCA PCB Spill Cleanup Policy as general guidance for establishing cleanup levels under RCRA corrective action authorities. The Agency also solicits comment on specific provisions of the TSCA PCB Spill Cleanup Policy for which it may be appropriate to modify or supplement for use in establishing cleanup levels under RCRA.

d. *Today's proposed remediation strategy for PCB spills under TSCA.* EPA is today proposing a new strategy under TSCA for cleanup of all PCBs in the environment that is closely modeled after the 1987 TSCA PCB Spill Cleanup Policy for new PCB spills from electrical equipment. The Agency believes that adopting such a strategy is warranted, for several reasons. EPA's experience with PCB cleanups under CERCLA has shown that the general approach and the specific cleanup goals expressed in the 1987 Policy are generally appropriate for cleanup of PCBs not directly addressed under the policy, as long as flexibility is provided for factoring site-specific conditions into final cleanup decisions. In addition, cleanup of PCBs not directly addressed currently under the policy must be addressed under TSCA on a case-by-case basis, with oversight of the cleanup action by EPA Regions. This can require considerable paperwork and lengthy negotiations between regulators and responsible parties over cleanup goals and procedures at individual sites. Adopting a simpler, more uniform yet flexible strategy for cleanup of PCBs in the environment under TSCA would thus serve to reduce administrative and other transactional costs and accelerate the cleanup process.

EPA is not convinced that there is any compelling technical or environmental rationale for having several separate and inconsistent methods for cleaning up PCB spills, based simply on when the spill occurred. Under TSCA, the new strategy and administrative procedures propose to address the problem of PCBs in the environment through a flexible, tiered approach.

EPA is proposing that PCBs disposed of, placed in a land disposal facility, spilled, or otherwise released into the environment prior to April 18, 1978 would be presumed to be disposed of in a manner which does not present a risk of exposure (i.e., the PCBs are presumed to be safely disposed of) unless EPA makes a finding that there is a risk of exposure (see §761.60 proposed revised introductory text in the codified portion of this document). EPA could then require that an application be submitted

for approval of remediation and proper disposal of those PCB remediation wastes under the proposed §761.61(c). All other PCB remediation wastes would be addressed by one of several alternatives proposed today.

In certain scenarios PCBs could be remediated to specified levels and treated under the self-implementing provisions proposed at §761.61(a). This activity would be conducted with a minimum of interaction between EPA and the party conducting the remediation, but it would require that the specified conditions be followed without variance.

Any PCB remediation waste could be cleaned up under the risk-based provisions proposed at §761.61(c). This new provision would be harmonized with the RCRA and CERCLA programs. Any changes of the levels under RCRA and CERCLA would be reflected in a change under TSCA in the target standards. While §761.61(c) would provide flexibility based on site-specific assessment of the risks posed, it would also be the most resource intensive and time consuming to implement. All actions addressing PCBs under Superfund would use §761.61(c) as the relevant requirement under TSCA thus providing the flexibility necessary to implement site-specific remedial actions.

EPA is also proposing to retain the traditional disposal options under proposed §761.61(b) for incineration, alternate treatment technologies, and chemical waste landfilling. This section could be used where all PCB remediation waste would be removed from the environment, or where remediation levels were established elsewhere in these rules. Section 761.61(b) could also be used where a mechanism such as a State established cleanup was recognized by EPA through a coordinated approval under proposed §761.77, where a State had already established a site characterization and/or remediation plan requiring off-site disposal in a facility with a TSCA disposal approval for PCBs.

The current TSCA PCB Spill Cleanup Policy would still be available to address recent spills from electrical equipment. The party responsible for a spill which was eligible for cleanup under the spill policy would also have the option of using one of the alternatives available under proposed §761.61 or §761.79 (Decontamination), where applicable. It should be noted that, in accordance with the anti-dilution provisions of §761.1(b), if the contamination was from an authorized use, then the PCB remediation waste is regulated based on the regulatory status

of the PCBs at the time of their release into the environment. The following illustrates this point. A transformer contains PCB dielectric fluid at 1,000 ppm. The unit leaks its dielectric fluid, and all resulting PCB remediation waste is regulated, regardless of concentration, because the original dielectric fluid was regulated at the time of the leak. However, if the same PCB Transformer is first reclassified to non-PCB status (i.e., less than 50 ppm PCB in the dielectric fluid) and non-PCB dielectric fluid leaks, none of the resulting remediation waste is regulated under TSCA (but not necessarily other laws or regulations) because the dielectric fluid was unregulated at the time of the leak.

There are two questions associated with any cleanup. The first question is to what level must contamination be cleaned and the second question is what are the disposal requirements for the contaminated material. In general, the current PCB rules address the disposal question by stating that PCBs diluted through acts such as spilling or processing for disposal must be disposed of based on the disposal requirements for that PCB concentration at the time the PCBs came out of service or were spilled. However, except for those scenarios addressed by the TSCA PCB Spill Cleanup Policy, the current rules require complete removal of spilled or otherwise improperly disposed of PCBs. Most commenters to the ANPRM were very supportive of the Agency's desire to amend the current rules to allow the management of remediation wastes based on their current PCB concentrations and the site-specific risk from exposure.

Several commenters asked that EPA address the question of cleanup levels by establishing, in this rule, national standards for specific exposure scenarios, with provisions for variances that would be binding, for remediation of wastes containing PCBs for all Federal programs that would be preemptive of State and local requirements. These commenters suggested that this approach could reduce the "transactional" costs associated with site-by-site negotiations, promote voluntary remediation activities and, in general, speed the cleanup of sites. EPA has limited authority under TSCA to preempt State or local requirements for the cleanup or disposal of PCB remediation wastes. With regard to establishing uniform standards for specific exposure scenarios for the remediation of PCBs and other hazardous substances or constituents, EPA has contemplated the following options: (a) Setting specific standards, (b) using a uniform decision-

making process with target standards, but allowing site-specific variances, or (c) using a uniform decision-making process with a general goal and site-specific application. EPA believes that specific standards are most appropriate when dealing with common disposal scenarios and limited disposal options. Favoring site-specific approaches to remediate old spills is most appropriate when there is little commonality at the various sites among the problems being addressed and the available disposal options. Except for the limited scenarios proposed in §761.61(a), EPA does not believe that it has sufficient experience or information to establish additional self-implementing cleanup and disposal options. EPA is seeking comments, supported by technical information from those engaged in remedial actions; other Federal, State or local entities responsible for the implementation or oversight of remedial actions; and the general public on all three approaches including the following proposal.

Several remedial approaches could be proposed for any given site which is contaminated with PCBs. In this section, EPA is proposing three alternatives for the cleanup and disposal of PCB remediation waste under TSCA. The first alternative would be self-implementing. The term self-implementing means that EPA approval under TSCA would not be necessary as long as the entire remediation conformed to the procedures and standards of the first alternative at proposed §761.61(a). The second alternative, performance-based disposal, is the use of "traditional" disposal technologies of incineration and chemical waste landfilling, according to the approval process and standards as proposed at §761.61(b). The third alternative, risk-based disposal, is a process and decision document not unlike the Superfund remedial action decision-making process and record of decision (ROD). Each step would be approved by the Regional Administrator having jurisdiction over the site which is contaminated with PCBs, including a risk assessment and any onsite treatment, or redistribution of treated or untreated remediation waste at the site. Treatment levels would be based on a site-specific risk assessment described at proposed §761.61(c). Those seeking a PCB disposal approval could also avail themselves of the "Coordinated Approval" provision (see Unit III.K.1. of this preamble). This alternative would allow the recognition of a cleanup action conducted under another authority such as a RCRA corrective action permit or in compliance with a

CERCLA ROD or enforcement decision document.

i. *Self-implementing option.* The self-implementing alternative is patterned after the PCB Spill Cleanup Policy (40 CFR part 761, subpart G), which sets standards for cleaning up spills shortly after they occur. Like the PCB Spill Cleanup Policy, this proposed alternative requires that risk-based surface and soil levels be achieved. However, an important distinction between subpart G and the proposed self-implementing alternative is that for non-recent spills, there may be limited information concerning the concentration and amount of PCBs released to the environment and the time, nature, and extent of that release and any subsequent migration. Subpart G established spill cleanup requirements addressing the concentration and amount of spilled materials based on the location of the spill and potential exposure to the spilled PCBs. Spill cleanup in this proposal is based on the current concentration in the material onto which a spill occurred. The extent of migration of the spill is likely to be greater for an old spill than for a more recent or new spill. This difference plus the requirement for rapid initiation and containment of the spill were partly responsible for the provision at 40 CFR 761.135 which creates a presumption against an enforcement action for penalties for the act of illegal disposal. While the self-implementing proposal allows disposal of remediation waste according to the waste's current existing concentration, the proposal does not create a presumption against enforcement action for penalties for the act of unauthorized disposal. Another significant difference from subpart G is that the self-implementing disposal requirements would not apply to certain environmental and exposure scenarios having the potential for a high risk of exposure. Subpart G allows certain residual levels to remain after cleanup based on the potential future use of the site, including the imposition of physical or institutional restrictions limiting access, which could have been incorrectly assumed to always directly correlate with exposure in those areas. Today's proposal addresses residual levels based not only on access to areas, but also potential exposure to residual PCB levels within those areas. For example, a restricted access commercial area might limit who could be exposed, but might not limit how much a person with access could be exposed.

In this proposal, concrete is not considered a non-porous surface as it is in subpart G (see the proposed

definition of "non-porous surface" at §761.3). Consequently, concrete containing PCBs would have to be removed rather than just wiped off. The size of the remediation area is not an issue with today's self-implementing proposal as it is with subpart G.

The self-implementing option differentiates between the cleanup of a site and the disposal of PCB remediation waste from the site. Cleanup means the identification and reduction of the PCB concentrations, and/or removal of PCB remediation waste to a specified residual PCB concentration at its existing location. The cleanup portion of this alternative allows remediation waste with specified PCB levels to remain undisturbed at the site and not be disposed of. Cleanup may be followed by either (or both) off-site disposal of a certain amount of PCB remediation waste, or treatment of a certain amount of remediation waste at the site. Disposal means the movement of PCB remediation wastes from the site of contamination to another location for destruction or containment (off-site disposal) or the destruction or containment of PCB remediation waste at the cleanup site (on-site disposal). Section 761.61 would apply to the cleanup and disposal of all PCB remediation wastes regardless of when the disposal, spill, or contamination occurred. Subpart G would continue to apply to recent spills from electrical equipment; however, the party responsible for the spill and cleanup could choose to follow §761.61. There are other conforming changes which could be made to 40 CFR part 761, subpart G, resulting from this proposal. These changes have not been made because those who were a party to the negotiation of subpart G have not been a direct party to the development of this proposal. Nevertheless, the conforming changes to subpart G have been accounted for in this proposal and the proposal is consistent with the conforming changes, especially with respect to references of "old" spills. Section 761.61 specifically applies to "old" spills.

The self-implementing remediation option proposes on-site disposal to specified cleanup levels of residual PCBs in the PCB remediation waste. Cleanup levels would be more stringent for high exposure areas than for low exposure areas, as these terms would be defined in §761.3. Three self-implementing on-site options are proposed: capping higher residual levels (a definition of "cap" is proposed at §761.3), "treating down" from higher levels to lower levels on-site using a non-chlorinated solvent washing

process; and microencapsulation or vitrification (definitions of these terms are proposed at §761.3). These last two immobilization technologies are being proposed because they have been promulgated under RCRA for debris which is contaminated with both RCRA hazardous waste and TSCA PCB waste (see 57 FR 37194-37282, August 18, 1992). Based on EPA's experience with approving PCB disposal technologies, the solvent washing process is the only currently available destruction or physical separation PCB disposal process considered generally effective in a variety of situations, commercially feasible at ambient temperatures (i.e., no external heat source), and safe enough to be conducted without prior approval. EPA will consider these factors, along with the general statutory requirement to prevent unreasonable risk of injury to health and the environment, in considering the addition, under §761.61(c), of other processes, procedures, or technologies to §761.61(a). EPA specifically requests comments on the best method to expeditiously include new universally acceptable risk-based treatment technologies as self-implementing treatment options prior to amendment of §761.61(a) in the *Federal Register*. The kind of solvent washing process EPA proposes for treating PCBs removes PCBs from the waste, separates the PCBs from the solvent, and reuses the solvent while disposing of the PCBs. Residual levels of solvent in the treated PCB remediation waste must correspond to allowable levels under all other Federal and local regulations, including requirements under RCRA and regulations of the Occupational Safety and Health Administration (OSHA). For other techniques such as vitrification, EPA is concerned about additional issues such as the release of volatile products of incomplete combustion (PICs) especially when the process is conducted *in-situ*. If EPA cannot devise a procedure or prescribe a technology for addressing the issue of volatile PICs, vitrification will be deleted from option (a) and only considered under option (c) in a risk-based approval. EPA specifically requests comment and supporting technical information on this issue.

RCRA uses the Toxicity Characteristic Leaching Procedure (TCLP), (40 CFR part 261 Appendix II, Method 1311), its model for co-disposal of potentially hazardous wastes with municipal solid waste in a landfill. Under RCRA regulations, the assumption is that if a waste does not exhibit the toxicity characteristic (and is otherwise not

hazardous), it does not need to be disposed of as a hazardous waste; thus, it can be placed in a solid waste landfill (40 CFR 261.3). EPA is drawing a parallel to the RCRA rules for disposal of certain treated remediation wastes under TSCA. EPA is proposing to use the RCRA TCLP as a measure of effectiveness of microencapsulation or vitrification of PCB containing remediation wastes. Using the RCRA model for establishing toxic contaminant levels, EPA is proposing 50 micrograms per liter (i.e., approximately 50 parts per billion [ppb]) as the treatability level for extractable PCBs. (The Toxicity Characteristic (TC) level for PCBs was proposed and subsequently withdrawn (see 57 FR 21520, May 20, 1992 and 57 FR 49280, October 30, 1992)). If adopted under TSCA, any PCB remediation waste that has been microencapsulated or vitrified and subsequently shown to leach PCBs at less than 50 ppb, as measured by the TCLP, would be considered appropriate for disposal in a municipal solid waste landfill, after written notice to the municipal solid waste landfill, or disposal could be at a TSCA approved disposal facility. The treated PCB remediation waste would still be subject to all prohibitions in the PCB rules including, but not limited to, use, reuse, export, or the proposed ban on open burning. One commenter to the ANPRM proposed that EPA use the American National Standards Institute/American Nuclear Society leachability test (ANSI/ANS 16.1) to determine the effectiveness of microencapsulation or vitrification technologies. The major technical differences between the two leaching procedures are the amount of surface area exposed to the leaching medium and the neutral (versus the TCLP's mildly acidic) nature of the leaching medium in the ANSI/ANS Standard. As stated in its introduction, the ANSI/ANS standard serves only as a basis for indexing releases from the encapsulant and does not apply to any specific environmental situation. The commenter noted that a variety of contaminant release tests and test conditions should be developed to assess the potential for release of specific contaminants in given situations. Since this proposal is focused on the release of a toxic constituent from a matrix when co-disposed with other solid waste in a municipal solid waste landfill, EPA believes that the question of which test to use is more properly addressed in the solid and hazardous waste regulations under RCRA than the PCB rules under TSCA.

Today's proposed self-implementing option for disposal of PCB remediation waste includes a different way to evaluate PCB concentrations during site remediation. Some field screening tests have been developed and approved for use under EPA's "Test Methods for Evaluating Solid Waste" (SW-846) and have otherwise been widely used. Chemicals other than PCBs at the remediation site may interfere with the tests and indicate that PCBs are not present when in fact PCBs are present (a false negative). The correct application of the tests may still not inform or warn the user of the presence of such interferences. This proposal includes the use of several kinds of PCB field screening tests during remediation, so long as confirmatory sampling is used to guard against false negatives and to demonstrate the absence of interferences which would render the analytical results invalid. The ability to obtain acceptable analytical results in a very short time on-site and while remediation is under way can complete remediation goals more quickly and at lower costs.

The self-implementing option for the disposal of PCB remediation waste would offer one new consideration for PCB disposal at §761.61(a)(4)(v): allowing non-liquid wastes generated by the cleanup process (e.g., spent abrasives) to be disposed of at their existing concentration (i.e., at a concentration less than the maximum concentration of PCBs found at the remediation waste site). Solvents used in remediation activities could be reused according to provisions proposed in §761.79(a)(1) and §761.61(a). During use of the solvents, secondary containment would have to be provided to ensure no solvent releases to soil or water. A general requirement for protection for workers engaged in decontamination activities is also proposed. Decontamination activities could not proceed until those workers conducting the decontamination are protected from exposure to PCBs and the materials used to decontaminate. EPA requests comments on this proposal and technical information on the performance and effectiveness of other treatment technologies the Agency could include in the self-implementing option.

ii. *Performance-based option.* The performance-based disposal option proposed at §761.61(b) includes the traditional disposal technologies of high-temperature incineration, high efficiency boilers, chemical waste landfills, and alternate destruction methodologies that are currently approved by the Director of the EPA

Chemical Management Division for mobile, transportable, and non-unique fixed-site disposal units, and by the Regional Administrator for unique fixed-site disposal units. These technologies are based on their performance as required in the existing PCB disposal regulations. No specific changes are being proposed for these standards.

iii. *Risk-based option.* The risk-based remediation option proposed at §761.61(c) bases disposal requirements for PCB remediation waste on the potential risks to health and the environment resulting from residual PCBs in the PCB-remediation waste. Performance requirements could include destruction, containment, restriction of access to the disposal site, deed restrictions, and other short- and long-term management controls. The risk-based disposal standard would continue to be one of no unreasonable risk of injury to health and the environment.

The application and approval process for a risk-based remediation approval would be essentially the same as the current process for application for a performance-based PCB disposal approval. New approvals would be classified as performance-risk based approvals under proposed §761.61(c). Written applications would be required and the approving official (i.e., the Regional Administrator having jurisdiction over the site of remediation) would document in the approval: the reasons for the approval, the approval conditions, and EPA's findings. The process, criteria, and standards for decision-making would be similar to EPA's site remediation program under CERCLA. It is EPA's desire to limit the use of this time consuming and resource intensive proposed option in favor of the self-implementing provisions proposed in §761.61(a) or the decontamination procedures proposed as additions to §761.79. To assist the applicant in developing an approach for the risk-based disposal application, EPA's general principles for reviewing a PCB remediation approval application are stated here in the form of four preferences. The first preference would be to have a permanent remedy that allows for the least restrictive access and land use restrictions at each site. The second preference would be to impose greater protection of sensitive ecosystems such as water resources, croplands, grazing lands, and residential areas than the target standards, expressed as cleanup levels in the self-implementing option (at proposed §761.61(a)), would provide. The third preference would be for destruction or

extraction instead of land disposal. The fourth preference would be for using on-site or existing off-site disposal facilities versus developing new off-site land disposal facilities. Microencapsulation or vitrification would not be a preferred technology for PCBs if it caused unacceptable increases in the overall volume of wastes being sent off-site to chemical waste landfills, resulted in a liquid phase, or allowed unacceptable levels of leaching of PCBs.

The evaluation criteria for site-specific variances from the target standards would include: (1) Risk factors associated with the waste (e.g., volume, concentration, physical state, toxicity, mobility), and (2) risk factors associated with the proposed waste management option (e.g., safety, reliability, effectiveness, possibility of discharge to surface or ground water, current and reasonably expected future site use, technical feasibility, resource value, proposed institutional controls, permanence of remedy, potential for concentration of PCBs and waste minimization). While this paragraph reflects some factors associated with each criterion, these unranked factors would only provide notice and assistance in defining the criterion. EPA would not be limiting itself to the factors listed or require that each factor listed be considered.

e. *Implementation of PCB remediation programs.* Currently, based on the results of site sampling, historical, or other data, EPA may presume that PCBs are illegally disposed of at a site and require remediation under TSCA. In that case, the burden is on the site owner or operator to establish, through persuasive evidence, that the PCBs are not illegally disposed of under TSCA. Today, EPA proposes to address all PCB remediation waste, regardless of concentration, physical state or date of disposal (see proposed introductory text at §761.60) under §761.61, based on the risk of exposure or injury they now pose. EPA would apply the current "anti-dilution" provision at §761.1(b) to retain regulatory authority over PCB remediation waste even where the PCB concentration is now below 50 ppm, unless the dilution was authorized (e.g., as the result of a transformer reclassification under §761.30(a)(2)(v)) and the authorized dilution occurred prior to disposal. Anti-dilution would not mandate disposal requirements for PCB remediation waste under proposed §761.61 (or §761.62 for PCB non-remediation waste). Again, the burden would be on the site owner or operator to establish, through persuasive evidence, that the PCB remediation wastes, regardless of current

concentration or date of disposal are legally disposed of under TSCA and in the case of wastes disposed of before April 18, 1978, which are now ≥ 50 ppm PCBs, do not pose a risk of injury. PCBs at any concentration are subject to remediation under CERCLA or corrective action under RCRA. This is not an inconsistency in application of the various statutes because the 50 ppm PCB level under TSCA is based in part on the economic impacts of the PCB regulations and not solely on risk. EPA is not precluded from taking action under any other statute it administers simply because it has chosen not to regulate use or disposal or take remedial action under TSCA. For example, a party begins a cleanup of a historic pre-1978 spill. This site would not fall under 40 CFR part 761, subpart G and would require Regional approval for cleanup levels for PCBs at ≥ 50 ppm. The soil at the site is found to vary in concentration between 10 ppm and 100 ppm PCBs. Upon application to the Regional Administrator, under proposed §761.61(c), the site could be cleaned to a specified level, and the resulting PCB remediation waste treated by chemical dechlorination. Or, under the proposal, the Regional Administrator could, upon application and upon a site-specific evaluation, determine that an immobilizing procedure such as *in situ* vitrification was a viable alternative. A disposal application would then be judged by EPA on its overall ability to protect health and the environment from unreasonable risk of injury from PCBs. PCBs at levels < 50 ppm (at a pre-1978 disposal) would still be subject to cleanup under RCRA and CERCLA authorities.

The disposal rule proposed today would be a potentially "applicable or relevant and appropriate requirement" for PCB cleanups under the CERCLA, both with respect to the disposal of PCB remediation wastes at CERCLA sites, and with respect to the remediation approach utilized and the residual level of PCBs in soil. However, EPA does not anticipate that the provisions relating to the remedial approach and residual levels permitted will significantly affect CERCLA cleanups, because the rule would provide three options. Generally, EPA would be likely to select the risk-based option at §761.61(c), which would give the Agency very broad discretion in selecting a remedy.

One commenter suggested that EPA should conduct a comparative risk analysis of all possible disposal techniques and include other factors such as transportation and disposal of treatment residues before issuing a PCB disposal approval under TSCA. EPA

does not believe that TSCA authority should be used to accomplish exactly what CERCLA, an all encompassing proactive remediation statute, was designed to do. Rather, the PCB disposal approval process under TSCA is simply one of determining the effectiveness of an applicant's proposed cleanup and disposal options for PCBs in achieving a specific standard.

5. *PCB remediation wastes.* One category of large volume PCB wastes includes all contaminated environmental media, dredged materials, municipal sewage treatment sludges, commercial or industrial sludges in or from any pollution control device (contaminated as the result of a spill of PCBs but not resulting from the incidental manufacture of PCBs); soil, rags, and other debris generated as the result of a spill cleanup; and site removal, remediation, or corrective action waste at any concentration of PCBs and in liquid or non-liquid form. This category of wastes would be referred to as "PCB remediation wastes," and EPA is proposing this definition at §761.3. In response to comments and to simplify the application of these amendments, EPA is proposing that PCB remediation wastes include both liquids and non-liquids at any concentration of PCBs, in any quantity or volume, regardless of when the waste was generated.

6. *PCB non-remediation wastes.* The other category of large volume PCB wastes would be referred to as "PCB non-remediation wastes." PCB non-remediation waste includes: non-liquid bulk wastes or debris from the demolition of buildings and other human created structures where the construction materials were manufactured or coated (e.g., by using paint containing PCBs) with PCBs as opposed to being contaminated with PCBs (e.g., through a spill from electrical equipment); wastes from the chopping or shredding of automobiles, household and industrial appliances, or other white goods (i.e., shredder fluff); PCB-impregnated electrical, sound-deadening, or other types of insulation and gaskets; and all other PCB items or PCBs for which disposal requirements are not otherwise specified in §761.60, regardless of concentration where the concentration at the time of disposal was greater than or equal to 50 ppm PCBs. EPA is proposing a definition of "PCB non-remediation waste" at §761.3.

Shredder wastes comprise small pieces of metal, rubber, plastic, fabric, foam, insulation, wire, cardboard, dirt, and various other materials. Demolition wastes may contain any number of materials, including some of the same

materials found in shredder waste. The results of shredding or demolition processes may be that the sources of PCB contamination in these large volume wastes may not easily be identified. In addition, some decommissioning projects and demolition projects may produce large quantities of insulation containing PCBs.

Shredder waste is also the "end of the line" for many items, not otherwise regulated for disposal, that find their way into the scrap metal stream, and may result in subsequent contamination of shredder waste. EPA acknowledges the need for responsibly operated metal recycling facilities. As such, EPA is reiterating that all wastes containing 50 ppm PCBs or greater, including shredder wastes, as well as demolition wastes and large volumes of other PCB non-remediation wastes impregnated with PCBs (e.g., insulation), are regulated for disposal. However, EPA is proposing at §761.62 that where PCB non-remediation wastes are the result of processing PCBs regulated for disposal, the wastes resulting from that processing are also regulated for disposal even when the resulting concentration of the processing wastes is less than 50 ppm PCB, through action of the anti-dilution provision at §761.1(b). Where the waste is already shredded, statistically valid sampling and analytical methods acceptable to EPA, such as those in proposed Appendix III to part 761, may be used to characterize the contamination to support proposals for various disposal options. Under the TSCA PCB program, EPA will not accept any sampling method that mathematically masks or dilutes areas of PCB contamination. A generator or facility owner or operator may demonstrate that no PCBs greater than or equal to 50 ppm were in the wastestream at the time of generation or that all wastes containing PCBs are exempt under the TSCA Household Waste Exemption (Unit II.D.1. in this preamble). Conscientious operators of demolition activities and shredding facilities should be aware of known sources of contamination that can readily be removed from the wastestream before processing and disposal. These sources may include small capacitors, light ballasts, or PCB-Contaminated Articles such as hydraulic equipment. Proposed §761.62 would allow for other disposal options for PCB non-remediation wastes based on site-specific criteria by extending the risk-based philosophy of the disposal requirements for municipal sludges and dredged materials under proposed

§761.60(a)(5). Under this proposal, EPA could also require as a condition of any approval under this section the implementation of a source identification and removal program to control the level (i.e., concentration) and variability of PCBs in the wastestream. In compliance with current restrictions, items regulated for disposal such as transformer carcasses, nonintact or leaking small capacitors, or wastes resulting from unauthorized uses must not be placed in the metal stream destined for shredding facilities.

a. *Risk-based disposal.* In general, EPA's preference for disposal of PCB non-remediation wastes under proposed §761.62 is to approve their disposal in a well-engineered and operated municipal solid waste landfill with appropriate monitoring to detect releases of PCBs to the environment. Facilities should also be designed and operated in such a manner as to control the release of PCB non-remediation wastes to the environment by controlling among other things, areal dispersion, run-on and runoff, and leachate generation and management from the waste disposal units. EPA would not be inclined to approve the disposal of PCB non-remediation wastes as fill material in environmentally sensitive areas including but not limited to sites in 100-year flood plains, near potential sources of drinking water, in wellhead protection areas, and in residential settings. PCB non-remediation wastes could still be disposed of under the three current disposal options of incineration, chemical waste landfill, or any alternative disposal methods approved under TSCA authorities by the Regional Administrator upon application. Under the proposal, if the waste is not uniform in PCB contamination, the Regional Administrator may specify appropriate limitations on the method or location of disposal (§761.62(c)(4)). Where PCB non-remediation waste is stored on the ground (e.g., in a pile), any soil contaminated with non-remediation waste would be regulated for disposal under §761.61.

b. *Leachability-based disposal.* As an alternative to obtaining a risk-based TSCA disposal approval under proposed §761.62(c), EPA is proposing under §761.62(b), to allow the disposal of PCB non-remediation waste in a municipal solid waste landfill if the level of PCBs in the waste as measured by the Toxicity Characteristic Leaching Procedure was less than 50 micrograms per liter (i.e., 50 ppb) and the landfill is notified in writing, at least 15 working days prior to their receipt of the waste. This self-implementing option would be

available to only the PCB non-remediation waste itself and not to any material resulting from pre-treatment such as microencapsulation or vitrification of the waste. Any proposal to process (i.e., pretreat) PCB non-remediation waste currently requires an approval, and this is not proposed to change. Disposal of PCB non-remediation wastes, such as wastes from automobile or appliance shredders, in a municipal solid waste landfill is currently prohibited by the PCB regulations, but may be allowed by EPA on a case-by-case basis.

EPA requests comment, with supporting data, on the inclusion of other self-implementing options for the storage and disposal of PCB non-remediation wastes under §761.62(b). These additional options would include provisions to make them generally applicable nationwide and not require additional site-specific prohibitions or limitations.

c. *Performance-based disposal.* PCB non-remediation waste could still be disposed of in a TSCA approved incinerator or chemical waste landfill under proposed §761.62(a). This option would be most appropriate where the PCB for PCB non-remediation waste which was no longer being generated, the waste could not be disposed of under proposed §761.62(b) because of high levels of leachable PCBs, and where the situation would not warrant the expenditure of resources to apply for a risk-based disposal approval under proposed §761.62(c).

7. *Decontamination standards and procedures.* EPA is proposing several changes and additions to §761.79 with general applicability throughout the PCB program under TSCA, for liquids and non-porous surfaces, except where another standard is established, for example in a RCRA permit, a TSCA PCB disposal approval, a Superfund ROD, or a Superfund enforcement decision document. Today's proposal includes a general decontamination standard of ≤ 10 micrograms PCBs (μg)/100 square centimeters (cm^2) (as measured by standard wipe tests, §761.123) for a non-porous surface (see proposed definition at §761.3) and two decontamination procedures for non-porous surfaces. The decontamination standard may be achieved using any disposal or cleaning technique which, in some instances, may require prior approval by EPA. Although activities such as filtering, soaking, wiping, stripping of insulation, chopping, scraping, or the use of abrasives to remove or separate PCBs from contaminated surfaces or liquids may be processing for disposal as opposed to disposal, EPA is proposing

to waive any requirement to obtain prior approval under TSCA for these listed activities. EPA also considered whether to include distillation in this exemption but remains concerned about releases of volatile and semi-volatile organic compounds to the environment. EPA is seeking comment on the inclusion of distillation. All residues containing PCBs from these and other "disposal" activities would remain regulated.

The proposed standard for decontamination of solid surfaces is the standard in the PCB Spill Cleanup Policy at §761.125(c)(2)(i). EPA believes that $\leq 10 \mu\text{g PCB}/100 \text{ cm}^2$ is protective for disposal or subsequent reuse of the decontaminated surface. This standard has also been demonstrated to EPA through the PCB disposal approval process to be achievable through a wide variety of techniques. The residual cleaning materials containing PCBs would be managed and disposed of as a PCB waste in accordance with the applicable PCB disposal regulations in part 761, subpart D. The "Note" currently following §761.79 would be inserted as introductory text under §761.79 to warn those conducting decontamination operations that compliance with this section would not relieve them of their duty to comply with other Federal, State, or local requirements for the use and disposal of solvents. One example is the requirement to comply with the rules for the disposal of wastes identified or listed under RCRA or State or local laws as solid, hazardous, or otherwise regulated wastes.

As an alternative to decontamination followed by sampling, for non-porous surfaces, especially those that cannot be accessed for sampling, EPA is proposing two non-aggressive procedures for decontamination. The first procedure is for surfaces contaminated with mineral oil dielectric fluid (MODEF) with PCB concentrations $\leq 10,000 \text{ ppm}$ (see proposed §761.79(e)). The second procedure is for surfaces contaminated with higher concentrations of PCBs in MODEF and askarel PCBs (see proposed §761.79(f)). Each procedure involves a 15-hour non-aggressive soaking (i.e., no agitation of the kerosene or movement of the contaminated surface in the kerosene). Proposed §761.79(f) would require a second soak with clean kerosene.

After decontamination using one of these procedures, the decontaminated surface would not be regulated for disposal and could be reused except in association with food, feed, or drinking water in accordance with proposed §761.20(c)(5). EPA's research demonstrates that these two non-

aggressive procedures using kerosene should decontaminate surfaces to a level $\leq 10 \mu\text{g}/100 \text{ cm}^2$. Therefore, confirmatory sampling would not be required. EPA is requesting comment, supported by laboratory data, on aggressive versus the proposed non-aggressive decontamination techniques especially where the volume of kerosene or another solvent proposed by the commenter can be reduced. EPA recognizes that there is a possibility that the proposed decontamination procedure may not result in final surface levels at or below $10 \mu\text{g}/100 \text{ cm}^2$. For purposes of implementation, if EPA subsequently sampled a decontaminated surface and found levels above $10 \mu\text{g}/100 \text{ cm}^2$, the surface would be regulated unless it could be shown by the owner (i.e., through laboratory documentation) that the original PCB concentrations were determined, the prescribed procedures in §761.79(e) or (f) were followed for those concentrations of PCBs, and the prescribed volume of PCB rinseate was used and properly disposed of (i.e., through copies of the manifests and certificates of disposal).

EPA is also proposing additional language at §761.79(a) to clarify that the disposal of solvents, abrasives, or equipment used in decontamination procedures is regulated and is proposing another disposal option, specifically disposal in an industrial boiler, for certain of those solvents. The proposal would also require at §761.79(a)(5) that all decontamination activities be conducted with containment adequate to prevent releases of PCBs to the environment. EPA is proposing that any decontamination activities conducted in accordance with the provisions of §761.79 would not require a PCB disposal approval from EPA. Workers would have to be protected against exposure through dermal contact or inhalation; however, EPA is not specifying what measures must be taken.

The proposal establishes a decontamination standard for water of 0.5 micrograms PCB per liter ($0.5 \mu\text{g}/\text{l}$) or approximately 0.5 ppb PCB (see proposed §761.79(g)). This standard is consistent with EPA drinking water levels for PCBs at 40 CFR 141.61(c). EPA is proposing a 0.5 ppb decontamination standard because it is difficult to ensure that the decontaminated water will not be reused in association with food or feed or as drinking water for livestock or humans. A conforming amendment at proposed §761.20(c)(6) would allow the unrestricted reuse of water decontaminated in accordance with the level established in §761.79(g). The Agency believes that uses of water at or

below the proposed decontamination level would not pose an unreasonable risk of injury to health or the environment. The proposal also establishes a decontamination standard for organic liquids, not associated with remediation wastes, of less than 2 milligrams PCB per liter (i.e., $<2 \text{ ppm PCB}$) (see proposed §761.79(h)).

EPA believes that placing these standards in the decontamination section will clarify and simplify the implementation of the PCB program by specifically defining levels for decontamination and removing the prohibitions against reuse (see §§761.20(c)(5) and (6)). The proposed introductory text to §761.60 states in part that "...PCB wastes must be disposed of in accordance with provisions of this subpart." EPA interprets this to mean that any PCB otherwise subject to the disposal requirements of §761.60, may also be disposed of through decontamination under proposed §761.79.

8. *Distribution in commerce and use of decontaminated equipment, structures, and materials.* The Agency is proposing a conforming amendment to the current provisions of §761.20(c) as an exception to the general prohibition against the distribution in commerce and use of equipment, structures, and materials unless they are decontaminated under a TSCA approval, or the provisions at proposed §761.79. This amendment is important because it causes the scope of the PCB prohibitions in this section to, among other things, specifically conform to the current use of TSCA disposal approvals in establishing decontamination or cleanup levels (see proposed §761.20(c)(4)). EPA also proposes at §761.20(c)(7) to exempt from the general prohibition on use of PCBs, surfaces (e.g., equipment) which comes in contact with PCBs or PCB wastes at $\geq 50 \text{ ppm}$ by allowing its continued use until the surface exceeded the appropriate decontamination standard, at which point it would have to be decontaminated or disposed of. The Agency believes that the further use, or distribution in commerce of items decontaminated or cleaned up to specific standards established in applicable EPA PCB spill cleanup policies, §761.79, or a TSCA approval would not present an unreasonable risk of injury if the decontaminated items are not used or reused in association with food, feed, or drinking water. For water, a standard is being proposed at §761.20(c)(6) that is stringent enough to allow unrestricted distribution or reuse of the decontaminated water. In §761.20(c)(7), the Agency is proposing

to allow the restricted distribution or reuse of solid, nonporous surfaces that have been contaminated by regulated PCBs if the final PCB concentration meets the decontamination standard proposed at §761.79(d), regardless of the original concentration of the PCBs. Although any liquid (e.g., a solvent) or solid (e.g., an abrasive) used for decontamination would remain regulated, the decontaminated surface could be distributed or reused pursuant to proposed §761.20(c)(5) and (6).

9. *Processing for disposal.* Current §761.20(c)(2) says in part that PCBs "may be processed . . . in compliance with the requirements of this part for purposes of disposal in accordance with the requirements of §761.60." The preamble language addressing this section (see 44 FR 31527, May 30, 1979) explained that the provision was intended to apply to the concentration of PCBs in a manufacturing waste stream where the wastes resulted from the manufacture and processing of PCBs for use. EPA is clarifying how this paragraph applies to the disposal of all PCBs, including those removed from use. Today, EPA is broadening the exemption for processing for disposal by identifying which processing for disposal does not require an approval and which processing for disposal does require a PCB disposal approval. EPA clarifies that processing activities which are primarily associated with and facilitate the storage and transportation of PCBs for disposal would not require an approval. Processing activities which are primarily associated with and facilitate treatment, as defined in §261.10, or land disposal, rather than storage or transportation for disposal would require an approval unless the processing was part of an activity already included in an approval or other authorization in subpart D of this part, for example in §§761.61(a), 761.62(b), or 761.79.

Specifically, EPA is implementing the existing provisions at §761.20(c)(2) as follows:

(a) Processing activities which are primarily associated with and facilitate storage or transportation for disposal do not require a TSCA PCB disposal approval. Examples include, but are not limited to removing PCBs from service (e.g., draining liquids), packaging or repackaging PCBs for transportation for disposal, or combining materials from smaller containers into larger containers in accordance with §761.1(b).

(b) Processing activities which are primarily associated with and facilitate treatment or land disposal require an approval unless they are part of an existing approval or are part of a self-

implementing activity such as §761.61(a) and §761.79 or otherwise specifically allowed under 40 CFR part 761, subpart D. Examples include but not limited to microencapsulation; pulverization; particle size separation; employing augers or hoppers to facilitate feeding non-liquid PCBs into a disposal unit; and directly piping liquid PCBs into a disposal unit from PCB items, storage containers or bulk transport vehicles; or directly introducing non-liquid PCBs from containers, bulk transport vehicles or on pallets into a disposal unit, such as an incinerator, a high efficiency boiler, industrial furnace, alternate destruction method, or chemical waste landfill.

(c) With the exception of provisions in §761.60(a)(2) or (3), in order to meet the intent of §761.1(b), processing, diluting or otherwise blending of waste prior to being introduced into a disposal unit for purposes of meeting a PCB concentration limit shall be included in a disposal approval or comply with the requirements of §761.79.

(d) The rate of delivering liquids or non-liquids into a PCB disposal unit shall be part of the conditions of the PCB disposal approval for the unit when an approval is required.

B. Large Volume PCB Articles

Section 761.3 currently defines "PCB Article" as any manufactured article, other than a PCB Container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. "PCB Article" includes capacitors, transformers, electric motors, pumps, pipes, and any other manufactured item (1) that is formed to a specific shape or design during manufacture, (2) that has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) that has either no change of chemical composition during its end use or only those changes of composition that have no commercial purpose separate from that of the PCB Article.

The large volume article disposal proposals differ from the existing PCB Article disposal regulations in two ways: they focus more on the presence of PCBs rather than on the presence of PCB containing liquids; and the proposed changes focus more on the decontamination of portions of the articles for purposes of another use (metal recovery) or reuse (by verifying the absence of PCBs presumed present), rather than for outright disposal (i.e., destruction or landfilling) of the article.

1. *Disposal.* The current §761.60(b)(5) would be redesignated as §761.60(b)(6). The new §761.60(b)(6)(ii) would be amended to include language allowing

disposal in industrial furnaces (as defined in the proposed §761.3) of drained PCB-Contaminated Articles. A new §761.60(b)(6)(iii) would be added to address PCB Articles with surfaces contaminated with PCBs, but which contain no liquids by which to characterize the article.

With respect to §761.60(b)(6)(ii), although not explicitly provided for in the current regulations, EPA in the past, has interpreted disposal in an industrial furnace, as defined in proposed §761.3, as an appropriate method of disposal also for drained PCB-Contaminated Transformers and drained PCB-Contaminated natural gas pipeline (see Ref. 25).

Currently, the regulations specifically state that "salvage" is an acceptable form of disposal for "PCB hydraulic machines" containing PCBs at concentrations of ≥ 50 ppm (§761.60(b)(3)). The word "salvage" has been interpreted by EPA to allow smelting of "PCB hydraulic machines" that have been drained of all free flowing liquid. (See Ref. 21) In addition to disposal of hydraulic machines, which have been drained of hydraulic fluids, in municipal or industrial landfills, EPA is proposing to amend §761.60(b)(3) to allow salvage by disposal in industrial furnaces, as defined in proposed §761.3. It should be noted that PCBs, not just free flowing liquids, associated with the PCB Articles must be removed from the surface of the item before the item may be reintroduced into commerce. EPA is seeking comments and data on disposal techniques such as disposal in industrial furnaces for inclusion in this amendment.

The new §761.60(b)(6)(iii) addresses PCB Articles with surfaces contaminated with PCBs, but which contain no liquids by which to characterize the article. This category of PCB Articles would include, but not be limited to, ship hulls, air handling systems, and other articles that could be characterized by a wipe sample. As a point of clarification, EPA believes that PCB-Contaminated Electrical Equipment with porous material in its core will probably not rapidly be able to meet the requirement of being drained, because the porous core will continue to release liquid for an extended period of time after the initial liquid is drained from the unit. In these cases EPA recommends that the core and any other sorbent material be removed and placed in a TSCA approved chemical waste landfill.

PCB-Contaminated Articles regulated under proposed §§761.60(b)(6)(ii) or (iii) would be required to be disposed of in:

a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units), an industrial furnace (defined in proposed §761.3) operating in compliance with the requirements of §761.60(a)(4), or other TSCA approved disposal facilities.

As a point of clarification, the phrase "is not regulated for disposal" at current §§761.60(b)(4) and (b)(5)(ii) does not mean that drained PCB-Contaminated Electrical Equipment and PCB Articles may be sold, distributed in commerce for sale or use, or reused without an exemption under these rules. The phrase only means that a waste can be disposed of, in accordance with the definition of disposal at §761.3, without a TSCA PCB approval.

2. *Open burning and industrial furnaces.* Currently, §761.60(b)(4) and (b)(5)(ii) provide that drained PCB-Contaminated Electrical Equipment (except capacitors) and drained PCB-Contaminated Articles are not regulated for disposal. EPA chose not to regulate the disposal of certain PCBs because it found that the risks were not unreasonable. However, EPA is aware that certain PCBs have been disposed of through "open burning" (e.g., the burn-out of core materials in PCB-Contaminated Transformers) without adequate provision for efficient combustion and control of gaseous combustion products. EPA currently controls the combustion of PCBs through incinerator and industrial boiler criteria set out at §761.70, to limit the release of PCBs and the production or release of byproducts of the incomplete combustion of PCBs such as dioxins and furans. EPA is proposing at §761.3 a definition of "open burning" that is consistent with RCRA's definition at 40 CFR 260.10, a ban on the practice of open burning. Open burning can result in the volatilization of PCBs and several toxic products of incomplete combustion including polychlorinated dibenzofurans; 2,3,7,8-tetrachlorodibenzofuran; polychlorinated dibenzo-*p*-dioxins; and 2,3,7,8-tetrachlorodibenzo-*p*-dioxin.

This provision would prevent open burning of regulated PCBs in State permitted, licensed, or registered municipal solid waste combustors (i.e., thermal treatment unit) unless the combustor met the requirements for an industrial furnace set out at proposed §761.3 and §761.60(a)(4). To facilitate the Regional Administrator's review of the operation of an industrial furnace, a site-specific risk assessment would need to accompany any request for a Regional Administrator's determination of no unreasonable risk. This risk assessment

could be in the form of a permit issued under RCRA or the Clean Air Act, or as a separate determination issued by the Regional Administrator prior to combustion of PCBs.

Industrial furnaces, as defined in 40 CFR 260.10, are being proposed as an acceptable form of disposal when as industrial furnace combusting PCBs does not release unreasonable levels of PCBs to the environment. To help ensure that PCBs disposed of in an industrial furnace do not pose an unreasonable risk of injury to health or the environment, EPA is proposing at §761.60(a)(4) that industrial furnaces used for disposal of PCBs be operated under either a RCRA permit (40 CFR part 266, subpart H and 40 CFR 270.66) for industrial furnaces or a valid State air permit that includes a standard for PCBs, and that the industrial furnaces be in compliance with the conditions of their permit. Where an industrial furnace does not meet the permit requirements, upon written request by the owner or operator of the industrial furnace, the Regional Administrator may make a finding, in writing, that the combustion of PCBs in certain industrial furnaces would not pose an unreasonable risk to health or the environment if the industrial furnace is operating in compliance with the proposed conditions discussed below even though it does not have RCRA or State air permits. EPA is amending Form 7710-53, "Notification of PCB Activity," to include a category for industrial furnaces and is proposing that owners of this equipment comply with the notification requirements of §761.205 by notifying the Agency that their equipment is used to dispose of PCBs. (For the reader's convenience, a copy of the revised form is reproduced at unit III.J. of this preamble and may be used to notify EPA of PCB waste handling activities. The form will no longer be shown in 40 CFR part 761.)

The following operating conditions are being proposed at §761.60(a)(4) for industrial furnaces disposing of PCB-Contaminated Items. The conditions are: (1) The operating temperature of the industrial furnace must be at least 1,000° C (centigrade) at the time it is charged; (2) each charge must be fed into molten metal or metal at or above 1,000° C; (3) successive charges must not be introduced into the hearth in less than 15 minute intervals, (4) there shall be no visible particulate emissions from the stack during PCB disposal (as determined by Method 9 in 40 CFR part 60 Appendix A), (5) there shall be no visible fugitive particulate emissions from the industrial furnace building during PCB disposal (as determined by

Method 9, in 40 CFR part 60 Appendix A); (6) the industrial furnace must have an operational device which accurately measures, directly or indirectly, the temperature in the hearth; and (7) a reading of the temperature in the hearth at the time it is charged must be taken, recorded, and retained at the facility for 3 years from the date each charge is introduced. If EPA ever determined that an industrial furnace was not operating in compliance with one or more of the conditions proposed in §761.60(a)(4), was not operating under and in compliance with a valid RCRA permit or State air permit (with an emissions standard for PCBs) or a finding by the Regional Administrator, the owner or operator of that industrial furnace would be deemed to be conducting "open burning", and would be, among other things, prohibited from introducing any additional PCB wastes into the unit. Examples of acceptable industrial furnaces which could meet the proposed operating conditions include, but are not limited to, electric arc furnaces, blast furnaces, and open hearth furnaces. If drained PCB-Contaminated Items are charged at less than 1,000° C into a furnace chamber and the furnace gas emissions from this chamber passed through a secondary combustion chamber, this kind of furnace shall be approved according to §761.60(e). This disposal option would not be available for TSCA regulated PCB liquids.

As a conforming change, due to the proposed ban on open burning, EPA is proposing to delete the phrase "is not regulated by this rule" from the PCB regulations at §761.60(b)(4), governing disposal of drained PCB-Contaminated Electrical Equipment, except capacitors and (b)(5), governing disposal of drained PCB-Contaminated Articles. The proposal would substitute the phrase "may be disposed of in a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units), an industrial furnace as defined in §761.3, operating in compliance with the requirements of §761.60(a)(4), or a disposal facility approved under this part." The purpose of these proposals is to promote, with minimal regulatory burden, certain recycling practices such as smelting for the recovery of metals and to stop such practices as the unapproved burning of PCB liquids, contaminated wood or paper cores, or contaminated insulation even where there may be a claim of energy recovery unless specifically allowed elsewhere by these regulations.

Some commenters to the ANPRM advised EPA against proposing controls

on industrial furnaces, stating that current processes were adequate. However, another group of commenters recommended that either additional controls be placed on industrial furnaces or that drained PCB-Contaminated Items be otherwise regulated for disposal. These commenters suggested environmental harm could be caused by the unregulated combustion of PCB-Contaminated Items.

EPA believes that responsibly run industrial furnaces provide a valuable recycling benefit and that the current Federal regulatory matrix in conjunction with the proposed operating standards would provide adequate controls on any potential emissions.

3. Characterization of PCB Articles. Under §761.60(b)(5) of the current rules, PCB Articles are characterized by the PCB concentration found in the free flowing liquid. This method is appropriate for electrical equipment containing PCBs and some other articles containing PCBs. However, it may not be appropriate for PCB Articles whose surfaces may be contaminated with a very light coating of liquid which is not free flowing. In these instances, EPA is proposing at §761.60(b)(6) that the standard wipe test be used to characterize these articles. Nonporous surfaces including, but not limited to, ship hulls and air handling systems could be wipe sampled under proposed §761.60(b)(6)(iii), pursuant to the wipe sampling guidelines, at locations that accurately characterize the article. Areas directly in contact with PCBs would have to be sampled. Any nonporous surface found to be contaminated with PCBs at <100 micrograms per 100 square centimeters could be disposed of in an industrial furnace. Other articles found to be contaminated with PCBs at ≥ 100 micrograms per 100 square centimeters must be disposed of in a TSCA approved incinerator or placed in a TSCA approved chemical waste landfill. EPA is proposing to limit the application of the wipe test to characterize items for disposal to certain articles. The wiped surface must be nonporous for the test to accurately characterize the contamination level of the article. However, a standard wipe test may be applicable to other PCB Articles with porous surfaces under an alternative disposal approval (§761.60(e)). Any article may also be disposed of through decontamination under proposed §761.79, as applicable.

4. Characterization of natural gas pipeline. A new §761.60(b)(5) and Appendix I would be created to address disposal, including abandonment in place, and removal of natural gas

pipeline. This section proposes the characterization of natural gas pipeline by direct analysis of pipeline fluids, commonly found in pipeline "drips" and geographic low points or the use of the standard wipe test for characterization purposes, if liquid samples are not available. Natural gas pipeline being removed from service which is characterized as PCB-Contaminated, that is, between 50 and less than 500 ppm PCBs in pipeline fluids or, for drained pipe, those segments which are greater than 10 to less than 100 micrograms PCB per 100 square centimeters, as characterized by the standard wipe test, may be disposed of in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste (except thermal treatment units), in an industrial furnace operating in compliance with the requirements of §761.60(a)(4), or in a TSCA approved disposal facility. Natural gas pipeline characterized at 500 ppm PCB or greater in its condensate liquids or 100 $\mu\text{g}/100\text{cm}^2$ PCB or greater in a standard wipe sample could be removed and managed in a TSCA approved disposal facility, as a PCB non-remediation waste under proposed §761.62 or decontaminated under proposed §761.79. Natural gas pipeline with an inside diameter of 4 inches or less is proposed to be disposed of in the same manner as PCB-Contaminated pipeline.

The natural gas pipeline industry routinely takes segments of pipeline out of service by abandoning the segments in the right-of-way. EPA is proposing several options for natural gas pipeline that would be abandoned in place. Natural gas pipeline at any concentration of PCBs, containing no free-flowing liquid and with an inside diameter of 4 inches or less, could be abandoned in place by filling the pipe to 50 percent of the volume with cement or other materials listed in proposed §761.60(b)(5) or placing the abandoned segment in a public service notification program and under either option, sealing the ends shut. PCB-Contaminated natural gas pipeline of any diameter could be abandoned in place if it contained no free flowing liquids and each end was sealed shut. Natural gas pipeline at concentrations of 500 ppm PCBs or greater, or 100 $\mu\text{g}/100\text{cm}^2$ PCBs or greater could be abandoned in place if it was either washed once with diesel fuel or filled to 50 percent of its volume with cement or other materials listed in proposed §761.60(b)(5) and, in either case, each end was sealed. Where natural gas pipeline of any diameter or PCB

concentration is abandoned in certain listed locations that could be difficult to sample, the segments would be filled to 50 percent with cement or other materials listed in proposed §761.60(b)(5), unless cement was specified as a requirement for abandonment.

EPA proposes, in Appendix I, details on how to characterize natural gas pipelines containing PCBs for abandonment and removal. Appendix I would require that natural gas pipeline containing PCBs be wiped on the lowest point on the inside surface of each end of a removed segment of pipe as that point would be determined prior to removal from the ground. Where the pipe was removed from the ground, the removed segment to be sampled could not exceed 40 feet in length. Segments of natural gas pipe removed from the ground for disposal would be required to be sampled at each end. A length of pipe having seven or fewer segments that was removed for disposal would have to be sampled at each end of each segment. For removal of multiple contiguous segments, greater than seven segments but less than 3 miles in total length, samples would be required from both ends of the first and last segments removed and both ends of five randomly chosen segments in between (with this scheme producing seven sampled segments). For removal of multiple contiguous segments more than 3 miles in total length, samples would be required from both ends of the first segment and both ends of each segment that is one-half mile distant from the segment previously sampled (with this scheme producing a minimum of seven sampled segments).

For pipe to be disposed of, the analytical results of both samples from each segment sampled would be averaged to determine the level of contamination. If any average sample results from any segment removed were greater than 10 to less than 100 micrograms PCB/100 square centimeters, then that segment would be considered PCB-Contaminated. If any average sample results from multiple contiguous segments removed were greater than 10 micrograms PCB/100 square centimeters then all unsampled segments in that removal would be presumed to be contaminated with PCBs at that level. Other sampling regimes could be approved in a disposal approval issued under §761.60(e) or §761.62(c).

C. PCB/Radioactive Wastes

The Agency solicited through the ANPRM information and comments regarding the regulation under TSCA of

the continued use, storage, and disposal of mixtures, items, and wastes with both PCB and radioactive constituents.

Information was requested to be used to propose criteria for developing an authorization for the continued use, storage, and disposal of such materials, which would minimize risks to health and the environment from PCBs. With respect to radioactive components, the proposed criteria would achieve compliance with requirements established under the authority of the Atomic Energy Act (AEA) as amended (42 U.S.C. 2011) and maintain doses from radioactive materials regulated under the AEA at a level that is "As Low As Reasonably Achievable" (ALARA) (40 FR 19442, May 5, 1975; 10 CFR part 50, Appendix I).

The Nuclear Regulatory Commission (NRC) and the Department of Energy (DOE) participated in the identification of situations of potential concern due to the presence of radionuclides and the development of the proposed waste management options for PCB/radioactive waste, as reflected in this section.

The ANPRM stated that neither TSCA nor the PCB regulations has waiver provisions similar to those under RCRA and solicited comments on amending the 1-year time limit for storage and disposal for PCBs at 40 CFR 761.65(a) where no disposal technology exists. An extension to the 1-year storage and disposal requirement could also be appropriate for situations where the disposal capacity or the time necessary to complete the disposal are insufficient. This approach would provide flexibility on a case-by-case basis to address specific use scenarios or storage requirements and issues unique to PCB/radioactive waste management.

The majority of comments supported flexibility in extending the 1-year time limit for storage and disposal, and concurred with the proposal that such extensions or waivers should be determined on a case-by-case basis. Some commenters suggested a general regulatory waiver or variance to the 1-year time limit for storage and disposal requirement. Still another commenter suggested that EPA grant an exemption similar to the national capacity variance to RCRA's hazardous waste land disposal restriction requirements. Other commenters proposed a "good faith" showing by contacting disposal facilities nationwide and certifying that disposal capacity is not available for wastes remaining in storage. Many commenters also supported extending or waiving the 1-year time limit for storage and disposal requirement for materials like PCB/radioactive waste. Commenters

recommended extensions for problems such as: a lack of disposal or treatment technology, a lack of disposal or treatment capacity, and a lack of sufficient time to complete the disposal process (e.g., bioremediation).

EPA, in Unit III.G.3 of this preamble, is proposing to amend 40 CFR 761.65 to allow for self-implementing and case-by-case extensions to the 1-year time limit for storage and disposal requirement for any PCB wastes. PCB/radioactive wastes are included in that proposal.

Proposed §761.65(a)(2) would provide the Regional Administrator for the Region where the waste is being stored, or the Director, Chemical Management Division (CMD), authority to grant extensions to the current 1-year time limit for storage and disposal of PCBs, including PCB/radioactive wastes. An extension could be granted based on a determination by the Regional Administrator or the Director, CMD, that there was a demonstrated need or justification to store or conduct disposal of wastes beyond 1 year and that no unreasonable risks of injury to health or the environment would result from an extension of the storage period. Criteria for extension would include, but not be limited to, a demonstrated need to store wastes beyond the 1-year time frame due to a lack of disposal capacity, the absence of a treatment technology or insufficient time to complete the treatment/destruction process, and a demonstration that relevant treatment or disposal requirements are being pursued.

The problem of capacity shortfalls is expected to continue for some time after the disposal technology has been developed because of the large volume of stored PCB/radioactive wastes awaiting disposal. As an example of capacity problems, DOE operates a Regional disposal facility at Oak Ridge, Tennessee, for PCB/RCRA/radioactive mixed wastes. Fifty million pounds of wastes are currently in storage for disposal at several Regional sites. Current generation rates at the various facilities that rely on Oak Ridge for disposal are approximately 5 million pounds per year. The maximum disposal rate for the unit is approximately 3.09 million pounds per year. Current projections indicate that it will take 30 to 50 years to dispose of the current materials in storage and all the wastes yet to be generated using the facility as currently configured (Ref. 11). Therefore, DOE is not expected to meet the 1-year time limit for storage and disposal requirement even though it is pursuing additional capacity.

Several commenters requested that under TSCA, the PCB and radioactive wastes in a mixture not be confused with the term "mixed wastes" under RCRA. EPA agrees and proposes to apply the term "PCB/radioactive wastes" or "PCB/fissionable radioactive waste" (See proposed definition at §761.3) as opposed to "mixed wastes" to wastes containing PCBs and radioactive constituents subject to regulation under TSCA and the AEA.

EPA disagrees with those commenters indicating that there is no disposal technology approved under TSCA for PCB/radioactive waste. Incineration technology is available; however, there is no commercial disposal capacity and only limited disposal capacity for incineration of PCB/radioactive waste (e.g., the DOE incinerator at Oak Ridge, TN). Therefore, facilities storing PCB/radioactive waste often cannot comply with the 1-year time limit for storage and disposal because insufficient disposal capacity exists. Until additional disposal capacity becomes available, PCB/radioactive wastes will require storage, generally exceeding the 1-year time limit for storage and disposal for PCBs. Even as capacity increases, there will still be requests for extensions of the 1-year time limit for storage and disposal because of the sheer volume of materials in storage. Therefore, EPA is not proposing to place a specific time limit on the extension to the 1-year time limit for storage and disposal. Recipients of an extension to the 1-year time limit for storage and disposal would have to request, if needed, and receive from the Regional Administrator or Director, CMD periodic renewals to their original extension. It is possible that the same reasons that apply to an original extension request may apply to any subsequent requests because no progress in developing a disposal technology has occurred.

One commenter stated that annual status reports for PCB/radioactive wastes in storage for disposal should be required and updated annually on July 15 to coincide with the submission of the PCB Annual Report for each facility. Status reports or reviews of existing extensions may be conditions established by the Regional Administrator or Director, CMD providing the extension.

Several commenters suggested that EPA amend §761.65 to accommodate concerns relating to management and storage and the uniqueness of PCB/radioactive wastes. There are certain elements relating to storage of radioactive wastes containing plutonium or enriched uranium that

require consideration of criticality safety (i.e., the prevention of nuclear reactions that would pose a threat to health and the environment). All actions relating to criticality or radiation protection issues must be coordinated through, and approved by, the local office of the regulatory authority for radioactive material regulation; for licensed nuclear facilities, this would be the appropriate NRC Regional Office or State radiation protection authority office. The issue of criticality relates to proper storage of fissionable materials so that a continuous self-sustaining chain reaction does not occur. [DOE Order 5480.5 states that "nuclear criticality is a self-sustaining chain reaction, i.e., the state in which the effective neutron multiplication constant of a system of fissionable material equals or exceeds unity."] Proper storage of fissionable material is essential to avoid a criticality event. A self-sustaining chain reaction (i.e., criticality) will not result in an atomic explosion. However, it can result in the generation of harmful radiation that can cause death or serious injury (Ref. 54).

The issue of criticality relates to the types of containers used to store the fissionable materials or suspect fissionable materials and the storage area. EPA is proposing to amend §761.65(c)(6) by allowing an alternative to the container requirements approved by the Department of Transportation (DOT) for PCB/fissionable radioactive wastes. Containers used to store liquid PCB/fissionable radioactive wastes would have to be nonleaking. Containers used to store both liquid and non-liquid PCB/fissionable radioactive wastes would need to be designed to meet nuclear criticality safety requirements such as those specified in the American National Standard for Nuclear Criticality Safety in Operations with Fissile Materials Outside Reactors (ANSI Standard No. 8.1). The standard currently includes polyethylene and stainless steel as acceptable container materials providing they are chemically compatible with the wastes being stored. Some containers designed to prevent the buildup of liquids could be used to store non-liquid fissionable PCB/radioactive wastes, provided they are stored in an area which would contain any spilled liquids. If any such containers were found to be leaking, their contents would have to be transferred immediately to non-leaking containers, and the leaked or spilled materials cleaned-up taking into account relevant safety procedures appropriate for radioactive materials.

EPA is also proposing to amend §761.65(b)(1)(ii) to allow storage areas

for PCB/fissionable radioactive wastes to meet performance criteria for containment volume rather than specific requirements for curb height. This amendment would retain the current requirements that facilities storing PCB/fissionable radioactive wastes store those materials in a storage area meeting the containment volume requirements equal to at least two times the internal volume of the largest PCB container stored therein or 25 percent of the total internal volume of all PCB containers stored therein or whichever is greater, but would not impose curb height requirements for these wastes.

Several commenters stated that PCB/radioactive wastes may also contain additional materials such as asbestos that cannot be incinerated. EPA believes that technology exists which allows PCBs to be separated from other materials (e.g., radioactive waste or asbestos). EPA recommends that whenever possible PCBs be separated from other wastes; however, today's proposal does not contain requirements for separating PCBs because guidance for separating PCBs, from water for example, already exists. EPA had developed a policy allowing the physical separation of PCBs from other wastes, so long as all waste parts separated from the original PCBs are regulated (TSCA Compliance Program Policy 6-PCB-2).

One commenter indicated that EPA does not have the jurisdiction to regulate radioactive PCBs under TSCA. EPA agrees in part and disagrees in part. TSCA section 3(2)(B)(iv) states that the term "chemical substance" does not include "any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 and regulations issued under such Act)." Generators of PCB/radioactive waste are subject to regulatory oversight for radioactive materials under the Atomic Energy Act of 1954 as amended (DOE or NRC). EPA, on the other hand, has regulatory oversight for PCBs under TSCA. Thus, generators of PCB/radioactive waste must comply with both EPA and NRC regulations, State requirements, or DOE Orders. Mixtures of radioactive PCB molecules and non-radioactive PCB molecules that cannot be separated are subject to TSCA and the AEA because, for regulatory purposes, when separation of the PCB molecules is not achieved, the statutory exemption does not extend to nonradioactive PCBs in a mixture. It should be noted that regulation of PCB/radioactive mixtures under TSCA and the AEA applies to both wastes and non-wastes. The NRC and DOE participated in the

development of this section in order to ensure compatibility between TSCA and AEA.

D. Issues Not Addressed When the Rules Were Originally Promulgated

In the ANPRM, EPA solicited comments on whether to establish a household waste exemption under TSCA, and information regarding current PCB uses that are not authorized in the regulations. Items 1 and 2 below discuss the household waste exemption and unauthorized use issues. In responding to these issues, several commenters raised questions regarding the disposal requirements for certain items containing PCBs; these issues are addressed under Item 3.

1. *Household waste exemption.* EPA solicited comments in the ANPRM on whether a household waste exemption, similar to the household waste exclusion under RCRA at 40 CFR 261.4, should be established under the TSCA PCB disposal regulations. The RCRA household waste exclusion exempts from the hazardous waste requirements any material that was derived from households (including single and multiple residences, hotels and motels, bunk houses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreation areas). Examples of household waste under the RCRA exclusion include garbage, trash, and sanitary wastes in septic tanks. Under the RCRA criteria, household waste is limited to: (1) Waste generated by individuals on the premises of a household, and (2) waste composed primarily of materials found in the wastes generated by consumers in their homes (49 FR 44978, November 13, 1984). Additionally, EPA sought comments on the types of PCB wastes for which such an exemption would be applicable. In today's notice, EPA is proposing a household waste exemption for any waste containing PCBs generated by individuals on the premises of private households (including single or individually owned or rented units of a multi-unit construction) primarily found in wastes generated by consumers in their homes, i.e., domestic wastes (see proposed regulatory text at §§761.3 and 761.63). This change in the PCB regulations would authorize private homeowners, including individually owned or rented units of a multi-unit construction, to dispose of their unwanted household items that contain hazardous and toxic wastes under a municipal solid waste collection program without fear of recrimination even though the homeowner may have knowledge of the existence of PCBs in the household appliance.

EPA received roughly a dozen comments, and all but two supported the establishment of a household waste exemption. Some commenters provided additional caveats on how such an exemption should be structured. Comments in favor of the household waste exemption essentially fell into four categories: (1) Broadly define the scope of the exemption, (2) consider the impact of the exemption on recycling activities, (3) limit the scope of the exemption, and (4) address other disposal considerations (i.e., the disposal of materials containing PCBs used in the construction of residential buildings). Commenters not in favor of the TSCA proposal for an exemption questioned whether there should be a household waste exemption under either TSCA or RCRA, and whether the volume of waste containing PCBs which was generated from households was significant enough to warrant an exemption. EPA's responses to the four broad categories of comments are provided below.

a. *Broadly define exemption.* Those in favor of establishing a household waste exemption suggested broadly defining the activities that would qualify for the exemption. One commenter suggested EPA use the definition for "Municipal solid wastes" found at §761.3 to define the scope of the household waste exemption. Municipal solid wastes are defined as "garbage, refuse, sludges, wastes and other discarded materials resulting from residential and non-industrial operations and activities, such as household activities, office functions, and commercial housekeeping wastes." However, if such a change was made, the exemption would include items EPA believes should not be excluded from regulation (e.g., PCB wastes from offices and commercial activities). Another commenter stated that commercial buildings should also be included in a household waste exemption because the wastes generated at these buildings may be from the same sources and types of equipment found in the household.

The effect of banning the manufacture, processing, and distribution in commerce of PCBs, coupled with actions taken to limit the use of PCBs, focuses the Agency's concern on activities where the continued use of PCBs has been authorized (i.e., industrial or commercial-scale settings such as utilities, manufacturing sites, construction/renovation/demolition projects, etc.) rather than on household settings where appliances with PCBs may not generally be found (Ref. 32). Additionally, industrial and

commercial-scale PCB disposal activities, because of the risks associated with the greater volume of PCB wastes generated by these activities, require a level of protection for health and the environment that can best be achieved through demonstrated and effective PCB destruction and containment technologies. Therefore, EPA is not persuaded that a broadly defined household waste exemption, encompassing large volumes of commercial-scale PCB wastes, would be protective of health and the environment.

b. *Impact on recycling activities.* One commenter stated that the exemption should include waste generated by households but diverted or removed from the wastestream for purposes of recycling. Another commenter stated EPA should control the recycling and storage of household waste (e.g., increase the storage timeframe from 1 to 2 years). The final set of comments associated with this category suggested EPA take steps to encourage municipal collection programs for PCBs.

The recycling of household waste contaminated with PCBs surfaced as a national issue during 1985-86 when the problem of PCB contamination in shredder fluff (i.e., the non-metallic residue from the shredding process) was first identified. Since that period, EPA has conducted a pilot study of the shredding industry to ascertain, among other things, the source of the PCB contamination (Ref. 34). When the fluff contamination problem first surfaced, PCB Small Capacitors in household appliances were thought to be the source of the contamination. Therefore, data search/collection activities were initiated to determine the types of appliances that would most likely contain PCB Small Capacitors. The results of these efforts indicated that PCB Small Capacitors were not used in most household appliances. However, EPA determined that there was a significant likelihood that PCB Small Capacitors could be found in room and central air conditioners, heat pumps, furnace blowers, fluorescent lighting ballasts, and microwave ovens (Refs. 32 and 33). As a result, many States have implemented PCB Small Capacitor removal programs to ensure that PCBs are not intentionally processed during shredding operations.

In proposing a TSCA household waste exemption, EPA recognizes that some objects that contain a PCB component may inadvertently be shredded, resulting in fluff containing PCBs. EPA is proposing at §761.62(b) that this residue when tested and found to be contaminated at levels of 50 ppm PCB

or greater, but measuring less than 50 micrograms per liter (ppb) when using RCRA's Toxicity Characteristic Leaching Procedure (see 40 CFR part 261 Appendix II) may be disposed of in a facility that is permitted, licensed, or registered by a State as a municipal or industrial waste landfill. However, shredder residue when tested and found to contain 50 ppm or greater PCBs must be managed pursuant to the current disposal requirements at §761.60. (Additional disposal options for this type of waste are proposed at §761.62 and discussed at Unit II.A.5. of this preamble.) Under the current regulations, the processing and distribution in commerce of PCBs is prohibited unless otherwise authorized by rulemaking or under a PCB exemption. The proposed household waste exemption authorizes these activities for household wastes containing PCBs. The processing of non-exempt, non-household items such as commercial or industrial grade appliances containing PCBs, fixtures from renovation or demolition projects, and industrial or heavy duty equipment containing PCBs would continue to be a violation of the PCB regulations. EPA is not encouraging the processing and subsequent dilution of PCBs by recycling facilities.

In a May 31, 1979, Federal Register notice, EPA explained that the random disposal of PCB Equipment in municipal solid waste sites by householders and other infrequent disposers did not present an environmental hazard (44 FR 31528). On the other hand, EPA determined that the disposal of large quantities of PCB Small Capacitors posed a somewhat larger risk, and commercial and industrial activities were encouraged to establish a voluntary collection and disposal program. EPA would therefore include in the household waste exemption wastestreams created by recycling operations that accepted only wastes composed of household items from private residences (see the discussion under Unit II.D.1.c., "Limit Scope of the Exemption" of this preamble). Therefore, the owner or operator of a recycling facility should establish contractual requirements or other appropriate notification or inspection procedures to ensure that PCB wastes not covered under the exemption (e.g., commercial or industrial appliances containing PCBs or fixtures from demolition or renovation projects, industrial, or heavy-duty equipment containing PCBs) were not processed at the facility. In any event, the owner or operator of such a

facility would be subject to an enforcement action should such waste be processed.

Municipal collection programs accepting only those wastes that satisfy the proposed exemption criteria could operate under the TSCA household waste exemption; the TSCA chemical waste landfill and incineration requirements would not apply to the disposal of these wastes (see the discussion under Unit II.D.1.c., "Limit Scope of the Exemption" of this preamble). Because disposal of the wastes collected under a municipal solid waste program that satisfy the criteria proposed for the exemption would not be regulated by this rule, the wastes could be disposed of in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial waste. As a result, the commercial storage approval requirement and compliance with the TSCA PCB 1-year time limit for storage and disposal limitation would not apply. Therefore, EPA does not see a need to extend the storage timeframe from 1 to 2 years as suggested by one commenter.

c. Limit scope of the exemption. A few commenters stressed the need to restrict the applicability of a household waste exemption to purely residential settings in order to exclude business activities that take place in a residence. Another commenter believed the exemption should be identical to the RCRA household waste exclusion. EPA has interpreted the RCRA Subtitle C rules at 40 CFR 261.4 as limiting the exclusion to those household wastes that meet two criteria: (1) The waste must be generated by individuals on the premises of either a temporary or permanent household, and (2) the waste must be composed primarily of materials found in wastes generated by consumers in their homes. The RCRA exclusion at 40 CFR 261.4(b) includes "household waste from single and multiple dwellings, hotels and motels, and other residential sources." The RCRA hazardous waste program, in establishing a household waste exclusion, acted upon a Congressional intent to ensure that wastes generated by consumers in their households would be exempt from the Subtitle C regulation. As a result, the RCRA exclusion included materials from single and multiple residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreation areas — locations at which consumer activity is of a type that would be conducted in a residential setting and result in the generation of hazardous wastes.

As commenters have suggested, EPA is proposing an exemption under TSCA for the disposal of household wastes containing PCBs that is similar, but not identical, to the RCRA exclusion. Like the RCRA exclusion, the TSCA exemption would not include non-residential PCB wastes such as commercial or industrial grade appliances containing PCBs, fixtures from demolition or renovation projects, and industrial or heavy duty PCB Equipment. Under TSCA, Congress sought to eliminate the use of PCBs, unless specifically authorized, by banning their continued manufacture, processing, and distribution in commerce. However, Congress intended that the use of equipment which contained PCBs in a totally enclosed manner not be terminated prior to the end of the equipment's useful life. As stated earlier, research conducted by EPA suggests that some refrigerators and household freezers, room and central air conditioners, heat pumps, furnace blowers, fluorescent lighting ballasts, and microwave ovens may contain PCB Small Capacitors. The risks associated with the disposal of those items containing PCB Small Capacitors in a random, geographically dispersed manner by individual homeowners were considered by EPA in mid-1977 when it proposed the PCB Small Capacitor exemption. EPA has re-evaluated this issue twice subsequent to that time and has determined that the exemption should remain in place (see the discussion at Unit II.D.3.c. of this preamble).

The distinction that EPA makes between the TSCA household waste exemption, which focuses on consumer products used by individuals in private residences, and the RCRA household waste exclusion, which focuses on consumer activity conducted by private individuals in temporary or permanent residences, is based on the continued belief that the unregulated disposal of large quantities of PCB Items such as light ballasts and PCB Small Capacitors by commercial and industrial activities presents an environmental risk (see 42 FR 26568, May 24, 1977; 43 FR 7152, February 17, 1978; 44 FR 31528, May 31, 1979 and the discussion on the disposal of small capacitors at Unit II.D.3.c. of this preamble).

Under RCRA, the risks associated with consumer activities that result in the generation of hazardous waste do not change when the activities are conducted in a single or multiple residence, hotel, motel, bunkhouse, ranger station, crew quarters, campgrounds, picnic grounds, or day use recreation areas. These are all

locations at which the consumer activity is of a type that would be conducted in a residential setting.

For the PCB household waste exemption under TSCA, EPA believes that the unregulated disposal by individual households of consumer products which contain PCBs should be exempted from the TSCA disposal requirements because there are relatively few household products that would contain PCBs. The proposed exemption would not apply to individuals who reside in transient settings because they would likely not dispose of household appliances that would contain PCBs (e.g., certain refrigerators and household freezers, room and central air conditioners, heat pumps, furnace blowers, fluorescent lighting ballasts, and microwave ovens). Rather, equipment containing PCBs obtained for use in transient settings would likely be of a commercial grade and disposed of in quantity. Therefore, the removal and disposal of equipment containing PCB Small Capacitors by commercial activities and entrepreneurial interests such as hotel and motel chains and owners of multiple unit residential buildings engaged in repair, renovation, and/or demolition projects, would not be covered by this exemption.

EPA considered excluding from the TSCA household waste exemption PCB wastes found in a home-based business, but has determined that PCB Items found in a private residence would likely be evident in these smaller business enterprises as well. That is, industrial-scale manufacturing activities would not normally be conducted in a residential setting. If, however, such was the case, only those PCB Items commonly found in a private household would be covered by this exemption.

Although EPA proposes to establish an exemption under TSCA for the disposal of household waste, the public is reminded of the CERCLA reporting requirement for PCBs at 40 CFR 302.6 that essentially requires individuals to contact the National Response Center when they are disposing of 1 pound or more of PCBs in any 24-hour period in a non-federally permitted facility. The TSCA household waste exemption does not relieve an individual (i.e., the person disposing of the waste and/or the owner of the disposal facility) of the liability for remediating PCB contamination if the non-federally permitted disposal facility becomes a future Superfund site. Therefore, EPA is seeking comments on whether additional limitations should be imposed when defining entities that would qualify for this exemption.

d. *Other disposal considerations.* One commenter, although not objecting to the exemption, suggested EPA should focus on the previous residential applications of PCBs, such as a wall painted with PCB-containing paint, and the item's sale, destruction, and disposal. The proposed TSCA household waste exemption would not apply to debris produced during building construction, renovation, or demolition and similar type wastes, since such wastes do not consist primarily of materials found in wastes generated by a consumer in his/her home. Disposal options for this large-volume waste are discussed under Unit II.A. of this preamble.

2. *Unauthorized use.* EPA also sought comments in the ANPRM on widespread PCB applications that had not been addressed when the original regulations were developed. EPA was particularly interested in obtaining information on current, but unauthorized uses of PCBs. Nearly a dozen sets of comments were submitted from four primary sources: Natural gas pipeline companies, the Armed Forces, civilian governmental agencies, and companies from the industrial sector. Items currently in use and identified by the commenters as containing PCBs included wool felt insulating materials which have high levels of PCBs and deck plates that are found on naval vessels; plastics, paints, small rubber parts, adhesive tape, and insulating materials used in electrical cabling, for example; PCB-impregnated gaskets in heating, ventilation and air conditioning, and other duct systems; concrete expansion joint materials, and large-diameter natural gas pipeline. Several distinct "unauthorized use" scenarios emerged based on a review of the comments and discussions with EPA Regional representatives. These scenarios and the proposed regulatory provisions addressing these uses are discussed below.

a. *PCB impregnated materials used in duct systems.* During the late 1940s through 1950s, the adhesive coating used on ventilation gaskets for use in the Department of War (a predecessor of the Department of Energy (DOE)) heating, ventilation, and air conditioning (HVAC) systems was impregnated with PCBs to comply with the Department of War's specifications. This application was not in violation of the ban on the manufacture, use, processing, or distribution in commerce of PCBs because it occurred prior to the enactment of TSCA and promulgation of the implementing regulations. However, in late 1989, DOE notified EPA that over time, operation of their plants had

caused small amounts of the lubricating oil (from motor and compressor bearings) to leach through the gasket material and to be drawn into the ventilation system, resulting in releases of material containing PCBs.

b. *PCB impregnated insulation materials.* The Department of the Navy discovered that wool felt containing PCBs had been installed in older submarines for sound-dampening purposes. Information provided to EPA by the Department of the Navy indicates no PCBs are emitted from the material and that the material is generally located in inaccessible or rarely accessed areas, fixed between metal plates. The Navy's current policy is to remove the material only when necessary (i.e., during maintenance).

c. *Agency experience.* Experience gained in implementing the PCB requirements has resulted in the identification of other uses of PCBs that are not authorized by the regulations. Issues have arisen over time concerning the use of PCBs in paint formulations, coatings for ceiling tiles, roofing, and siding materials, adhesives, waterproofing compounds, and any number of other chemical uses such as additives and plasticizers. The recent discovery of asbestos roofing and siding materials and insulating (potting) material in fluorescent light ballasts that contain PCBs are illustrations of the Agency's expanding knowledge of the applications for PCBs.

In November 1992, EPA was informed of the discovery of PCBs in asbestos roofing and siding materials that had been manufactured by H. H. Robertson (circa 1917) and marketed as Robertson Protected Metal (RPM) and Galbestos. RPM and Galbestos are multilayered steel siding materials that consist of steel, asphalt, or zinc (depending on the product line); asphalt-impregnated asbestos felt; and an asphaltic waterproof coating. Although there is limited evidence available that PCBs were ever introduced in the manufacturing process, preliminary sampling and analysis have indicated PCB concentrations in this material ranging from <2 ppm to 30,000 ppm. These products were purchased and used internationally by the U.S. Department of Defense (Department of War, U.S. Navy, U.S. Army, U.S. Air Force, U.S. Marine Corps), U.S. Coast Guard, Tennessee Valley Authority, and various industries such as airlines, railroads, chemical plants, steel mills, mines, and industrial/manufacturing facilities. Manufacturing facilities for RPM and Galbestos products were located in Beaver Falls, PA, and subsequently relocated to Ambridge,

PA, as well as in Canada and England. Preliminary data suggests that the continued use of this material, if in good condition, and subsequent disposal in a municipal solid waste landfill, would not present an unreasonable risk of injury to health or the environment (see "Toxic Characteristic Leaching Procedure (TCLP) for Galbestos Siding Material" MRI Report, Project No. 9802-30-01, August 16, 1993 [Ref. 45]).

Also, in August/September 1993 EPA received data from several sources indicating that PCBs were found in the insulating (potting) materials of fluorescent light ballasts generally manufactured prior to 1978. PCBs at concentrations of 50 ppm or greater were found in the insulating materials of approximately 70 percent of the ballasts analyzed. While this data represents only a small portion of ballasts manufactured prior to 1978 still in use today, the continued use of such ballasts would need to be authorized.

EPA is proposing at 40 CFR 761.30(q) to authorize the use and distribution in commerce of non-liquid materials which contain PCBs at any concentration (including, but not limited to, gaskets, insulation, plastics, plasticizers, fluorescent light ballast potting materials, electrical cable, dried paints, small rubber parts, adhesive tape, caulking, roofing and siding materials, waterproofing compounds, and ceiling tile coatings) in use prior to July 2, 1979, for the remainder of their useful life where monitoring indicates that the migration of PCBs from the material does not pose an unreasonable risk of injury. Under the proposed authorization, the PCB-containing materials must remain intact and in place in their existing application and location unless they are being removed for disposal. The authorization of continued use and distribution in commerce of these PCB materials do not include an authorization to remove the material from its existing location and subsequently reassemble or install the PCB material at a different location but would allow for continued use in a mobile application such as a vehicle or vessel. Such PCB materials currently in use that exhibit significant PCB migration, as discussed in proposed §761.30(q)(1)(iii), (iv) or (v), would not be in compliance with this authorization and would be required to be removed, contained by means of encapsulation (either with an epoxy-based or equivalent paint or sealant), or equipped with release controls in which a continual release is collected in a closed container and displaces only the air in the container (i.e., a leak collection system) to ensure personnel

are protected from dermal and inhalation exposures.

Additionally, the owner or operator of a facility with such a use of PCB material would be required to notify the Regional Administrator of the discovery of such material and submit documentary evidence that established the historical use of such material. Notification to the Regional Administrator would be required within 30 days of the effective date of the final rule or within 30 days of discovery thereafter. It would be required to include the location of the material, a description of its use, an estimate of the amount of material in use (e.g., number, square footage, pounds), the PCB concentration, expected useful life of the material, the condition of the material (e.g., potential for exposure), and any additional information that might be useful to the Regional Administrator. Secondly, the owner or operator of the facility would be required to post a PCB Mark ML as described in §761.40 in a prominent location near material containing PCBs as a warning of the presence of PCBs. They would also be required to make available to any potentially exposed employee and, upon request, to any other potentially exposed individual, information concerning the identity of the PCBs and any health risk associated with the PCB application. Failure to provide documentary evidence that substantiated the historical use of such material might result in the rejection of such claims by the Regional Administrator. Consequently, the continued use of such materials might be a violation of the PCB regulations.

Air monitoring readings and standard wipe test samples of exterior surfaces would have to be taken and recorded quarterly for the first year and annually thereafter until the material was removed. Records would be maintained in a central location at the facility for 3 years beyond the date of removal of the material for review by EPA officials. Air monitoring results of PCB levels above 0.001 milligram per cubic meter of air (mg/m^3) for a 10-hour workday, 40-hour workweek (the National Institute of Occupational Safety and Health's (NIOSH's) occupational exposure limit for all PCBs) or wipe samples of accessible exterior surfaces greater than 10 micrograms per 100 square centimeters ($10 \mu\text{g}/100\text{cm}^2$) would require that action be initiated within 24 hours of the occurrence to modify the release controls, to re-encapsulate the surface, or to remove the PCB-impregnated materials. In addition, individuals would be required to notify the EPA Regional Toxics Office by

facsimile machine or overnight delivery mail services within 24 hours of the occurrence of an environmental release that exceeded the action levels listed above. The notification would indicate the actions that would be taken to bring the facility into compliance. However, if the release occurred during a weekend or Federal holiday, notification could be made during the next business day. This notification would not be in lieu of any other Federal, State, or local notification requirements such as those under CERCLA for the release of a hazardous substance (see 40 CFR 302.6).

At the end of their current useful life, all such PCB materials with a PCB concentration of 50 ppm or greater, and materials that came in contact with 50 ppm or greater PCBs, including leak collection systems, PCB-containing paint and other encapsulation materials, and all materials used during decontamination or cleanup procedures would have to be handled, stored, and disposed of in accordance with the PCB storage requirements at 40 CFR 761.65 and the disposal requirements at §761.60 or §761.62.

While the continued use of unauthorized pre-TSCA PCB materials is a violation of the existing PCB regulations, in most cases, premature removal of the media containing PCBs could only be achieved with great difficulty and at enormous expense given the extraordinary efforts that would be required to remove the PCBs. The conditions proposed by EPA for the continued use of these items (i.e., removal upon evidence of deterioration, installation of release controls, or encapsulation) would ensure no unreasonable risk from exposure to PCBs as a result of the continued use of these materials. Comments are therefore solicited on whether consideration should be given to developing authorizations for the conditional, continued use of these materials and whether additional restrictions should be imposed and if there are other situations which are similar to the pre-1978 authorization issues which should be addressed in this rulemaking. Comments are also solicited on whether the proposed authorization should allow for the movement and reassembly of the PCB-containing material when such movement and reassembly will not adversely impact the integrity of the material (e.g., will not result in a risk of injury to health or the environment caused by the exposure to PCBs). Comments supporting a modification of the proposed authorization should also provide examples of the specific material and reuse scenarios that should be addressed.

EPA has no information indicating that PCBs were routinely used in the formulation of consumer products such as household paints, sealants, finishes or caulking. It believes however, that consumers could now occasionally obtain products such as industrial enamels or marine paints which were formulated with PCBs, through the purchase of these items as surplus. The sale of these unauthorized items containing PCBs is currently prohibited under TSCA. Identification and removal of these materials, once installed in households, could pose considerable costs to homeowners while increasing risk of exposure through removal. Because the PCBs are bound into these materials, EPA believes they would not pose a serious risk of exposure if left in place. Therefore, EPA is proposing a general use authorization at §761.30(g)(2) for the non-liquid PCBs that meet the definition of household wastes at the time of disposal. In unit II.A. of this preamble EPA discussed a proposed exemption for the disposal of household wastes containing PCBs. Today, EPA is also proposing a general authorization for continued use at §761.30(g)(3) for non-liquid items that do not leach PCBs at levels $\geq 50 \mu\text{g}/\text{l}$ as measured by the TCLP.

d. Reuse of natural gas pipeline. EPA received comments on both the reuse of and the disposal requirements for natural gas pipeline. A discussion concerning the disposal of natural gas pipeline appears at Unit II.D.3.e of this preamble. Regarding the reuse of pipeline, commenters contend that the inadvertent contamination of natural gas pipeline at or above regulated levels for PCBs all but eliminates any opportunity for the natural gas industry to reuse the pipe and other natural gas pipeline appurtenances. Requirements to dispose of or decontaminate the equipment often deprive these companies of the economic benefits associated with recycling, reusing, or selling the equipment. EPA, under a Memorandum of Understanding (MOU) with the Federal Energy Regulatory Commission (FERC), has been reviewing pipeline abandonment plans and issuing alternate disposal permits for the decontamination of pipeline since late 1987. Based on this experience, EPA does not view risks of injury to health and the environment from exposure to PCBs due to the continued use of PCB-contaminated pipeline as being unreasonable.

PCBs when found in natural gas pipeline are generally located in the condensate that is collected from drips and geographical low points along the pipeline or in the moisture on the

interior of the pipe. Since these collection points are often dry, EPA is proposing, as an alternative for characterization purposes, surface levels of greater than 10 micrograms PCB per 100 square centimeters for dry pipe as the regulatory equivalent of 50 ppm, and 100 micrograms PCB per 100 square centimeters in dry pipe as the regulatory equivalent of 500 ppm with regard to the TSCA PCB regulatory requirements at part 761 (characterization of natural gas pipeline is discussed at Unit II.B.4. of this preamble). EPA is proposing to amend §761.30(i) to authorize the reuse of natural gas pipeline systems, provided the liquids have been removed. All removed liquids must be disposed of pursuant to the disposal requirements at §761.60(a)(3). EPA solicits comments on whether EPA should require marking of pipe that may be in temporary storage while testing is being conducted. Pipe in temporary storage is generally capped at each end and stacked in a restricted area along the perimeter of the pipeline system. EPA solicits comment on whether the Agency should require each pipe in a temporary storage area to be marked or whether only posting a sign in the storage area would be adequate.

In today's notice at §761.30(i), the reuse of PCB-contaminated natural gas pipeline and appurtenances would be allowed in natural gas pipeline systems. Natural gas pipeline and pipeline appurtenances that were to be reused would have to be drained of free-flowing liquids and decontaminated pursuant to procedures proposed in §761.30(i). Any natural gas pipeline may also meet the decontamination level as proposed in §761.79(d). Based on experience gained from issuing alternate disposal approvals to pipeline companies, EPA is also proposing several additional uses. Acceptable proposed reuse scenarios are for the transport of bulk hydrocarbons, chemicals, or petroleum products; as a coal slurry pipeline; as casing to provide secondary containment under transportation systems such as highways or railroads; as temporary flume at construction sites; as culverts (less than 80 feet in length) in intermittent flow situations (i.e., as culvert for a driveway over a roadside ditch); as equipment skids; for sewage service with written consent of the Publicly Owned Treatment Works (POTW); for steam service; in totally enclosed compressed air systems; as irrigation systems where the pipe is less than 20 inches in diameter and 200 miles in length; or as industrial structural material such as fence posts,

sign posts, gate posts, bridge supports, and overhead sign cross members. In addition to commenters' reactions as to whether natural gas pipeline should be authorized for reuse in these scenarios, EPA solicits comments on the other specific uses for which this pipe would be suitable. The reader should remember that the reuse provision is intended for contaminated equipment which is drained of all free flowing liquid (i.e., the surface is dry) and the surface contamination is demonstrated to be less than 100 micrograms PCBs per 100 square centimeters.

EPA is also proposing a parallel authorization for the use of PCBs in other pipelines or air compressor systems, with the consent of the Regional Administrator. The Agency is aware of the use of PCBs as lubricants in other air compressor systems not associated with natural gas pipelines and believes that these uses pose no greater risk.

3. *Disposal issues.* The disposal of non-liquid, bound materials, such as plastic insulating material containing PCBs found in electrical cabling and lead (Pb) cable insulated with PCB oil-soaked paper, were also identified by commenters to the ANPRM as issues that are not adequately addressed by the current regulations. Since the ANPRM, EPA has also received comments addressing the disposal requirements for the relatively small quantity of waste generated during the chemical analysis of PCBs.

a. *Disposal of PCB-bound material.* One commenter requested that EPA designate these materials as unregulated for disposal. The PCB concentration encased in this solid plastic insulating material ranges from less than 50 ppm to 500 ppm PCBs. The commenter argues that non-liquid, bound PCB materials are distinct from liquid PCBs and that the current exemption at §761.60(b)(2)(ii) that allows persons, except manufacturers, to dispose of PCB Small Capacitors in municipal landfills should be extended to cover manufactured items containing non-liquid, bound PCB materials. Alternatively, the commenter argues that the PCB bound plastic insulation should be treated as "other PCB Articles" having a PCB concentration between 50 and 500 ppm pursuant to the current §761.60(b)(5)(ii). The commenter suggests that these bound PCB materials should be viewed as having been drained of free flowing liquid and should be treated as unregulated for disposal under that section.

However, EPA is proposing provisions at §761.62 to address the

disposal of PCB non-remediation wastes using one of four options: Incineration, chemical waste landfill, municipal solid waste landfill, or a disposal method approved by the Regional Administrator. Under this provision, the Regional Administrator could approve an alternate disposal method based, among other things, on technical, environmental, or waste-specific characteristics or considerations indicating that the disposal method would not pose an unreasonable risk of injury to health or the environment. EPA believes that this provision would provide the flexibility being sought by the commenter, and that expansion of the current exemption would therefore be unnecessary.

b. *Disposal of cable insulation containing PCBs.* Another commenter informed EPA of lead-sheathed cable containing PCBs in the oil-soaked paper that is used to wrap the copper conductors; the PCB levels typically range from 50 to 500 ppm with some levels reported as exceeding 100,000 ppm. Discarded lead cable is potentially stored for long periods of time, pending changes in the metals market, and then ultimately sent to scrap yards where the metal is removed and sold to recycling operations. The scrap yards then burn the PCB-soaked paper without regard to its PCB content. This may result in illegal disposal and site contamination by PCBs, dioxins, and dibenzofurans. Further, cables that are not contained in a conduit are often abandoned in place. The cable is ripped out to a convenient point, cut, and abandoned with no protection at all for the cut end. The PCB-containing oil will often leak, as free flowing oil, from the paper when the cable is cut or the covering damaged, thereby creating environmental concerns when cable runs are abandoned or old cable is improperly stored or disposed of.

According to the information submitted by the commenter, lead cable is used in high voltage distribution of electric power, typically 5,000 volts and above. This cable has been in use for quite some time (about 100 years), and although lead cable can be found everywhere, including in overhead distribution lines, the product typically was used in underground, submerged, or submersible applications. In particular, lead cable was used to supply primary power to vaulted network distribution systems and subway transformers. Almost all utilities serving metropolitan areas and most large industrial facilities either currently own or have owned significant quantities of lead cable. Large

commercial facilities that distribute primary power also have lead cable.

On August 25, 1982 (47 FR 37352), EPA promulgated 40 CFR 761.30(m) to authorize the use of PCBs in, and the servicing of, cable containing any concentration of PCBs for the useful life of the cable provided the cable is serviced (including rebuilding) only with dielectric fluid containing less than 50 ppm PCBs. This provision was based in part on a study conducted by the Edison Electric Institute (EEI) and the Utilities Solid Waste Activities Group (USWAG) that described voltage regulators, switches, electromagnets, and cable as mineral oil-filled electrical equipment, not designed to contain PCB dielectric fluid. The rulemaking record indicates that this oil-filled cable generally contained less than 50 ppm PCBs (Previous Rulemaking Record Ref. 6, Support Document for the Electrical Equipment Use Rule, Response to Comments, August 1982). Although this oil-filled cable was authorized for use until it reached the end of its lifecycle, EPA required that the disposal requirements at 40 CFR 761.60 and the servicing requirements at §761.30(m)(2) be followed for any cable found to contain a PCB concentration of at least 50 ppm.

Therefore, the issue being raised by the commenter suggests that other types of electrical cable containing PCBs may exist that were not anticipated when §761.30(m) was promulgated. As reflected at Unit II.D.2. of this preamble, proposed §761.30(q) would expressly allow the continued use of electrical cable, in a totally enclosed manner, until it reached the end of its useful life. However, the installation of materials containing PCBs as insulation and the processing and distribution in commerce, except for purposes of disposal, would continue to be unauthorized.

Comments are solicited on whether EPA should include electrical cable under the proposed authorization to be inserted at §761.30(q) or expand its interpretation of the current authorization at §761.30(m) to include, in addition to oil-filled cable, all electrical cable containing PCBs such as electrical cable encased with PCB-impregnated insulation materials, and lead cable containing PCB oil-soaked paper.

EPA also welcomes information on any other electrical cable containing PCBs, including its uses, PCB concentrations, and potential risks of exposure to workers, the general public, and the environment. For example, high-voltage cable used in underground coal mines may have been

manufactured with PCBs in the conductor insulation. In 1954, the U.S. Bureau of Mines published fire-resistance standards for underground electrical equipment. In addition to requiring non-flammable liquid [e.g., PCB dielectric fluid] in liquid-filled transformers, the Bureau also published a fire test procedure which was mandatory for "trailing cables," or electric cables that are reeled out the back of mobile, high-voltage mining equipment such as continuous miners and shuttle cars (Ref. 56). The fire resistance test was considered prudent because trailing cables, which lie on the mine floor, are often damaged by equipment travel and can short out, causing an electrical fire. While the Bureau did not specify how such cable should be made, experience with naval vessels indicates that such cable could have been manufactured with PCBs to meet the test standards. Some of this cable may still be in use or may be abandoned with other electrical equipment in mine storage areas or in closed mines. An environmental hazard would exist if the cable is improperly disposed of. A hazard to workers would exist from inhalation of the fumes during an electrical short or from dermal contact when splicing cable. Therefore, EPA is seeking comment from any person who may know of past uses of PCBs in electrical cables.

In response to concerns raised about handling lead cable, EPA cannot emphasize strongly enough that caution must be exercised when handling any electrical cable which contains PCBs. First, caution must be exercised when servicing the cable to prevent the inadvertent release of PCBs into the environment. In this instance, restrictions attendant to the disposal of lead complicate the PCB disposal process, as environmental releases must be controlled when separating the PCB and lead materials to ensure further contamination is avoided. Further, to ensure the PCBs are not reintroduced into commerce, the lead cable must be decontaminated to remove the residual PCBs prior to sending it to a recycling operation. The processing and distribution in commerce for the purpose of disposal of regulated PCB wastes and their destruction require an approval (i.e., permit) from EPA (see §761.20(c)(2) and §761.60(a)). Owners and operators of scrap yards who engage in activities to decontaminate the cable (i.e., to remove the PCBs) and/or destroy PCBs at concentrations of 50 ppm or greater through the practice of "open burning" may be subject to an enforcement action and are conducting

these activities in violation of the TSCA permit requirements if they do not possess a PCB disposal approval. Finally, owners and operators of recycling operations who accept lead cable containing PCBs for processing are operating in violation of the TSCA ban on processing PCBs if they have not obtained an exemption for their activities (see §761.20(c)).

The disposal activities identified by the commenter are currently regulated under the TSCA PCB regulations at 40 CFR part 761 to include abandonment in place, storage, disposal, permitting, and manifesting requirements for PCB wastes at concentrations of 50 ppm or greater. Therefore, from a regulatory perspective, no further rules are required to address the disposal of this cable. However, an outreach program designed to reach scrap and salvaging operations may be the most appropriate mechanism to ensure the owners and operators of these facilities are educated about their responsibilities regarding the TSCA PCB disposal approval requirements and potential liabilities under CERCLA for environmental releases of PCBs. EPA solicits the cooperation of the Institute of Scrap Recycling Industries, Inc. (ISRI) and any other individuals, organizations, or associations in developing a comprehensive mailing list of facilities to whom such an outreach program could be directed.

c. Disposal of small capacitors.
Another commenter suggested that EPA define the disposal requirements for PCB Small Capacitors and then cross reference these disposal requirements to the CERCLA requirements for reporting releases of hazardous substances. The TSCA disposal requirements for PCB Capacitors are provided at §761.60(b)(2); CERCLA reporting requirements for hazardous substance releases are listed at 40 CFR 302.6. The regulations in 40 CFR 302.6(a) state: "Any person in charge of a vessel or an offshore or an onshore facility shall, as soon as he has knowledge of any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center ((800) 424-8802; in Washington, DC (202) 426-2675)."

Since PCBs are a hazardous substance with a reportable quantity (RQ) of 1 pound under CERCLA, the question becomes which scenarios constitute a "release" under CERCLA. In the case of fluorescent light ballasts containing PCB Small Capacitors, open or closed drums

of light ballasts collectively containing 1 pound or more of PCBs, that are abandoned or otherwise disposed of, such as through placement in a municipal solid waste landfill, would generally be regarded as a reportable release under CERCLA. One point should be made clear; unlike TSCA or RCRA, CERCLA imposes no disposal requirements itself on the initial disposal (i.e., release) of hazardous substances such as PCBs, even if the release is in excess of the RQ for that substance. For specifics regarding the reporting requirements for the release of hazardous substances under CERCLA, readers are advised to contact EPA's Superfund/RCRA Hotline, which is the information service for the Office of Solid Waste and Emergency Response in Washington, D.C. (Toll-free (800) 424-9346, local for the Washington, D.C. area (703) 920-9810).

In promulgating the disposal and marking rule published on February 1978 (43 FR 7150), EPA decided not to impose special disposal requirements for small capacitors (except those owned by capacitor manufacturers or PCB Article manufacturers in which the small capacitor was placed as a result of manufacturing activities) due to problems associated with regulating this class of PCB wastes (e.g., enforcement difficulties, the expense associated with their collection/disposal, and issues surrounding the question of who should incur these costs). In reassessing whether steps should be taken to further limit the small capacitor exemption, EPA determined not to impose additional regulatory controls (44 FR 31528, May 31, 1979). However, because the disposal of large quantities of PCB Small Capacitors by commercial and industrial activities posed a somewhat larger risk to the environment than disposal by householders and other infrequent disposers, EPA encouraged commercial and industrial firms to establish a voluntary PCB Small Capacitor collection and disposal program that would result in the disposal of these capacitors in either a chemical waste landfill or an incinerator. EPA still recommends disposing of fluorescent light ballasts containing intact and non-leaking PCB Small Capacitors in an approved hazardous waste incinerator or an approved chemical waste landfill. Persons who can dispose of such fluorescent light ballasts under the household waste exemption should consider utilizing local hazardous waste collection efforts sponsored by city/county health departments, local fire

departments or other local government entities for disposal of these items.

Under the current regulations, PCB Small Capacitors found in light ballasts generally are not required to be disposed of in a TSCA approved disposal facility (see §761.60(b)(2)(ii)). Readers are, however, advised that State and local governments may impose more stringent disposal requirements on items containing PCB Small Capacitors such as fluorescent light ballasts and are advised to determine all other disposal requirements prior to undertaking disposal. EPA's Office of Air and Radiation has developed guidance addressing these activities in conjunction with its "Green Lights Program" (Ref. 53). Once a PCB Small Capacitor starts leaking, it is regulated for disposal under §761.60(d) as a PCB Article and must be disposed of according to the disposal rules for PCB Articles at §761.60(b)(5) (Ref. 57). Also, §761.60(b)(2)(iv) identifies another exception: "Any PCB Small Capacitor owned by any person who manufactures or at any time manufactured PCB Capacitors or PCB Equipment and acquired the PCB Capacitors in the course of such manufacture shall be disposed of in ... an incinerator which complies with §761.70 or until March 1, 1981, ... in a chemical waste landfill which complies with §761.75." In practice, this means that, except for manufacturers of capacitors or manufacturers of equipment containing small capacitors, any quantity of intact, non-leaking small capacitors may be disposed of in a municipal landfill. As mentioned earlier in this section, EPA reevaluated the scope of the small capacitor exemption and determined not to impose additional regulatory controls. In the Federal Register notice of May 31, 1979 (44 FR 31528), EPA also warned readers that any PCB spillage that might result from failure of, or from damage to small capacitors, could be considered illegal disposal, as is the case for other spills of PCBs. If the insulating material inside the ballast, sometimes referred to as "potting" material, contains PCBs at greater than or equal to 50 ppm, then the entire ballast is regulated for disposal under current rules even if the internal small capacitor remains intact and nonleaking. Many facilities are disposing of light ballasts or their capacitors in TSCA incinerators to avoid the potential for Superfund liability should today's municipal landfills become subject to future CERCLA cleanup action. Therefore, EPA proposes to include a statement in §761.60(b)(2)(vii) in response to the

commenter's suggestion that the PCB regulations cross reference the CERCLA requirements.

Since the publication of the ANPRM, EPA has received a TSCA section 21 petition from several fluorescent light ballast recyclers and the Hazardous Waste Treatment Council (Ref. 49). The petitioners requested that disposal requirements for intact and non-leaking small capacitors in fluorescent light ballasts at §761.60(b)(2)(ii) be amended to require incineration of fluorescent light ballasts or incineration of the PCB Small Capacitors or PCB potting materials removed by recycling the fluorescent light ballasts. EPA granted their petition and stated its intention to initiate a regulatory investigation to determine whether or not to amend the PCB Small Capacitor disposal requirements at §761.60(b)(2)(ii) (Ref. 50).

As noted earlier, EPA has discussed the disposal and phaseout of PCB Small Capacitors in various rulemakings. In 1979, EPA encouraged firms disposing of large quantities of PCB Small Capacitors to establish a voluntary collection and disposal program resulting in the waste capacitors going to chemical waste landfills or high temperature incinerators (44 FR 31514, 31528, May 31, 1979). In 1982, EPA revisited the issue of small capacitors, this time in regard to their potential phaseout. EPA concluded that because many of these PCB-containing small capacitors are encapsulated and contain minimal quantities (0.1 to 0.6 pounds) of fluid and a significant amount of absorbent materials such as paper, PCBs are rarely released from the capacitors during their use or from equipment using the capacitors. Therefore, EPA determined the exposure risks to humans, food, feed, water, and the environment were low (47 FR 37342 and 37349, August 25, 1982).

In their petition, petitioners raised a number of issues for which EPA is seeking information regarding the proposed amendment of the disposal requirements for intact and non-leaking PCB Small Capacitors, specifically those in fluorescent light ballasts.

First, the petitioners indicated that the PCBs are not only found in small capacitors but in the potting material of fluorescent light ballasts as well. EPA is seeking data on the level of PCBs found in the potting materials of fluorescent light ballasts and whether the PCBs were in the potting material prior to recycling, i.e., were the PCBs in the potting material because of a rupture of the PCB Small Capacitor. EPA is also seeking data on the percentage of ballasts recycled that contain PCBs in

either a small capacitor and/or the potting material, as well as the concentration of PCBs in the potting material. EPA is also seeking information regarding the manufacture of light ballasts that have PCBs in their potting materials, i.e., date of manufacture, PCB concentration, etc. However, any additional disposal requirements for fluorescent light ballasts with PCB Small Capacitors become moot if the ballast potting material contains PCBs. Fluorescent light ballasts with PCBs in their potting material meet the definitional requirements of PCB Articles under §761.3 and the disposal requirements for such items are already prescribed at §761.60(b)(5). If PCBs ≥ 50 ppm are found in the potting materials of fluorescent light ballasts, the issue of continued use becomes a significant problem because such PCBs are not authorized for use under §761.30. However, PCBs found at < 50 ppm (and not the result of dilution) in the potting compound would qualify the fluorescent light ballast as an "Excluded PCB Products" as defined at §761.3.

Second, if EPA determines that additional disposal requirements need to be placed on fluorescent light ballasts containing PCB Small Capacitors, the number of ballasts that may be disposed of as municipal solid waste within a 1-year period needs to be determined. EPA is proposing at §761.60(b)(2)(viii) that any person may dispose of up to 25 intact and non-leaking fluorescent light ballasts containing PCB Small Capacitors as household waste in a municipal solid waste landfill within a 1-year period from a single household. The number 25 was chosen because under CERCLA the reportable quantity (RQ) for PCBs is 1 pound (40 CFR 302.4). If an estimate of approximately 2/3 ounce of PCBs in each small capacitor is used, 25 small capacitors equals just over 1 pound or the RQ for CERCLA. This number could be lower, such as 10 ballasts within a 1-year period as the petitioners suggested or higher, such as 3,000 per month which approximates the 100 kg per month small quantity exemption under RCRA. EPA is seeking information on the number of fluorescent light ballasts containing PCB Small Capacitors that should be allowed to be disposed of in a municipal solid waste landfill.

Finally, on a related issue, the petitioners indicated that fluorescent light ballasts containing PCB Small Capacitors sent to municipal solid waste landfills do not remain intact and nonleaking once they are placed in the landfill. EPA is seeking data indicating that the disposal practices at a

municipal solid waste landfill, such as compaction, will cause the PCBs to leak into the environment. If true, EPA is seeking data in support of statements that the PCBs leaking from small capacitors in municipal solid waste landfills can create a risk to health and the environment through ground water contamination. Such information should include the degree of risk reduction that could be achieved, the costs of risk reduction methods, and the impacts of any regulation on the economy, small businesses and other affected entities.

d. *Large volume PCB liquids.* EPA also received a request to address the issue of disposal options for large volume liquid PCB wastes. Under current regulations at §761.60(a)(3), liquids at concentrations of 50 to 499 ppm may be disposed of in a high efficiency boiler meeting the requirements of §761.60(a)(3)(iii), in an incinerator meeting the requirements of §761.70, or a chemical waste landfill (CWL) meeting the requirements of §761.75, if information is presented to the CWL owner or operator that the fluid does not exceed 500 ppm and is not an ignitable waste as described in §761.75(b)(8)(iii). However, the commenter was referring to industrial sludges at 500 ppm or greater that must be disposed of by incineration or by an alternate method that has been demonstrated to be the equivalent of incineration.

In responding to a citizens petition under section 21 of TSCA that had been submitted to EPA on behalf of several potentially responsible parties to a Superfund cleanup (Refs. 5 and 6), the Agency indicated that "[a]s a matter of policy, EPA in 1985 determined to treat industrial sludge similarly to PCB liquids.... Under this policy, PCB-contaminated industrial sludges may be placed in a TSCA landfill complying with 40 CFR 761.75, while sludges contaminated at greater than 500 ppm must be disposed of in a TSCA incinerator complying with 40 CFR 761.70."

As discussed earlier in this rule (see the discussion on "Large Volume PCB Wastes" at Unit II.A. of this preamble), EPA is proposing to consider the site-specific risk factors in determining the appropriate disposal mechanisms for PCB remediation wastes, a category of wastes which includes industrial sludges.

e. *Abandonment and disposal of natural gas pipeline.* There are approximately 1.5 million miles of natural gas pipeline in the United States, including approximately 275,000 miles of interstate transmission line with the remainder comprising local

distribution systems. Several thousands of miles of pipeline are removed from service every year for a variety of reasons. One commenter suggested "that the regulations should allow for the abandonment in place of all distribution mains after removal of any liquids by reasonable means and the sealing of the ends of each segment of pipe." This commenter also suggested that the disposal requirements for drained hydraulic machinery and drained natural gas pipeline should be equivalent. Another commenter stated that §761.60(b)(5)(ii), which addresses disposal of "Other PCB Articles," should be revised to say "the handling, storage, and disposal of the drained article (gas pipeline) is not regulated." Moreover, one commenter suggested EPA revise the definition for PCB Items "so that natural gas pipelines can be regulated in a manner more in line with the risks presented."

A review of the history of the regulation of PCBs in natural gas pipelines is needed to put these comments into perspective. The use of PCBs in natural gas pipeline compressors and in the liquids found in natural gas pipeline is authorized at concentrations below 50 ppm (§761.30(i)). The current authorization does not extend to the use of PCBs in air compressor units that are routinely found at natural gas compressor stations. EPA believes that the risk of exposure associated with other PCB Articles such as hydraulic equipment are much different than the risk of exposure to the end-users of natural gas containing PCBs or the reuse of pipeline containing PCBs. In a final rule published in the *Federal Register* on May 31, 1979 (44 FR 31536), EPA authorized the use, including servicing, of PCBs in natural gas pipeline compressors at levels above 50 ppm until May 1, 1980. The authorization was intended to give individuals time to drain and refill these compressors with non-PCB fluid to further reduce the PCB concentration below 50 ppm. EPA determined that "[b]ecause of the small quantities and low concentrations of PCBs involved, ... this authorization will not result in exposure to PCBs that presents an unreasonable risk to health or the environment."

In 1981, EPA found that industry practices continued to result in the use of PCBs in at least 13 natural gas pipeline transmission systems at concentrations above 50 ppm, and in some instances above 500 ppm, in violation of the PCB regulations. To address the elevated levels of PCBs found in the pipeline systems, EPA implemented remedial plans with four

basic objectives: (1) To contain the contamination to limited areas of the transmission system; (2) to eliminate any further entry of PCBs into the system; (3) to remove remaining PCB contamination from these systems; and (4) to ensure proper handling of PCBs that were removed. Each of these 13 interstate pipelines were originally presumed to contain PCBs at levels greater than 50 ppm. Data collected since a 1981 compliance program was implemented showed the levels to be, in fact, greater than 500 ppm. This presumption did not extend to other interstate pipelines or to associated distribution system pipelines. Further, on July 10, 1984 (49 FR 28185), EPA amended the regulations to allow the continued use of PCBs at less than 50 ppm in the natural gas compressors and liquid of natural gas pipelines provided the compressors are marked in accordance with §761.45(a).

Therefore, commenters questioning the disposal requirements are advised that, when the natural gas pipeline has been operated in compliance with the PCB use authorization (i.e., the compressor and liquids contain less than 50 ppm), the handling, storage, and disposal of these items are currently not regulated. Reuse of this pipeline, such as for culverts, is not currently authorized by these rules; however, reuse of pipeline is specifically addressed in Unit IL.D.2.b. and generally addressed in Units II.A.5. and 6. of this preamble. Items containing PCBs at levels of ≥ 50 ppm are subject to the disposal requirements at 40 CFR 761.60. However, PCB-Contaminated Articles that have been drained of all free flowing liquids could still be abandoned in place under proposed

§761.60(b)(6)(ii), as under current §761.60(b)(5)(ii), but not used or reused.

Local distribution system pipe frequently shares public rights-of-way, thus underlying major public infrastructures such as roadways, water lines, sewer lines, and telephone and electrical service lines. Unlike interstate transmission lines, testing and removal of some distribution lines have a great potential for causing prolonged disruption of other utilities sharing these rights-of-way. Today's proposal at §761.60(b)(5) would allow segments of either interstate or distribution natural gas pipelines to be abandoned in place along these rights-of-way if certain activities were undertaken to limit the risk of exposure. EPA believes that it is not a function of who owns the pipeline but rather how disruptive a removal would be that is the determining factor for allowing abandonment in these circumstances. DOT requires that

natural gas pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas (but not liquids); in the case of local distribution lines, physically disconnected from the customer; and sealed at both ends (49 CFR 192.727). EPA believes that these requirements do not provide protection from exposure to pipe containing PCBs, even of the small diameters routinely found in local distribution systems because the distribution company may lose physical control of the pipeline containing PCBs after abandonment. EPA specifically requests data on levels of PCB contamination in local distribution systems and the protection from exposure to PCBs afforded by the DOT requirements for abandonment.

EPA proposes at §761.60(b)(5)(i)(A), that when levels of PCB contamination cannot be determined because condensate samples cannot be collected and the pipe is too small (having an inside diameter of 4 inches or less) to be accurately wipe sampled, the pipe may be abandoned in place if it is either filled to 50 percent of its volume with grout or high density polyurethane foam and sealed closed at each end, or sealed closed at each end and included in a public service notification program, such as a "one-call" underground utility warning program under DOT regulations at 49 CFR 192.614.

The proposal also provides a series of options for the removal with subsequent disposal or decontamination of pipeline containing PCBs and defines procedures for determining the level of contamination and whether the pipeline contains liquid. PCB-Contaminated natural gas pipeline, i.e., pipeline containing or contacting PCBs at concentrations of 50 - <500 ppm, or with surface concentrations of >10 - <100 micrograms PCB per 100 square centimeters, or natural gas pipeline containing PCBs at any concentration and having an inside diameter less than or equal to 4 inches could be disposed of in a solid waste landfill or an industrial furnace. In addition, natural gas pipeline containing PCBs at any concentration could be disposed of in a TSCA chemical waste landfill, a TSCA incinerator, by a TSCA approved alternate disposal method, or as a PCB non-remediation waste in compliance with proposed §761.62. Pipe containing or contacting PCBs at concentrations of less than 50 ppm or with surface concentrations of ≤ 10 micrograms per 100 square centimeters may currently be reused only as natural gas pipeline in the same natural gas system (same company) pursuant to the use authorization at §761.30(i); §761.30(i)

does not also authorize distribution in commerce. In §761.79, *Decontamination*, EPA proposes cleanup levels and procedures for surfaces for reuse and for determining current regulatory status. This section is also applicable to natural gas pipelines and associated equipment.

f. *Disposal of solvents*. EPA, in response to several comments and a related judicial decision (In the matter of: Rollins Environmental Services (N.J.), Inc., Docket No. II-TSCAPCB-88-0116 (July 13, 1989), *Rollins Environmental Services (NJ) Inc. v. EPA*, 937 F.2d 649 (D.C. Cir. 1991)), is proposing to clarify the disposal requirements relating to solvents used in decontamination procedures. Current regulations at §761.79(a) explicitly require the disposal of solvents used to decontaminate PCB containers in a TSCA approved facility once the PCB concentration in the solvent reaches 50 ppm PCBs. Section 761.79 does not address the disposal requirements for solvents used to decontaminate that do not reach 50 ppm. Existing rules at §761.1(b) require solvents used in decontamination to be disposed of as PCBs regardless of the final concentration of PCBs in the solvent. Such solvents have been in contact with PCBs and as such are regarded as containing the concentration of the original PCBs because of the principle of anti-dilution. The PCB rules currently contain no other provisions for decontamination; however, EPA has approved various decontamination-like activities under §761.60(e). PCB disposal approvals for decontamination-like activities, issued under §761.60(e), specify disposal requirements for solvents. In the Rollins Circuit Court decision, the disposal requirements for solvents that contain less than 50 ppm PCB used to decontaminate PCB containers were found to be unclear. In order to clarify this situation, EPA is proposing to amend the provisions at §761.79 to allow hydrocarbon solvents containing less than 50 ppm PCBs to be used in accordance with the provisions for used oil as outlined in §761.20(e) or to be decontaminated themselves through processes such as filtration.

g. *Disposal of waste generated during the chemical analysis of PCBs*. Chemical analysis is needed to determine PCB concentrations for the purposes of determining compliance with the PCB regulations; characterize PCB contamination; determine the effectiveness of various decontamination and treatment technologies; and determine PCB levels in humans and their food chain. The chemical analysis of PCBs includes

sample preparation, sample extraction, extract concentration, extract cleanup, addition of PCB standards, and instrumental analysis. There are several possible wastestreams resulting from the chemical analysis of PCBs: excess sample, potentially contaminated drying agent (anhydrous sodium sulphate), extract solvent removed during extract concentration (acetone, hexane, methylene chloride, etc.), cleanup column packing materials (alumina, florisil, etc.), cleanup liquids (concentrated sulfuric acid), glassware, filtering materials, extracted sample material, and excess extract. In addition, analytical instrumentation is contaminated and therefore regulated if regulated PCBs are analyzed.

The relatively small amount of PCBs extracted in a sample is often diluted significantly in most potential laboratory wastes, and most wastes that cannot be recycled contain materials that should absorb PCBs. Extraction of small amounts of PCBs resulting from PCB analysis would likely be more burdensome than disposal in a controlled disposal facility and would result in less reduction in risk. Therefore, EPA is proposing at §761.64 special disposal provisions for laboratory waste.

All samples, including extracted sample material, would remain regulated for disposal, but could be returned to the site of generation for disposal according to the concentration measured in the sample. EPA is also proposing to permit, under certain conditions, the recycling for reuse of limited quantities of organic solvents used in the chemical analysis process described above. This change would result in cost savings to the laboratory by not having to replace used solvent, that could otherwise be safely and economically recycled by distillation within the laboratory, and would also result in minimization of laboratory waste solvents for disposal. In addition, EPA is proposing to allow the disposal of small quantities of non-liquid waste according to their existing (or presumed) concentration even though that concentration is known to be the result of dilution from performance of chemical analysis. EPA believes that the relatively small quantity of these wastes which are generated, their low concentrations of PCBs in non-liquid materials, and the significant quantity of materials in the non-liquid waste which would absorb PCBs present make disposal of these materials in a RCRA approved or TSCA approved landfill a safe and economical option.

h. Transboundary movement of PCBs for disposal. EPA periodically receives

requests from individuals wishing to import or export PCBs for disposal. Current regulations at 40 CFR 761.20(b)(2), promulgated under section 6(e)(1) of TSCA, authorize the import or export for disposal of PCBs only at concentrations less than 50 ppm. EPA believes there are instances where the import or export for disposal of PCBs at higher concentrations would not pose an unreasonable risk of injury to health or the environment. EPA therefore proposes to amend §761.20(b)(2) and add §761.20(b)(3) to create certain categorical exceptions to the general ban on import for disposal of PCBs at 50 ppm or greater and to clarify what constitutes import or export for purposes of this regulation. This proposal would also establish a petition procedure under proposed §§761.20(b)(4) and (c)(3) under which other imports and exports for disposal could be allowed on a case-by-case basis. This section of the proposal would not alter the current ban on import or export of PCBs at 50 ppm or greater for purposes other than disposal (including import for use, reuse, or recycling), or affect the meaning of the terms "import" or "export" for any other provisions of TSCA.

When EPA addressed the issue of import and export for disposal in 1979, it noted that regulation of these types of activities could be accomplished under TSCA section 6(e)(1), which governs disposal activities, or alternatively under section 6(e)(3), which governs manufacture and import activities (44 FR 31514, 31526 (May 31, 1979)). Based upon the authority in section 6(e)(1), EPA elected to issue comprehensive regulations that temporarily authorized the import and export of PCBs for disposal, otherwise known as the "Open Border Policy." EPA decided not to extend these regulations in 1980 and they expired (45 FR 29115 (May 1, 1980)).

In 1984, EPA issued the current PCB regulations that address import and export for disposal (40 CFR 761.20(b) and 761.60(h)). Section 761.60(h) provides that the import and export of PCBs and PCB items for purposes of disposal are regulated under section 761.20. Section 761.20(b)(2) authorizes only the import or export for disposal of PCBs at concentrations of less than 50 ppm. The current rules do not authorize import or export for disposal of PCBs at higher concentrations. In the absence of a general rule that allows the import or export for disposal of such PCBs, the only way that such wastes may currently be imported or exported is if EPA grants an exemption pursuant to TSCA section 6(e)(3).

This rule is designed to control the transboundary movement of PCB waste in a manner consistent with the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal. EPA is requesting comment on the circumstances under which the U.S. border should be opened to transboundary shipments of PCBs for disposal. The options range from allowing all imports for disposal under section 6(e) to maintaining the current closed border status, and might include opening the border to PCBs from a limited geographic area such as the Great Lakes drainage basin. Today's proposal, if finalized, would retain the general prohibitions on import and export of PCB wastes at concentrations of 50 ppm or greater, with certain exceptions described below.

Import. Proposed §761.20(b)(2) would allow three exceptions to the general prohibition on import of PCBs for disposal. Proposed §761.20(b)(3) would clarify what constitutes import for purposes of this regulation. EPA could add categorical exceptions to proposed §761.20(b)(2) and (b)(3) should the need arise in the future.

(1) *Imports of PCBs at concentrations less than 50 ppm.* Because the Administrator has made the finding that PCBs at concentrations less than 50 ppm present no unreasonable risk to health or the environment, import for disposal of these PCBs would continue to be allowed.

(2) *Import of PCB wastes from United States territories or possessions that are outside the customs territory of the United States into the customs territory of the United States for disposal.* TSCA and the regulations issued thereunder at 40 CFR Part 761 regulate the manufacture, import, distribution, processing, use, storage, and disposal of PCB waste in the United States. The terms "United States" and "States" are defined at sections 3(13) and 3(14) of TSCA to include "any state, D.C., Puerto Rico, Virgin Islands, Guam, the Canal Zone, American Samoa, Northern Mariana Islands, or any other territory or possession of the United States." TSCA does not define imports specifically, but section 13 of TSCA requires the Secretary of the Treasury to refuse entry into the customs territory of the United States (as defined in general headnote 2 of the Tariff Schedules of the United States) of any chemical substance, mixture, or article offered for entry if it fails to comply with any rule under TSCA. In the Tariff Schedules, "customs territory of the United States" is defined as "any State of the United States, the District of Columbia, and

Puerto Rico." Thus, a problem arises when a territory or possession which is outside the customs territory of the United States attempts to ship PCB wastes back into the customs territory of the United States for disposal. Any such transfer of such PCB wastes at concentrations of 50 ppm or greater would be considered a prohibited import under existing regulations. This is problematic because most United States territories and possessions outside the customs territory do not have adequate disposal facilities. Since PCBs persist in the environment, improper disposal of PCBs in those territories or possessions could create an unreasonable risk to health or the environment in the territory or possession of the United States. Therefore, EPA proposes to allow transfers of PCBs from United States territories or possessions that are outside the customs territory of the United States into the customs territory of the United States for disposal.

(3) *Imports of PCBs for disposal where EPA determines that it is in the interests of the United States and will not result in unreasonable risks to health or the environment.* In addition to the categorical exceptions listed above, there may be instances in which it would be in the interests of the United States to allow import of PCBs for disposal. This might be the case where PCBs were located outside the United States, but in close proximity to the United States, and adequate disposal facilities were not available in the country in which they were located. Import of the PCBs into the United States for disposal might be in the interests of the United States to mitigate an unreasonable risk to health or the environment in the United States that could not be mitigated by other means. It might be in the interests of the United States to allow import of PCBs for disposal to implement a federal law such as CERCLA, or to carry out United States obligations under a treaty or other international agreement. EPA would not be inclined to find that import for disposal was in the interests of the United States solely because disposal of the PCBs in this country was less expensive. EPA proposes to allow imports for disposal that are in the interests of the United States on a case-by-case basis where they would not pose an unreasonable risk of injury to health or the environment.

Under its section 6(e)(1) authority to regulate disposal, EPA proposes to allow these case-by-case exceptions to the ban on import for disposal of PCBs at concentrations of 50 ppm or greater at EPA's initiative or in response to a

petition. Under proposed §761.20(b)(4), any person may petition EPA for an exception to the prohibition on import for disposal, and EPA may grant such an exception if it finds that to do so would be in the interests of the United States and would not result in unreasonable risk of injury to health or the environment.

Petitions would be filed with the Director, Chemical Management Division. The Director has the authority to issue TSCA PCB disposal approvals in certain instances and is responsible for coordination and oversight of PCB disposal activities in the United States. Therefore, the Director is in the most advantageous position to require proper disposal of imported PCBs. Petitions would have to be submitted on an individual basis for each individual that would be subject to the exception. If EPA determined that it was appropriate to create a categorical exception, it could do so by adding through rulemaking to the categorical exceptions proposed at §761.20(b)(2) and (b)(3). Information to be included in the petition is specified at proposed §761.20(b)(4)(i) through (vii). The petitioner would be notified of EPA's decision by letter.

To implement the proposed §761.20(b)(2) through (4), EPA is also proposing at §761.20(b)(5) that all PCBs at concentrations greater than or equal to 50 ppm that are imported for disposal must be disposed of in an EPA designated facility which has a TSCA PCB disposal approval. Each facility's TSCA PCB disposal approval would have to contain specific conditions addressing at a minimum its designation to receive specified shipments of imported PCBs for disposal, analytical data on wastes to be imported including their compatibility with the facility's approved waste disposal techniques, prior notification and certification to EPA of adequate disposal capacity, use of the manifest system, provisions for financial responsibility for the imported PCBs from the port of entry through final disposal, appropriate recordkeeping for these activities, and any other conditions that EPA found were necessary to ensure that the import and disposal of PCBs did not present an unreasonable risk of injury to health or the environment. Since EPA cannot easily reach foreign generators of imported PCBs to enforce liability provisions of TSCA or other Federal statutes and cannot be assured that shipments of imported PCBs could be returned to their country of origin if they could not be disposed of at the designated facility, conditions would be included in disposal approvals to

address these situations. Imported PCBs could also be decontaminated under the proposed changes to §761.79. However, the PCBs would have to be imported to a commercial storage facility which had a PCB commercial storage approval, unless exempt, including special approval conditions for imported wastes, as noted above.

Export. When EPA announced the expiration of the Open Border Policy in 1980 it stated, with regard to exports, that it would not grant an exemption unless the nation to which the export was destined had proper facilities for ultimate disposal (See 45 FR 29115). EPA believes that export of PCBs to other countries needs to be limited so as not to pose a risk of injury to health or the environment in those countries and that to the maximum extent practicable, each nation should manage its own waste within its own borders. Therefore, EPA is proposing at §761.20(c)(3) to allow export for disposal of PCB waste at concentrations of 50 ppm or greater on a case-by-case basis unless EPA has reason to believe that the PCBs in question will not be properly managed, where the receiving country has an international agreement consistent with the international obligations of the United States relating to transboundary movements of PCBs and their disposal, with the U.S. Government concerning such exports; the government of the receiving country certifies to EPA that it has received accurate and complete information about the waste, consents to receive it, and has adequate disposal facilities to assure proper management; and the exporter identifies waste containing liquid PCBs or PCB-containing electrical equipment. As an example, vessels are sometimes exported for salvage of the considerable amounts of metal they contain. PCBs present in integral components of the ships, such as wire cable or air handling system gaskets, could be exported with the ship under conditions specified in the export approval. EPA could require as a condition of approval for export that PCBs found in large capacitors, transformers, and hydraulic or heat transfer fluids, be removed prior to export for disposal. EPA could allow such exports for disposal on its own initiative or in response to a petition. Other information that would have to be included in the petition is set out at proposed §§761.20(c)(3).

Other transboundary shipments. Certain types of movement of PCB wastes across national borders is not considered to be either import or export.

(1) *Transport of PCB waste generated in the United States through a foreign country (and any residuals resulting*

from cleanup of spills of such waste in transit) for reentry into the United States for disposal. The proposal would clarify that PCB waste generated in the United States may be transported through a foreign country and returned to the United States for disposal. For example, PCB waste generated in Michigan could be transported across Canada for disposal in New York. Any residual PCB waste resulting from the cleanup of spills that might occur in transit could also be brought into the United States for disposal. Otherwise, it would be impractical and inefficient to transport PCBs generated in certain parts of the United States to nearby United States disposal facilities. This provision is included in §761.20(b)(3) as a clarification. For purposes of this regulation, EPA considers such shipments to be transit shipments, not exports or imports.

(2) *Return for disposal of wastes that result from PCBs that were procured domestically by the U. S. Government, taken overseas for use by the U. S. Government, and that have remained under U. S. Government control since the time of procurement (including any residuals resulting from cleanup of spills of such wastes during use, storage, or in transit).* In conjunction with U. S. Government operations, PCBs may be taken to United States facilities abroad for use. Because these PCBs have always been the property of the United States, and because disposal facilities for these wastes might not be readily available overseas, they would be permitted back into the United States for disposal along with any residuals resulting from cleanup of spills occurring during use, while in storage for reuse or awaiting shipment for disposal, or in transit. For purposes of this regulation, EPA would not consider these shipments to be exports or imports.

i. *Landfilling of liquid PCBs.* EPA proposes to remove the provisions allowing for the disposal of liquid PCBs, which have been stabilized on-site prior to disposal, at a chemical waste landfill, §761.60(a)(2)(ii), §761.60(a)(3)(ii), and §761.75(b)(8)(ii). These provisions were established in the May 31, 1979 rulemaking, since at the time of the rulemaking there was a limited number of incinerators permitted to burn PCB waste and disposal capacity was a concern. Currently, and as can be reasonably expected in the future, the amount of low concentration PCB liquids anticipated to be designated for disposal and in storage for disposal can easily be accommodated within the existing and anticipated future PCB disposal technologies other than landfilling. The existing PCB disposal

and storage for disposal regulations and the amendments proposed in this rulemaking are expected to accommodate the surplus in the disposal capacity supply.

Further support for this deletion of a disposal option for liquid PCBs having low PCB concentrations is the prohibition on landfilling liquid hazardous wastes containing PCBs under the RCRA land disposal restrictions at 40 CFR 268.42.

j. *Self-Implementing requirements for research and development for PCB disposal activities—1. General.* This change would eliminate the time-consuming process of obtaining an R&D approval in order to engage in limited R&D into PCB disposal. R&D for PCB disposal not conforming with the limitations of this section would require written approval or written waiver of the requirements of a §761.60(e), 761.60(i)(2), or 761.70(a) or (b) approval by the Regional Administrator in the EPA Region where the R&D would occur. Persons engaged in research and development into PCB disposal technologies would now be required to obtain an EPA identification number.

EPA proposes at §761.60(j) a self-implementing approval for research and development (R&D) for PCB disposal activities. Limitations are proposed for the amount of PCB material disposed of, the concentration of the PCBs disposed of, the total amount of PCBs, and the duration of the R&D for disposal activity. All treated and untreated PCB materials from a PCB R&D for disposal activity would be required to be disposed of according to §761.60(a)-(e).

2. *Definition of R&D for PCB Disposal.* An individual engaged in R&D for PCB disposal activities is someone who is not accepting PCB waste on a commercial scale; the person is involved solely in the R&D for preliminary investigation and limited scale up of PCB disposal technologies and may or may not possess a TSCA PCB R&D Approval issued according to §761.60(e), 761.60(i)(2), or 761.70(a) or (b).

3. *Limitations.* EPA is proposing at §761.60(j) that the maximum quantity used annually under this exemption for PCB treatability study samples be 70 cubic feet for solid material or 500 gallons for liquid material. This should be a sufficient amount of material for conducting small-scale treatability studies. If additional material is needed to conduct the study, the Regional Administrator may at his or her discretion grant requests on a case-by-case basis for quantity limits in excess of those specified or require a formal R&D approval if the increased quantity

could present an unreasonable risk to health or the environment.

In addition to a quantity cut-off, EPA is proposing at §761.60(j) to limit the maximum concentration for PCB waste that is used in a treatability study to 10,000 ppm for those utilizing the 500 gallon or 70 cubic feet volume cap or 1 kilogram (kg) of pure PCB waste annually at the facility. It has been EPA's experience in the past in reviewing applications for R&D approvals and in discussions with those in the waste treatment field, that it is rare that one would need a sample that contains more than 10,000 ppm PCBs to conduct a small-scale treatability study. The concentration limits are also proposed based on the Agency's concern with the potential risks associated with the distribution in commerce (without a manifest) and handling of high concentration PCBs. EPA is also limiting the approvals under proposed §761.60(j) to one calendar year to evaluate the progress and scope of the R&D and to plan for potential formal permitting of successful technologies.

4. *Permitting and exceeding the limitations.* Under the proposal, a the laboratory conducting the treatability study conforms to the criteria of §761.60(j), then it is not subject to the permitting requirements of §§761.60(e), 761.60(i)(2), or 761.70(a) or (b). The Agency feels that the criteria in proposed §761.60(j) coupled with the applicable provisions of OSHA regulations at 29 CFR part 1910 provide adequate oversight and protection to health and the environment to forego the need for formal permitting. The Regional Administrator or Director, CMD would, however, have the authority even in cases where the R&D activity would not exceed the maximum allowable volume (500 gallons of liquid or 70 cubic feet of solid) or the maximum allowable concentration (10,000 ppm or 1 kg of pure PCB), to require the requestor to submit a formal permit application if the disposal activity could present an unreasonable risk of injury to health or the environment. Under proposed §761.60(j), the Regional Administrator in the Region in which the R&D disposal activity is proposed would have to be informed in writing at least 30 days prior to the commencement of the disposal activity.

5. *Notification.* Individuals engaged in conducting R&D for PCB Disposal would also be required to submit EPA Form 7710-53, even though they may have notified EPA as a "Permitted Disposer." There is a new category on EPA Form 7710-53 designated as R&D/

Treatability included for the notification.

III. Other Regulatory Changes and Clarifications

The following issues were identified in the ANPRM as items where changes may be appropriate. These revisions include providing clarification on certain provisions (e.g., the 1-year time limit for storage and disposal requirement) and amending the regulations where appropriate, eliminating seemingly duplicative requirements (e.g., marking), and creating new provisions to promote efficiency in disposal operations (e.g., temporary storage of greater than 500 ppm PCB liquids).

A. Marking

The regulations at §761.40(b) and (e) essentially express the same requirements with regard to the marking of transport vehicles when loaded with PCBs in the liquid phase at concentrations of 50 ppm or greater. In the ANPRM, EPA solicited comments on the best remedy for this regulatory duplication. In response to the ANPRM, commenters expressed general support for EPA's overall objective to clarify the language and eliminate duplication in the marking regulations. Several commenters suggested that both §761.40(b) and (e) be deleted and totally rewritten. Other suggestions included combining the paragraphs, rewriting both subsections, or deleting one and updating the other.

In today's proposal, EPA proposes to eliminate this duplication by combining references to the marking requirement for transport vehicles at §761.40(b) and (e) under proposed paragraph (d), thus leaving the requirements for the remaining PCB items under paragraph (e). This amendment would not result in any substantive change.

Further, EPA has determined that Large Low Voltage Capacitors often are not identified and disposed of properly at the time of removal, because they are not required to be marked while in use. Therefore, EPA is proposing to strengthen the marking requirements for Large Low Voltage Capacitors to include those still in use. Because of these identification and disposal concerns, the Agency is proposing at §761.40(k) that all PCB Equipment in use containing PCB transformers or PCB Large Capacitors be marked with the mark ML.

The Agency is also aware of reports that PCB Capacitors were not marked because they were assumed not to contain PCBs. To clarify what capacitors must be assumed to contain PCBs, EPA

is proposing to amend the definition of "Capacitor" in §761.3 to clarify that a capacitor whose PCB concentration is unknown generally must be assumed to contain 500 ppm or greater PCBs. This should make it evident to readers that this rule applies to the marking, use, and recordkeeping requirements, and not just disposal.

B. Department of Transportation Containers for Storage of PCB Waste

Currently, the regulations at §761.60(b)(2)(vi) and §761.65(c)(6) specify the use of Department of Transportation (DOT) specification containers for PCB storage and disposal. Section 761.65(c)(7) allows liquid PCB waste to be stored in containers that are larger than the DOT containers specified at §761.65(c)(6), provided they meet OSHA requirements (§761.65(c)(7)(i)). In addition, a Spill Prevention Control and Countermeasure (SPCC) Plan must be prepared and implemented in order for these larger containers to be used. For non-liquid PCB waste, containers larger than those specified in §761.65(c)(6) may be used, if they provide as much protection against leaks and exposure as the DOT containers, and they are of the same relative strength and durability. In short, the current regulations require the most durable containers be used for storing and/or transporting PCBs, which in most cases, and in particular when storing PCB/radioactive waste, may not be the best alternative (See discussion at Unit II.C.—PCB/Radioactive Waste).

EPA is proposing to amend §761.60(b)(2)(vi) and §761.65(c)(6) by deferring to the DOT container requirements for the storage and transportation of PCBs. EPA proposes to eliminate all citations to specific container type and to cross reference the new performance-based DOT container requirements set forth in the DOT Hazardous Material Regulations (HMR) at 49 CFR Parts 171–180. EPA regulates PCBs at a much lower concentration than DOT. Therefore, EPA would also like to emphasize that although some material may not be subject to DOT regulations, part 761 would still require these materials to be packaged in accordance with the DOT regulations, that is, in DOT authorized containers. PCBs are shown in the Hazardous Materials table at 49 CFR 172.101, in Packing Group II. However, under those regulations PCBs that are transported by highway or rail need only be packaged pursuant to Packing Group III. PCB/radioactive, PCB/fissionable material, PCB/mixed waste, and PCB/hazardous waste not packaged in accordance with the HMR are not allowed to be

transported. Additionally, readers are advised that the HMR as amended on December 21, 1990 (55 FR 52402) prohibits the construction of DOT specification packaging previously designated for the storage of PCB waste (i.e., DOT Specification 5, 5B, 6D, 17C, 17E, and 17H containers) effective October 1, 1994. Further, transportation of PCBs in these outdated DOT specification containers is not authorized beyond September 30, 1996. Although most commenters agreed with EPA's decision to defer to DOT, one commenter suggested that EPA continue to list all containers authorized by DOT. However, such an approach would defeat EPA's objectives in amending the PCB rules which are to provide flexibility to industry and to minimize the resource burden associated with updating the PCB regulations each time DOT modifies its requirements.

C. Definition of a PCB Transformer and PCB-Contaminated Electrical Equipment

The proposed amendment to the definition of a PCB Transformer at §761.3 provides: "PCB Transformer means any transformer that contains 500 ppm PCBs or greater. A transformer is a PCB Transformer if: the nameplate indicates that the transformer contains PCB dielectric fluid; the owner or operator has any reason to believe that the transformer contains PCB dielectric fluid; or the transformer dielectric fluid has been tested and found to contain PCBs at 500 ppm or greater. A transformer is assumed to be a PCB Transformer if: the transformer does not have a nameplate; records do not exist that indicate the type of dielectric fluid; or records do not exist that indicate the PCB concentration." In order to clarify the current definitions of "PCB-Contaminated Electrical Equipment" (specifically PCB-Contaminated Transformer within this definition) at §761.3, EPA is proposing to incorporate into this definition the provisions of the "assumption rule" in this preamble to the PCB to the PCB Ban rule (44 FR 31517, May 31, 1979).

EPA inspectors have suspected that some owners of transformers are abusing the "assumption rule" to avoid the stricter disposal requirements of §761.60. An example of such an avoidance technique is the removal of the manufacturer's nameplate or other identifying information that could be used to classify a transformer as PCB. Additionally, the possibility exists that a transformer may have been serviced with fluid containing 500 ppm PCBs or greater. For purposes of clarification, "records" as used above refers to

servicing records, manufacturers certifications and/or other data that would indicate or impact PCB concentration. Generally, commenters expressed support for EPA's effort to clarify the existing definition of a PCB Transformer.

In addition, the current definition of PCB-Contaminated Electrical Equipment at §761.3 which includes "oil-filled electrical equipment," has been misinterpreted to mean that a transformer with any oil in it could be assumed to be PCB-Contaminated (50 to 499 ppm). To further clarify this definition, the Agency is proposing to add the word "mineral" before the words "oil filled". In addition, language would be added to this definition which states that "a transformer is assumed to contain PCBs at 500 ppm or greater, if it is an untested mineral oil transformer and reasons exist to believe that the transformer was at any time serviced with fluid containing PCBs at 500 ppm or greater." Historically, mineral oil transformers encompassed the vast majority of non-askarel transformers; however, over time the types of non-askarel transformers have expanded to include, for example, silicone filled transformers. Adding this clarification would reestablish the Agency's intent when this definition was added to the regulation in August of 1982 (46 FR 37342) that mineral oil filled transformers are assumed to be PCB-Contaminated (50 to 499 ppm).

Some commenters suggested that instead of amending the definition, the Agency should consider requiring that these units be tested prior to disposal. Others commented that EPA should provide immunity from enforcement action to owners who assumed their oil-filled electrical equipment was PCB-Contaminated Electrical Equipment when it was later determined that the transformer contained PCBs at 500 ppm or greater.

While the costs of testing have decreased since 1979, EPA is not proposing to change its long standing policy, which does not require testing transformers prior to disposal, while the equipment is in use. Nonetheless, owners of electrical equipment containing PCBs should consider verifying the concentration prior to disposal to avoid violations of TSCA. In addition, EPA is not proposing to issue a blanket exemption from enforcement action for use of a mineral oil transformers assumed to contain less than 500 ppm PCBs but later found to contain PCBs at 500 ppm or greater. The regulations at §761.30(a)(1)(xv) currently describe procedures for bringing such transformers into

compliance with the use authorization provisions. For example, in order to qualify for the current use authorization, all PCB Transformers were required to have been registered with fire response personnel by December 1, 1985 (§761.30(a)(1)(vi)). PCB transformers erroneously assumed to have been contaminated at less than 500 ppm PCBs must be registered within 30 days of discovery of the actual contamination level with the required fire response personnel (§761.30(a)(1)(xv)(D)). If it cannot be demonstrated (e.g., by the production of the receipt from a registered letter used to register the transformer and signed by the fire response personnel) that, this registration has taken place, then that PCB Transformer is not authorized for use under §761.30.

The Agency is seeking information regarding numbers of small transformers or other electrical equipment that contains PCBs. These small transformers or other types of small electrical equipment generally do not have nameplates and are not easily sampled. Some examples of this type of equipment are: potential transformers, current transformers, instrument transformers, grounding transformers, voltage transformers, and ignition transformers. These small transformers can range in size from several inches to several feet in height. Such small transformers can be filled with oil, epoxy, or tar-like potting compounds that contain PCBs, or they could be "dry". Since these small transformers generally do not have a nameplate, under the proposed amendment to §761.3 they would have to be assumed to be PCB Transformers and would be subject to the use requirements at §761.30(a) and the disposal requirements at §761.60(a).

The Agency is also soliciting comments regarding the disposal requirements that could be imposed on these small transformers or other similar types of small electrical equipment. Their disposal requirements could resemble those for small capacitors (e.g., 3 pounds of dielectric fluid (§761.60(b)(2)(ii)) or could be expanded to include the size (physical dimensions) or the total weight of the equipment as well. Such small transformers or similar small electrical equipment, meeting the size or weight conditions, could be authorized for disposal in an approved chemical waste landfill under §761.75, or if less stringent disposal was deemed protective, in a municipal solid waste landfill.

D. Drained PCB-Contaminated Transformers

Drained PCB-Contaminated Electrical Equipment is unregulated for disposal under the existing regulations at §761.60(b)(4) and may be salvaged through smelting, a process recognized by EPA as an acceptable form of disposal when certain conditions are met. EPA solicited comments in the ANPRM on whether the Agency should consider amending the regulations for the disposal of drained PCB-Contaminated Electrical Equipment to ensure that the equipment is properly disposed of and is not illegally reused. Possible remedies such as decontamination and stricter controls to ensure that units were completely drained were not well received by commenters. In particular, most commenters stated that the anecdotal information that drained PCB-Contaminated Electrical Equipment carcasses were used for barbecue grills reflected isolated instances of non-compliance.

Considering the low potential exposure to humans and the environment and the valuable metals that could be salvaged for recycling, EPA is proposing to modify the disposal requirements at §761.60(b)(4) for drained PCB-Contaminated Electrical Equipment by including this equipment under the proposed general ban against open burning of PCBs and allowing disposal only in facilities that are permitted, licensed, or registered by a State to manage municipal or industrial wastes (excluding thermal treatment units), in an industrial furnace or in a TSCA approved disposal facility (See Unit II.B.2. of this preamble). Finally, EPA also proposes to add language to §761.60(b)(4) which states that for a period of not less than 48 hours, equipment should be allowed to drain, so that as much liquid as possible is removed from the equipment to further reduce PCB content prior to disposal.

E. Transfer of Totally Enclosed PCBs

Under current rules, PCB Items with concentrations of 50 ppm or greater, sold before July 1, 1979, for purposes other than resale may be distributed in commerce in a totally enclosed manner (§761.20(c)(1)). While under §761.20(c)(1), totally enclosed PCB Items such as transformers, and Large High and Low Voltage Capacitors ≥ 50 ppm (as defined in §761.3) may be distributed in commerce (e.g., sold), EPA requested comment in the ANPRM on the requirement that records be maintained on these transactions. Generally, commenters were very

supportive of the requirement that records be maintained to document the distribution in commerce of these items.

With the proposed recordkeeping requirement at §761.180(a)(2)(ix), EPA seeks to prevent illegal disposal of PCB Items, including PCB and PCB-contaminated transformers and Large Capacitors, by those who explain the disappearance of such items by claiming a sale has occurred. To minimize the potential for illegal disposal, EPA is proposing that the name, address, and phone number of the parties to which the item was transferred, the date of transfer, and the identifying number of the item be recorded in the annual document log for any distribution in commerce of a PCB Item (excluding small capacitors) with a concentration of 50 ppm or greater. In addition, EPA suggests that summary information relevant to the equipment (e.g., PCB content, servicing, and inspection records) and its compliance with applicable sections of part 761 be passed on to the new owner.

EPA had anticipated in the ANPRM that this recordkeeping requirement would be imposed pursuant to a sale. However, in order to avoid claims that the transaction is exempt from the proposed recordkeeping requirement because it involved no transfer of money, EPA is proposing to require that any transfer of ownership resulting in the transformer or other PCB Item being distributed in commerce, be included in the recordkeeping requirement.

The intent behind this proposed recordkeeping requirement is to identify instances of illegal disposal hidden behind the guise of a transfer of ownership. As such, EPA is seeking to require additional information on transactions which result in the removal of the transformers and capacitors from the property. In this proposal, EPA would not require the annual document log to identify the transfer of ownership of PCB Items (excluding small capacitors) with a concentration of 50 ppm or greater when that transfer was included in a real estate transfer. For example, a company sells a warehouse and the surrounding property. As long as the transformers and capacitors were transferred in the same transaction as the real estate, a separate log of the transaction would not be necessary.

A few commenters to the ANPRM suggested that the sale of totally enclosed electrical equipment should be banned outright. EPA believes that the sale or transfer of totally enclosed PCB Items should not be banned and that there is still a legitimate need for such equipment. However, EPA believes that

additional controls are needed to ensure proper disposal of such equipment.

One commenter stated that a recordkeeping requirement would be impossible since not all PCB Items (e.g., PCB-Contaminated Transformers, or Large Capacitors) are marked with a serial number. Although EPA proposes that the records include the serial number of the equipment, the absence of a serial number should not preclude EPA from tracing an illegal disposal. Therefore, EPA is proposing that any internal identification number that the company uses to identify the specific PCB Item be included in the records. Any facility with PCB Items (excluding small capacitors) with a concentration of 50 ppm or greater not equipped with manufacturer identification numbers should develop some mechanism for identifying those pieces of equipment for activities such as maintenance or quarterly inspections. The proposal would require permanent marking, such as engraving of an internal identifying number in a prominent location on the equipment, as a means of identifying this equipment. Absent a manufacturer's identification, the company's own identification number would have to be documented on the records.

Several commenters recommended that the recordkeeping requirement be included in the annual record requirements at §761.180(a). EPA agrees that this would be an appropriate method of maintaining the records of a transfer of ownership of a PCB Item (excluding small capacitors) with a concentration of 50 ppm or greater. Therefore, EPA is proposing to implement this requirement by adding paragraph (ix) to §761.180(a)(2).

F. Change in Reportable Quantity — Spill Cleanup Policy

In attempting to provide more consistency with other Federal statutes, EPA solicited comments on whether §761.125(a)(1) should be modified to the new reporting requirement to the National Response Center. Changing the notice requirements from 10 pounds to 1 pound or more of pure PCBs, would reflect changes made to the reportable quantity (RQ) under CERCLA at 40 CFR part 302. In addition to seeking comments on this issue, the Agency restated its objective in establishing the TSCA PCB Spill Cleanup Policy of April 2, 1987; i.e., to provide guidance for the cleanup of recent (after May 4, 1987) or fresh spills. Commenters conveyed general support for changing the National Response Center RQ to 1 pound or more of pure PCBs. However, some suggested addressing old spills by applying the TSCA PCB Spill Cleanup

Policy, while others recommended changes to the Regional reporting requirement. In considering these options, EPA concluded it is inappropriate to change the current policy to address these issues at this time. EPA's objective in initiating this rulemaking is to provide flexibility and to remove redundancies without weakening the existing policy. Finally, further discussion of EPA's position regarding the remediation of old spills can be found by referring to Unit II.A., "Large Volume PCB Wastes" in this notice.

In this rule, EPA proposes to change only the notice of a reporting requirement to the National Response Center at §761.125(a)(1) by lowering the RQ to 1 pound or more of pure PCBs to be consistent with CERCLA.

G. PCB Storage Requirements

1. *Indefinite storage of PCB Articles designated for reuse.* EPA regulations specifically state at 40 CFR 761.65(a) that any PCB Articles or PCB Containers that are stored for disposal shall be removed from storage and disposed of within 1 year from the date when it was first placed into storage. However, there currently is no comparable provision in the regulations that addresses the length of time a PCB Article may be stored for reuse. Further, EPA has been made aware of situations where PCB Transformers and PCB-Contaminated Transformers have been held "in storage for reuse" well beyond a time when it is reasonable to expect the equipment could be reused. This storage is being done under the pretext that the equipment is being retained as "spares" for critical components of existing electrical systems or that at some future date the owner will service the unit. It was not EPA's intent to allow PCB Articles that clearly could not be reused due to their state of disrepair, and therefore should be disposed of, to remain in storage for "reuse." This activity constitutes illegal disposal and creates additional risks of environmental exposure to PCBs while the equipment is "in storage for reuse."

EPA is aware, however, that there are many legitimate instances which warrant the storage of PCB equipment for many years for the purpose of reuse as spares for critical components of electrical systems. These are typically intact and nonleaking PCB Articles which are treated as if they were in service. Many comments received in response to the ANPRM suggested that limiting storage for reuse would in effect amount to a new use restriction without any apparent basis from the standpoint of protection of health and the

environment. Nevertheless, EPA is aware of other situations for which restrictions are warranted to minimize potential risks to the environment and health from exposure to PCB Articles which are being stored for reuse.

There are many compelling reasons for allowing the storage for reuse of PCB Articles. Since transformers, for example, can easily have an active service life of more than 40 years, disposing of this equipment prematurely based upon an arbitrary time limit would not be economically prudent nor serve any environmental goals. Placing such a piece of electrical equipment in storage for reuse to be used as a spare or in emergency situations is both prudent and economically sound. EPA is proposing to minimize the potential risks associated with the storage for reuse of this equipment, that once it is placed in storage for reuse it be treated as if it were in use (i.e., in-service).

Commenters provided a number of scenarios in which extended storage for reuse is warranted: (1) Some PCB Articles are designed and manufactured for very specific use and size requirements and for which replacement is imperative for the continued uninterrupted operation of a facility (i.e., power rectifiers to convert electrical power to a usable form for specific manufacturing operations, side-mounted bushings, etc.); (2) certain industries must maintain inventories of all vintages of spare equipment, for example, owners of locomotive and stationary PCB Transformers often maintain these units in storage for reuse for a number of years prior to reinstalling and reusing the transformer; (3) aircraft and airport operations require airport safety and facility operational flexibility and expedient maintenance capabilities; (4) changes in facility ownership or business transactions may result in the premature storage of some PCB Articles; (5) there may also be difficulties forecasting electrical demand or specialty needs and obtaining parts for repair which are not readily available; and (6) if spares of older designs that had been removed from service for reuse could not be maintained, significant changes to system design would be necessary and in-service equipment would have to be replaced.

Although EPA takes these many factors and situations into consideration, there are nevertheless, situations where the storage for reuse policy is abused. This abuse results, or has the potential to result, in serious environmental damage. It is these situations which the Agency is seeking

to control by limiting the time allowed for storage for reuse and imposing other safeguards.

Certain types of businesses, by their nature (e.g., brokers, junk yards, service shops, etc.), accumulate larger quantities or volumes of PCBs than owners or users (e.g., a utility or industrial facility). Besides accumulating large volumes of PCB equipment that in many cases are in disrepair and may not be intact and non-leaking, these businesses have no intent of reusing the equipment themselves. The equipment may be awaiting repair prior to some future resale or may be in storage for "reuse" prior to purging for metal reclamation. In many cases, these units "in storage for reuse" remain for years in locations that are exposed to the elements which further compromise the integrity of the unit.

Therefore, EPA is proposing to add new §761.67 to limit storage for reuse in an area that was not designed, constructed and operated in compliance with §761.65(b) for a maximum of 3 years from the date a PCB Article was taken out of service or 3 years from the effective date of the final rule, whichever is later. PCB Articles placed into storage for reuse would have to be labeled at the time the PCB Articles were taken out of service, or upon the effective date of the final rule, and placed into storage for reuse. In addition, the storage for reuse of any PCB Article would have to comply with all marking and recordkeeping regulations. Information required on these labels would include the date the equipment was placed into storage for reuse, or the effective date of the final rule if the other date is not known, a projected location for the future use of the equipment, and the date the equipment was scheduled for repair or servicing, if appropriate.

Individuals would be required, upon request of an EPA inspector, to provide records of the potential use for the stored articles, a description of any leak containment precautions, and the PCB status (PCB or PCB-Contaminated) of the PCB Article.

PCB Articles that are intended to be stored for reuse for a period longer than 3 years would have to be disposed of unless the person storing the PCB Article had requested and received from the Regional Administrator for the Region in which the Article is located a written approval for an extension of the 3-year period. Anyone requesting an extension would be required to do so in writing to the Regional Administrator no later than 6 months prior to the expiration of the storage for reuse

period. Requests for an extension of the storage period must include the rationale for exceeding the storage limitation on an article-by-article basis. All extension requests would be subject to approval by the Regional Administrator and any conditions the Regional Administrator deems necessary to protect health or the environment. A record of these evaluations would have to be kept at the storage site for a minimum of 3 years. EPA also requests comment on the inclusion of site-specific or nationwide exemption or waiver provisions in addition to the proposed waiver provision.

One option for stored equipment would be to reclassify the equipment in storage for reuse. EPA, in another rulemaking, is currently considering modifications to the reclassification regulations to facilitate a widespread application of the reclassification procedures. Such an approach would significantly reduce the risk that might be posed by the longterm storage for reuse of PCB or PCB-Contaminated equipment. PCB Equipment that is reclassified to non-PCB status (i.e., <50 ppm) would not be subject to any of the storage for reuse restrictions proposed today. EPA recommends that owners and users or brokers and servicers of PCB equipment develop their own "reuse or reclassification schedule" to account for properly retained equipment. The schedule should include a simple inventory to aid in monitoring the status of the equipment. This may include the reclassification schedule and/or the purpose for storing for reuse.

One question raised in response to the ANPRM was whether the time between a piece of equipment's removal from service for repair and its return to the owner is considered storage for reuse. Until a determination is made that the piece of equipment can or cannot be repaired, any storage of that piece of electrical equipment prior to such a determination is considered storage for reuse. The owner of malfunctioning equipment that has been sent off-site for repair will still be subject to the 1-year time limit for storage and disposal, beginning on the date it was determined the equipment could not be repaired. Although service facilities may hold units for several months while scheduling the unit for repair, EPA views prolonged storage in such situations as an abuse of the storage provisions. Records must be maintained by the servicers, for review by PCB inspectors, of the dates of receipt of the equipment for repair, the type of malfunction, and the anticipated date

for return of the equipment to the owner or user.

2. *Clarification of the 1-year time limit for storage and disposal.* EPA proposes to clarify the requirement at §761.65(a) that states that a PCB Article or PCB Container must be disposed of within 1 year from the date the item is first placed into storage. EPA is proposing to amend the language at §761.65(a) to explicitly state EPA's original intent that the 1-year period begins on the date when the equipment is taken out of service and designated for disposal (when it is determined by a servicer, for example, that the equipment cannot be repaired) not when the equipment is placed into storage for disposal.

Currently, the 1-year time limit for storage and disposal of drums, which are used to collect liquid from various PCB Articles, and for other containers used to store the accumulation of PCB wastes such as oil, rags, booties, cleanup debris, etc., starts on the day an item is first placed into the container for storage for disposal. EPA is not proposing to allow the accumulation in containers of these items for periods of greater than 1 year except as proposed in Unit III.G.3 of this preamble. Currently this waste has to be stored in containers. However, comments suggested that this is not a common practice and may lead to disagreements within the regulated community. Therefore, EPA is proposing to change the language at §761.65(a) from "PCB Article and PCB Containers" to "PCBs or PCB Items" to effectively capture all storage scenarios.

For transformers that are taken out of service but are not drained until later, the 1-year clock, for both the oil and the transformer, starts when the transformer is taken out of service and designated for disposal (i.e., the date of removal from service for disposal). EPA also wants to clarify that the start date for the 1-year period for disposal (and any other applicable requirements) for PCBs legally returned into the United States for disposal (see Unit II.D.3.h and proposed §761.20(b)(3)) is the date the PCBs reach the port of entry in the continental United States, or the date the PCBs reach the port of entry if the disposal facility is outside the continental United States or if the waste is stored during transport for more than 10 days in a State. This policy applies to certain PCBs, to include wastes containing PCBs at less than 50 ppm which are imported for disposal. The policy also applies to PCBs purchased in the United States, by the U.S. Government, taken overseas for use (including any wastes directly resulting from the remediation of these PCBs), and subsequently returned to the United

States for disposal in an approved facility from U.S. embassies, U.S. military installations, other U.S. Government installations or territories, and PCBs imported under any Federal administrative order issued under TSCA or any Federal court action.

3. *Situations which warrant an extension or waiver of the 1-year time limit for storage and disposal.* In the June 10, 1991 ANPRM, EPA solicited comments on whether an extension of the 1-year time limit for storage and disposal requirement would be appropriate in situations, for example, innovative PCB destructive technologies; such as biological treatment technologies that may take more than 1 year to achieve acceptable levels; and the absence of disposal capacity, specifically for PCB/radioactive wastes. Comments on alternative options, procedures and/or restrictions for dealing with such situations were also requested. EPA received several comments, most of which supported the establishment of a provision which would allow the Regional Administrator for the Region in which the material is stored, or the Director, CMD, if the Director issued the permit, to recognize situations which require more than the 1-year time limit for storage and disposal, and to grant an extension to the requirement.

Commenters also identified other situations for which they believe equal consideration should be given to extending the 1-year time limit for storage and disposal. These situations included: (1) Technologies, such as thermal separation (thermal desorption) and bioremediation, that require more than 1 year to process waste at a remediation site; (2) limited expedited remedial action undertaken ahead of the main remediation effort; and (3) conflicting remediation or disposal requirements associated with the presence of certain co-regulated wastes from which the PCBs cannot be separated (i.e., such as mine cable coated with a solid anti-fouling compound containing both PCBs and mercury).

Most commenters supported the grounds for extension cited in the ANPRM (justification of need, demonstration that treatment/disposal options are being pursued, and the submission of periodic progress reports). Other commenters offered variations on the EPA proposal including: (1) Modify regulations to allow DOE to seek an extension on a complex-wide, multifacility basis to address the PCB/radioactive waste situation and to submit reports on a biennial basis; (2) for PCB/radioactive

wastes, also require compliance with ALARA principles; (3) use a letter rather than the permit process as the mechanism for granting extensions; (4) make the extension effective upon submission of the request, or alternatively, make the extension automatic if the Agency does not object within 90 days; and (5) eliminate the 1-year limitation for extensions.

EPA has considered these suggestions and is proposing several changes to §761.65(a). First, criteria for extending the 1-year time limit for storage and disposal requirement include, but are not limited to: A demonstrated need to store wastes beyond the 1-year time limit due to a lack of disposal capacity, the absence of a treatment technology, or insufficient time to complete the treatment/destruction process and a demonstration that relevant treatment or disposal requirements are being pursued. Additional criteria for PCB/radioactive waste, PCB/fissionable radioactive wastes, or RCRA/mixed wastes and PCB/RCRA wastes could also be required to comply with the requirements of the appropriate Federal, (i.e., Nuclear Regulatory Commission or EPA) or State regulatory authorities.

Anyone storing PCB waste that was subject to the 1-year time limit could provide written notification to the Regional Administrator for the Region in which the PCB waste was stored that they had been unsuccessful in their continuing attempts to dispose of their waste within the 1-year time limit and could receive an extension for one additional year provided certain conditions were met. Second, the Regional Administrator could grant additional extensions of 1-year or longer upon receipt of a justified request. Third, EPA would consider including site-specific time frames for storage and disposal, where appropriate, when approving a TSCA PCB storage or disposal application or a modification to a previously issued approval (see §761.60(e) or §761.65(d)).

However, EPA is less receptive to allowing organizations to develop complex-wide (i.e., nationwide) justifications and/or reports of their storage and disposal activities. If the data were allowed to be submitted in an aggregate form, resources would be required to disaggregate the information and transmit the data to the appropriate Regional Administrator. Nonetheless, EPA would consider aggregation of these data on a Regional basis for submission to and approval by the Regional Administrator for the Region in which the materials are stored.

Finally, under the proposal EPA may impose conditions when approving

requests for an extension. These conditions would vary due to the specifics of each situation. Therefore, it is not possible to list every conceivable requirement that could be imposed on a facility in granting additional or longer extensions. EPA is proposing that the Regional Administrator or the Director, CMD, may require any information deemed necessary to ensure protection of health and the environment, and may likewise require that additional steps be taken during the storage period, such as marking, inspection, recordkeeping or financial assurance or complying with ALARA principles for PCB/radioactive wastes to protect health or the environment.

EPA wishes to make a distinction between those situations for which an extension of the storage and disposal requirement may be legitimate (see example (3) above) versus those situations that would result in the abuse of such an extension, such as the acceptance of PCB wastes in excess of the capacity limitations imposed either by the permit or the physical constraints of the technology being used. EPA does not believe an extension of the storage and disposal requirement is warranted because of failure to initiate attempts to obtain disposal capacity, the cost of disposal, or to allow for the aggregation by multiple generators of PCB wastes into one vehicle for shipment. EPA is not modifying its view that PCB wastes should be properly managed and disposed of as quickly as possible, and therefore is not inclined to take steps that would relieve the generator of its responsibility to remove the PCBs from the environment in a timely manner. On the other hand, individuals engaged in on-site remediation activities are most likely conducting those activities in accordance with some instrument developed by EPA, another Federal agency, or a State that provides instruction on what/how the project is to be conducted and when the project is to be completed (as the case may be for examples (1) and (2) above). In these instances, the TSCA PCB permit and 1-year time limit for storage and disposal may not apply. (Also see the discussion regarding the Coordinated Approval provision at Unit III.K. of this preamble.)

EPA would also consider extension requests to be legitimate when an individual's ability to store and dispose of PCBs within the 1 year is inhibited by other Federal or State disposal/remedial requirements (e.g., RCRA, CERCLA, the Clean Water Act (CWA), the Clean Air Act (CAA)), or any statute governing remedial actions which

involve PCBs at or derived from federally-regulated levels.

4. *Temporary storage of PCB liquid at 500 ppm or greater.* Under the existing regulations at §761.65(c)(1), temporary storage is allowed for certain PCB Items, including PCB Containers that are filled with liquid containing PCBs at concentrations of 50 to 499 ppm in an area that does not meet the requirements of paragraph (b) of that section for up to 30 days from the date of their removal from use. In the case of liquid PCBs, a Spill Prevention, Control, and Countermeasure (SPCC) Plan must be in place for the temporary storage area in accordance with 40 CFR part 112. The current regulations, however, do not authorize temporary storage of liquids containing PCBs with a concentration of 500 ppm or greater. However, the current regulations at §761.20(c)(2) authorize the processing and distribution in commerce of PCBs and PCB Items greater than 50 ppm for purposes of disposal.

The Agency does not believe that there are significant risks associated with temporarily storing for disposal PCB liquids at concentrations greater than 500 ppm provided the waste is in containers meeting DOT specifications and an SPCC plan is implemented. In the ANPRM, EPA suggested two approaches to amending the regulations to allow the temporary storage of liquids greater than 500 ppm: (1) To add a provision to allow temporary storage of liquid with concentrations of 500 ppm or greater at §761.65(c)(1), or (2) to consider the holding/storing of this liquid as a step in the disposal process. Most commenters supported the option of amending the temporary storage provision at §761.65(c) as opposed to amending the provision at §761.20(c) which allows the processing and distribution in commerce of PCBs and PCB Items for disposal. Many commenters also suggested increasing the 30-day time allotted for temporary storage.

The Agency believes it is appropriate to extend the allowance for temporary storage for disposal of liquid PCB waste above 500 ppm, but not beyond the existing 30-day limit. The point of the 30-day temporary storage provision is to allow for the accumulation of waste prior to shipment to a disposal facility or commercial storage facility. This rationale should also apply to liquids above 500 ppm, especially when one considers the preponderance of PCB Transformer owners who are opting for reclassification of these units. To have them build or ship to a formal storage area in each instance would be unduly burdensome.

EPA is proposing that the 30-day temporary provision at §761.65(c)(1) be extended to liquids at 500 ppm or greater, provided an SPCC Plan is in place and the liquid waste is in stationary bulk storage tanks (excluding rolling stock such as, but not limited to, tanker trucks) or DOT specification containers.

5. *Storage of large PCB Capacitors and PCB-Contaminated equipment on pallets next to a qualified storage area.* The storage for disposal of non-leaking and structurally undamaged Large High Voltage capacitors and PCB-Contaminated Transformers on pallets next to qualified storage areas was permitted until January 1, 1983, under the May 31, 1979, PCB rule (formerly 40 CFR 761.42(c)(2)). This provision was designed to relieve the burden on PCB storage facilities until EPA-approved incineration facilities were commercially available.

In light of the fact that EPA was initiating an accelerated phaseout of Large PCB Capacitors (Final Electrical Equipment Use Rule, August 25, 1982, 47 FR 37342), EPA recognized that there would be a need for additional storage space for this type of equipment. Therefore, temporary storage for disposal was allowed indefinitely after January 1, 1983, on pallets next to a qualified storage facility for PCB-Contaminated Electrical Equipment and PCB Large High Voltage Capacitors (§761.65(c)(2)).

In today's proposal, EPA is proposing to delete §761.65(c)(2) from the PCB regulations since the October 1, 1988 phaseout date (§761.30(l)(1)) for most uses of PCB Large High Voltage Capacitors has passed and there should no longer be a need for additional storage space for this type of equipment. In addition, EPA does not believe that this provision is needed for PCB-Contaminated Electrical Equipment because this equipment is typically drained prior to disposal and the drained hull or carcass is not subject to the storage for disposal provisions of §761.65.

The current PCB regulations do not prohibit expansion of the storage capacity of a given storage area as long as, in the case of commercial storage facilities, the closure plan, and financial assurance mechanisms are also adjusted to reflect the increased amount of waste stored at the facility. EPA believes that the deletion of this provision for storage on pallets next to a qualified storage area will not result in undue hardships on existing storage facilities.

EPA is soliciting comments on the appropriateness of deleting this provision and also seeks information

from storers of PCB waste as to whether they are currently utilizing the provisions of §761.65(c)(2).

6. *Alternate storage of PCBs.* EPA is proposing a modification at §761.65(b)(2) to the storage requirements to allow the storage of PCBs and PCB Items designated for disposal in waste management units permitted by EPA under section 3004 of RCRA or by a State authorized under section 3006 of RCRA to manage hazardous waste in containers. This proposal would also allow the storage in units otherwise regulated by a State under a TSCA look-alike law or approved as part of a PCB disposal approval. EPA believes that the RCRA requirements for permitted container storage units provide an equal level of protection to the TSCA requirements, and preclude an unreasonable risk of injury from PCBs (i.e., recordkeeping, waste tracking, secondary containment, monitoring for leaks, inspections, and financial assurance and closure requirements). This proposal does not extend to units operating in interim status under RCRA. All other requirements for PCB wastes, including but not limited to containerization, marking, recordkeeping, manifesting, and spill cleanup would continue to apply. Any PCBs or PCB Items that are currently required to be stored in compliance with 40 CFR 761.65(b)(1) would be eligible. PCBs, especially large volume wastes, which would otherwise be required to be stored in compliance with this section could be stored instead under the terms and conditions of a PCB disposal approval. It may not be feasible or desirable to construct a PCB storage area where large volumes of PCB remediation wastes or PCB Items are concerned. EPA views storage and disposal of PCB wastes as a continuum and believes this issue of storage of large volume wastes is best addressed on a case-by-case basis through the PCB approval or other permitting process. However, anyone subject to the PCB storage requirements could choose to follow §761.65(b)(1) and not avail themselves of these other options.

7. *Storage requirements for PCB Article Containers.* Under §761.65(c)(5), PCB Articles and PCB Containers are required to be checked periodically for leaks, and §761.65(c)(8) requires that they be dated when they are placed into storage. By not including PCB Article Containers in §761.65(c)(5) and (c)(8), a loophole exists that allows a storage unit owner to omit dating and inspecting these containers and to circumvent the 1-year time limit for storage and disposal requirement. Therefore, EPA is proposing to correct

this oversight by replacing the phrase "PCB Articles and PCB Containers" with "PCB Items" wherever it occurs in §761.65(c)(5) and (c)(8).

8. *Recordkeeping requirements for storage unit operators.* Certain additional recordkeeping requirements for storage unit operators are being proposed under §761.180(a)(1) and (b)(1). The first addition would be to require the operator to maintain a record of the inspections for leaks, and cleanups, that must be performed under §761.65(c)(5). Currently, EPA inspectors have no way to verify that unit operators are complying with these requirements.

In addition, EPA is proposing that storage unit operators keep an up-to-date written inventory or log of what they are currently holding in their unit. The annual log requires similar information; but since it is an annual summary, it does not reflect what is actually in a unit on a given day and thus is of no assistance to an EPA inspector performing a site inspection. Although this would be an additional recordkeeping requirement, EPA believes that it would not place any additional burden on unit operations. EPA believes that most operators maintain some sort of inventory; maintenance of such is almost a necessity to properly manage a facility, as well as to ensure compliance with the 1-year time limit for storage and disposal deadline, and to collect data for the annual log. Allowing EPA inspectors access to this inventory would greatly facilitate on-site inspections, particularly at larger facilities. Also, since the purpose of this inventory is to facilitate on-site inspections, EPA is requiring that the inventory be maintained on-site at the storage unit, rather than at a central facility. This requirement to maintain the inventory on-site applies only to this inventory, and affects no other portion on the annual records.

9. *Revision to storage unit criteria.* Proposed §761.65(b)(1)(iv) would reflect the proposed definition of "Porous surface" found at §761.3. This proposed definition includes concrete and cement within the definition of "Porous surface." The reference to Portland cement or concrete in §761.65(b)(1)(iv) as impervious would be inconsistent with the proposed definition of "Porous surface." The references to Portland cement and concrete would not be deleted, however, from §761.65(b)(1)(iv) because this would create a situation where all existing storage units that have used Portland cement or concrete would be out of compliance. Therefore, the references have remained, albeit parenthetically, to Portland cement or

concrete as acceptable. EPA would recommend, however, that nonporous surfaces be used for curbing and flooring for storage units since cleanup of nonporous surfaces is easier and less costly.

H. ASTM References

EPA has incorporated by reference several test standards developed by the American Society for Testing and Materials (ASTM) which describe various testing and sampling procedures for conducting PCB analyses. These standards are referenced throughout 40 CFR part 761, and a listing of the applicable test methods can be found in the back of the CFR under the heading "Material Approved for Incorporation by Reference;" 40 CFR chapter I (parts 761, 763)—Subchapter R—Toxic Substances Control Act, Environmental Protection Agency.

EPA published a final rule on April 16, 1992, which updated the listing of the ASTM test standards incorporated by reference in the PCB regulations. In that rule, EPA indicated that copies of ASTM standards were available for inspection and copying at the TSCA Public Reading Room. This notation is also included at §761.19 which states: "Copies of the incorporated material may be obtained from the TSCA Public Docket Office (7407) Rm. B-607, Northeast Mall, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, or from the American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103." On May 21, 1992, ASTM contacted EPA and requested that the Agency either produce a copy of an existing agreement that grants EPA permission to reproduce ASTM standards (i.e., copyrighted material) or refrain from making further copies until permission is granted.

While EPA does not believe that copyright law prohibits the copying of copyrighted materials that are part of a statute or regulation, EPA has offered to refer requests for copies of the ASTM standards to ASTM. EPA's offer, however, makes clear that EPA will continue to satisfy requests for these documents under the Freedom of Information Act. Therefore, in today's notice, EPA is proposing to modify the regulatory text at §761.19.

EPA also received one comment reminding the Agency of an earlier commitment to propose the addition of ASTM Method D-4059, "Standard Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography," which ASTM has validated through a series of round

robin tests, to the list of references. Copies of the test method, ASTM D-4059, are available for public inspection at the TSCA Nonconfidential Information Center (7407), Office of Pollution Prevention and Toxics, Rm. B-607, Northeast Mall, at the address listed earlier in this notice. Copies of the standard are available from the ASTM, 1916 Race Street, Philadelphia, PA 19103. Instead of incorporating this standard, EPA proposes adding §§761.60(g)(1)(iii) and (2)(iii) to identify ASTM D-4059 and other applicable EPA procedures as standards that can be used for the analysis of PCBs when using gas chromatography. Comments are invited on whether the PCB regulations at 40 CFR part 761 should be amended to include this procedure.

I. Manufacture of PCBs for Disposal-Related Studies

EPA received comments that the current regulatory requirement to obtain a research and development (R&D) approval (§§761.60(e) and (i) and §761.70(a) and (b)) limits innovative development of effective remediation technologies such as identifying biological and other innovative processes that destroy or contain PCBs, developing technologies that can enhance those processes, finding methods of separating PCB contaminants from other media, and identifying contaminants present in environmental samples so that appropriate remediation techniques may be selected and applied. A comment was submitted for EPA's consideration citing as rationale for a change the regulation's inflexible and harmful effects on international scientific exchange and U.S. competitive/technological advancement.

The commenter included a suggestion that EPA eliminate the requirement to obtain a R&D approval for research into the disposal of PCBs, allow the manufacture of 13.23 lbs. of PCBs per facility annually, and eliminate restrictions placed on the import/export of PCBs. The comment would require notification of the Regional Administrator of the facility's site, the amount of PCBs to be handled, whether R&D activities were laboratory scale or not, and whether PCBs would be manufactured. Additionally, the principal researcher would be required to certify that the R&D facility would be in compliance with the terms of the PCB regulations. Other features of the comment included storage of materials pursuant to the requirements at §761.65(b) and (c), labelling the work areas with the ML mark, maintenance of a log covering materials received and

shipped (e.g., date, source, PCB weight, media), compliance with OSHA laboratory and recognized research practices, disposal of materials within 1 year of completion of the R&D activity, and a provision that the Regional Administrator could terminate the R&D activities if a determination could be made that the PCB regulations had been violated or that bona fide R&D activities were not being conducted at the facility. Finally, the material would be shipped in compliance with DOT regulations, or if applicable, the laws of a foreign nation.

The potential quantity of PCBs the comment would allow each R&D facility to manufacture (i.e., 0.5 kilograms within 30 days, or roughly 13.23 pounds per year per facility) is of particular concern to the Agency. EPA recognizes the public policy importance of PCB research; however, there is a need to maintain a certain level of control over the manufacture of PCBs for R&D activities. Further, as more countries ratify international agreements to control the movement of PCBs across their borders, it would be inappropriate for the United States to establish a rule or policy that would allow the indiscriminate transboundary movement of PCBs.

EPA has considered the commenter's proposal and in §761.80(e) is proposing to grant a class exemption to all R&D facilities to manufacture (including import) PCBs solely for the facility's own research for the development of PCB disposal technologies, but not for purposes of distributing in commerce the PCBs that are manufactured. For purposes of this rulemaking provision, use "solely in a facility's own research" would mean use by the manufacturer or one of its wholly owned subsidiaries conducting disposal-related research and development. All PCBs and materials containing PCBs, regardless of concentration, resulting from the conduct of disposal-related studies, would be required to be decontaminated or disposed of pursuant to the original PCB concentration. EPA proposes to limit PCB manufacturing, including import, activities to no more than 454 grams (or 1 pound) of PCBs per year. Since PCBs are generally used in extremely small quantities (i.e., micrograms) during R&D activities, EPA believes, based on its experience in issuing R&D approvals, that an annual limitation on the manufacture of PCBs at no more than 1 pound for each R&D facility should be adequate. Individuals wishing to exceed this amount would be required to submit a petition pursuant to TSCA section 6(e)(3)(B) and the interim procedural rules at 40 CFR part

750. Likewise, EPA is proposing to grant a class exemption at §761.80(g) to allow the processing and distribution in commerce of PCBs for the purpose of exporting PCBs for research and development.

To be included in the class exemption, a petition for an exemption from the manufacturing prohibitions would have to be received by EPA within 60 days of the effective date of the final rule or 60 days prior to engaging in this activity. Renewals of or modifications to the petition would be required annually pursuant to the interim procedures for manufacturing exemptions at §750.11(e)(1), as finalized in the Federal Register of April 11, 1994 (59 FR 16991). In order to reduce the paperwork burden of the renewal process for the class, EPA would deem a properly filed request for a renewal of the exemption by any member of the class as a renewal request for the entire class. In addition, to ensure the manufacture of PCBs is being conducted for purposes of research and development into the disposal of PCBs, EPA is proposing that the Regional Administrator be notified in writing 30 days prior to the commencement of R&D activities that require the manufacture of PCBs. However, this notification would not be required if an individual has obtained a PCB R&D approval from EPA pursuant to §§761.60(a), (i)(2), and §761.70(a) or 761.70(b) and the approval contains a provision regarding the manufacture of PCBs.

In granting an exemption under section 6(e)(3)(B) of TSCA, a demonstration must be made that there is no unreasonable risk of injury to health or the environment associated with the exempted activity and that good faith efforts have been conducted to find a substitute for PCBs.

OSHA regulates workplace safety in laboratories under 29 CFR 1910.1450. These regulations define "laboratory" as "a facility where the 'laboratory use of hazardous chemicals' occurs. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis." "Laboratory scale" means "work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person." "Laboratory scale" excludes those workplaces whose function is to provide commercial quantities of materials.

Under 29 CFR 1910.1450, an employer, among other requirements, must develop and carry out the provisions of a written Chemical Hygiene Plan for employees working in

laboratories. Appendix A of that section is non-mandatory, but provides guidance to assist employers. The guidance in Appendix A was extracted from "Prudent Practices for Handling Hazardous Chemicals in Laboratories," which is available from the National Academy Press, 2101 Constitution Avenue, NW., Washington, DC 20418. "Prudent Practices" is cited in the OSHA regulations because of its wide distribution and acceptance and because of its preparation by members of the laboratory community through the sponsorship of the National Research Council. "Prudent Practices" deals with both safety and chemical hazards, while the OSHA laboratory standard is concerned primarily with chemical hazards.

EPA believes that the limited manufacture (i.e., 1 pound or less of PCBs) and use of PCBs in conducting research pursuant to the OSHA workplace safety requirements would not result in an environmental release of PCBs or risks of exposure to PCBs due to the highly trained nature of laboratory workers and scientists, the limitation on the volume of production, and the current marking regulations that require containers be labelled as containing PCBs. Instrumentation contaminated with PCBs would be required to be decontaminated in accordance with current requirements at §761.79, using a triple rinse procedure in which each rinse is 10 percent or greater of the volume of the container, or disposed of pursuant to the regulations at 40 CFR 761.60. Finally, all wastes, including diluted PCB materials and any PCB residues or other contaminated media, would be subject to the 1-year time limit for storage and disposal requirements at §761.65 and §761.60 and the manifesting requirements at §761.207 et seq.

The good faith efforts finding does not apply because other chemicals cannot be substituted in toxicological, environmental or analytical testing for PCBs.

The Agency solicits comments on its proposal to establish a class exemption that authorizes the limited manufacture, or import, of PCBs for use in one's own research for the purpose of conducting disposal-related studies.

J. PCB Samples and Standards

EPA has received a number of inquiries as to whether "round robin" analytical exercises or inter-laboratory studies require exemptions from the ban on the distribution of PCBs. EPA's response has been that these exercises may be exempt if they meet the requirements of the current provision at

§761.80(g). These kinds of activities are normally conducted as quality assurance measures to test or verify a laboratory's performance using a given chemical analysis methodology.

In authorizing the processing and distribution in commerce of small quantities of PCBs for research and development in 1984, EPA was addressing the need to process and distribute in commerce PCBs for activities such as toxicological and environmental testing and analytical testing that include analyzing and monitoring PCBs in the air, soil, surface waters, and sediments; conducting bioassays and toxicological studies; and producing reference standards for identifying PCBs using gas chromatography (49 FR 28162, July 10, 1984). "Small quantities for research and development" is currently defined at §761.3 as "any quantity of PCBs (1) that is originally packaged in one or more hermetically sealed containers of a volume of no more than five (5.0) milliliters, and (2) that is used only for purposes of scientific experimentation or analysis, or chemical research on, or analysis of, PCBs, but not for research or analysis for the development of a PCB product."

EPA intends to retain the class exemption at §761.80(g) so that these activities may be continued without disruption. So as not to change the scope of the class exemption at §761.80(g), EPA proposes to modify §761.80(g) by adding to it the criteria currently found at §761.3 in the definition of small quantities for research and development. Further, EPA is proposing, for purposes of consistency, to modify the provision at §761.80(o) that addresses the renewal requirements for the class exemption at §761.80(g). Under current section §761.80(g)(2), any person or company covered by the class exemption who expects to exceed the limitation on the amount of PCBs that may be processed or distributed in commerce in 1 year (100 grams or 0.22 pound) must report to (i.e., petition) EPA, identifying the sites of PCB activities and the quantity of PCBs to be processed or distributed in commerce pursuant to §761.80(g)(2). EPA is proposing to modify §761.80(o) to clarify that activities being conducted under the class exemption may be continued only when the activities conform to the provision at §761.80(g). To increase the quantities of PCBs that are processed or distributed at §761.80(g)(2), individuals must submit a written request to the Director, CMD for approval to exceed the 100 grams limit prior to engaging in the activity. Each request must include a justification for

the increase. Any increase granted will be in writing and will extend only for the time remaining in a specific exemption year.

EPA also recognizes that some laboratories may work with amounts of media containing PCBs that are needed for chemical analysis procedures at required quantitation levels and which will not fit into 5.0 milliliter hermetically sealed vials. For example, many non-academic research scenarios require the use of contaminated media to conduct chemical analyses; to conduct health and environmental studies; and as quality assurance samples for evaluating innovative disposal technologies. Increasing efforts are being devoted to remediating PCB contamination, whether under TSCA or some other environmental statute. As a result, the use of media containing PCBs as quality assurance environmental samples plays a much larger role in the disposal universe than it did initially. Today, environmental samples containing PCBs are required and are used in conducting research activities to determine toxicity, health, environmental, and other effects. The Agency's intent in proposing to broaden the use authorization at §761.30(j) and to add a class exemption for processors and distributors of media containing PCBs at §761.80(i) is to promote required testing for toxicity and health effects which may be used in setting risk-based cleanup levels at PCB remediation sites.

1. *Use authorization.* Under the current §761.30(j), PCBs may be used in small quantities for research and development. That term is narrowly defined at §761.3. PCB uses not compatible with the limitations established by that definition can only be authorized through rulemaking or a disposal approval under §§761.60(e), 761.60(i)(2), or 761.70(a) and (b), if the PCBs are to be used in conjunction with developing disposal technologies. This proposal would delete the definition of "small quantities for research and development" and would modify §761.30(j) to allow the use for research and development of PCBs in organic liquids and contaminated media other than organic liquids which did not exceed the proposed material limitations. This change would eliminate the time-consuming process of obtaining an approval or awaiting regulatory changes for the use of PCBs when conducting tests to determine toxicity, health, environmental, and other effects.

Under proposed §761.30(j), permissible research and development activities would include, but not be

limited to, scientific experimentation or chemical research on PCBs, and the chemical analysis of PCBs and testing to determine: biochemical transport processes; environmental transport processes; the effects of PCBs on aquatic and terrestrial environments; and the health effects of PCBs such as general toxicity, subchronic toxicity, chronic toxicity, specific organ/tissue toxicity, neurotoxicity, genetic toxicity, and metabolic products. However, permissible research and development activities would not include research or analysis for the development of a PCB product. This section would allow the continued use of PCBs in limited quantities for research and development provided the PCBs were originally packaged in hermetically sealed containers no larger than 5 milliliters, or as samples of environmental media containing PCBs in containers larger than 5 milliliters that had been packaged pursuant to the DOT performance standards at 49 CFR parts 171-180 when the following requirements were met:

(a) The Regional Administrator was notified in writing 30 days prior to the commencement of any R&D activity authorized under this section. Notifications would have to include information which identifies the sites of PCB R&D activities, the quantity of PCBs to be used, the type of R&D process to be used, the kind of material being treated, and includes an estimate of the duration of the PCB activity.

(b) No more than 100 grams of pure PCBs could be used annually at a facility.

(c) All PCB wastes (e.g., spent laboratory samples, residuals, unused samples, contaminated media/instrumentation, clothing, etc.) would have to be stored in a unit that complies with the storage requirements of §761.65(b).

(d) Manifests were used for all R&D PCB wastes being transported from the R&D facility to a storage and/or disposal facility.

(e) Requests would have to be submitted in writing to the Regional Administrator for approval to exceed

the 100 grams in total weight of pure PCB limitation for use in non-disposal PCB research and development activities. Such requests would have to provide a justification for the additional quantity needed, as well as specify the quantity of PCBs that would be needed. The approval would be in writing, signed by the Regional Administrator, and include all requirements that would be applicable to the R&D activity.


All R&D facilities would have to comply with the applicable storage and disposal requirements of subpart D, and applicable Federal, State, and local laws and regulations. The requirements at §761.207 to manifest PCB waste at concentrations of 50 ppm or greater would not apply to PCB samples taken from any PCB waste and sent off-site to be used for research and development under proposed §761.30(j). In addition, all PCB wastes would be subject to the 1-year time limit for storage and disposal requirements at §761.65.

This proposal would create a distinction between PCB wastes that a generator decides to place into storage or send to a disposal facility for final disposal, to which manifesting requirements would still apply, and PCB samples that remain in use for quantitative analysis of constituents in the samples and PCBs which are sent for treatability or other limited research and development for PCB disposal activities, such as, materials containing ≥ 50 ppm PCBs as a result of a spill. Samples of materials containing PCBs and meeting the requirements of the proposed revised use authorization would be considered "PCB materials in use" and not PCB wastes. Manifests would not be required to return unused samples under §761.30(j), or untreated samples under §761.60(j), to the site of generation, such as a Superfund remediation site, or under the provisions of proposed §761.77, Coordinated Approval. (See Unit III.K. of this preamble for a discussion of the Coordinated Approval.) However, spent laboratory or R&D samples could not be placed back in use after completion of the study. Materials not returned to the

site of generation would then be considered wastes and would be required to be disposed of pursuant to the provisions at §761.60. Individuals handling waste that had been subsequently placed into storage for disposal or shipped to a disposal facility would again be subject to the notification and manifesting requirements of subpart K.

EPA also received a proposal regarding research and development activities in which the commenter questioned why regulatory approval is required for PCB R&D activities when no such impediment is imposed on facilities that are engaged in research involving neurotoxins, bioactive microorganisms, and highly radioactive substances. Proposed changes in §761.30(j) would make it clear that EPA has interpreted that research on the physical properties, chemical properties, chemical analysis, toxicity, health effects, and environmental effects of PCBs falls under the use authorization in that paragraph. Treatability research on the disposal of any kind of PCB waste, using any kind of disposal technology, including the use of microorganisms to degrade, destroy, or chemically alter PCBs, falls under disposal and not use, and is being addressed in the new proposed §761.60(j). Facilities that conduct treatability research or R&D into PCB disposal would have to comply with applicable notification requirements of subpart K, the storage and disposal requirements of subpart D, and applicable Federal, State, and local laws and regulations. To comply with the notification requirements of §761.205, the facility would have to notify EPA using EPA Form 7710-53, "Notification of PCB Activity". (For the reader's convenience, a copy of the draft revised form is inserted in this part of the preamble; when the rule becomes effective, the final version may be used to notify EPA of PCB waste handling activities. The form will not appear in the codified text.)

BILLING CODE 6560-50-F

		United States Environmental Protection Agency Washington, DC 20460		Form Approved OMB No. 2070-0112 Approval Expires 2-28-96	
Notification of PCB Activity					
Return To: Operations Branch (7404) Office of Pollution, Prevention & Toxics U.S. Environmental Protection Agency 401 M. Street, S.W. Washington, DC 20460			For Official Use Only TSCA PCB ID Number		
1. Name of Facility		Name of Owner Facility		2. EPA Identification Number <i>(if already assigned under RCRA)</i>	
3. Facility Mailing Address <i>(Street or PO Box, City, State, & Zip Code)</i>			4. Location of Facility <i>(No. Street, City, State, & Zip Code)</i>		
5. Installation Contact <i>(Name and Title)</i>			6. Type of PCB Activity <i>(Mark 'X' in appropriate box. See instructions)</i> <input type="checkbox"/> A. Generator with onsite storage facility <input type="checkbox"/> B. Storer (Commercial) <input type="checkbox"/> C. Transporter <input type="checkbox"/> D. R&D / Treatability <input type="checkbox"/> E. Approved Disposer <input type="checkbox"/> F. Industrial Furnace / High Efficiency Boiler		
Telephone Number <i>(Area Code and Number)</i>					
7. Certification Under Civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.					
Signature		Name and Official Title <i>(Type or Print)</i>		Date Signed	
Paperwork Reduction Act Notice					
The public reporting burden for this collection of information is estimated to average 1.5 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked ATTENTION: Desk Office for EPA.					

Item-by-Item Instructions for Completing the EPA Form 7710-53

Return completed form to:

Operations Branch, 7404
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
401 M Street S.W.
Washington, DC 20460

No information on the form may be claimed confidential.

Type or print in black ink except Item VII, "Certification." If you must use additional sheets, indicate clearly the number of the item on the form to which the information on the separate sheet applies.

Item I -- Name of Facility: Enter the name of facility and the name of owner of the facility.

Item II -- EPA Identification Number (If already assigned under RCRA): Enter the identification number the facility was assigned under the RCRA hazardous waste notification regulations. If no identification number has been assigned, leave this space blank.

Items III and IV -- Facility Mailing Address and Location: Complete Items III and IV. Please note that the address you give in item IV, "Location of Facility," must be a physical address, not a post office box or route number. If the mailing address and physical location are the same, you may enter "Same" in Item IV. If the facility is a mobile incinerator, you may enter "Mobile" in Item IV, and provide the mailing address for the installation contact in Item III.

Item V -- Installation Contact: Enter the name, title, and business telephone number of the person who should be contacted regarding information submitted on this form.

Item VI -- Type of PCB Activity: Mark the appropriate boxes to show which PCB activities are taking place at this facility.

A. Generator with onsite storage facility: You are a generator with an onsite storage facility under this notification requirement if you are a user, owner, or processor of PCBs or PCB Items and you maintain your own storage facilities subject to 40 CFR 761.65(b) or (c)(7) for PCBs. If you are a generator with an onsite storage facility, mark an "X" in this box.

B. Commercial storer: You are a commercial storer if you own or operate a storage facility which is subject to the storage facility standards of 40 CFR 761.65(b) or (c)(7), and which engages in offsite storage activities involving the PCB wastes generated by others. Most commercial storers of PCB waste perform waste storage services in exchange for a fee or other compensation, but the receipt of compensation is not necessary for your storage facility to qualify as a commercial storer of PCB wastes under this notification requirement. It is sufficient that your facility stores PCB wastes generated by others. See definition of commercial storer in 40 CFR 761.3. If you are a commercial storer, mark "X" in this box.

C. Transporter: If you move PCBs by air, rail, highway, or water, then mark "X" in this box.

D. R&D/Treatability: If you are engaged in conducting R&D into PCB disposal technologies and cannot accept waste on a commercial scale, mark an "X" in this box. You should also check this box if you conduct treatability studies even though you may have marked the "Approved Disposer" box.

E. Approved Disposer: If you currently hold a valid EPA approval to dispose of PCBs in concentrations of 50 ppm or greater in a landfill, through alternative technology or incineration, mark an "X" in this box.

F. Industrial Furnace/High Efficiency Boiler: If you operate an enclosed device as defined in 40 CFR 260.10 that is used to dispose of PCBs, or if you dispose of PCBs in compliance with § 761.60 (a)(2) or (3) (i.e., high efficiency boilers) or § 761.60 (a)(4) (i.e., industrial furnaces), mark an "X" in this box.

Item VII -- Certification: This certification must be signed by the owner, operator, or an authorized representative of the facility. An "authorized representative" is a person responsible for the overall operation of the facility (i.e., a plant manager or superintendent, or a person of equal responsibility). All notifications must include this certification to be complete.

EPA Form 7710-53 (10-93) Reverse

Although processors/distributors would have the option of expanding their processing/distributing activities, they would also incur the responsibility of providing, in the form of a petition, notification to EPA if they chose also to process and distribute in commerce media containing PCBs.

In the ANPRM, EPA solicited comments on whether it should codify its policy that exempts EPA laboratories and other U.S. Government agency laboratories, i.e., the National Institute for Standards and Testing (NIST), from the processing and distribution in commerce prohibitions when such activity is being conducted to effectively implement or enforce the regulations. Since an accurate determination of PCB concentration is the basis for compliance with many of the PCB regulations, such activities are crucial for effective compliance by the regulated community and effective enforcement by EPA. Therefore, the class exemption at §761.80(i) is intended to also address the need for EPA and other Federal Government laboratories to process and distribute in commerce small quantities of PCBs for purposes of supporting enforcement or compliance activities.

EPA is proposing at §761.80(p) that a properly filed request for a renewal of the exemption by any member of the class would be deemed a renewal request for the entire class.

Individual processors/distributors wishing to exceed the limit of 100 grams by total weight of pure PCBs proposed at §761.80(i) would have to obtain approval from the Director, Chemical Management Division who may grant approval, without further rulemaking, to any processor or distributor who qualifies for the exemption.

The standards imposed by TSCA section 6(e)(3)(B) for granting an exemption based on no unreasonable risk and good faith efforts to develop substitute substances must be addressed. EPA believes that no unreasonable risk would result from the processing and distribution in commerce of media containing PCBs because such samples would be handled

by laboratories that have established procedures for handling hazardous materials. (See Unit III.I. of this preamble for a discussion of the OSHA laboratory workplace safety requirements.) Further, EPA believes that the use of such samples would further enhance efforts to implement, comply with, and enforce the requirements for PCBs under TSCA. Once the use of such samples was over, persons who had used the samples would be subject to any Federal, State, and local law governing the disposal of the PCBs, including the rules found in 40 CFR part 761. The good faith efforts finding does not apply because other chemicals cannot be substituted for PCBs for these purposes.

K. State Enhancement Activities

In the ANPRM, EPA solicited comments on a proposal to recognize other Federal and/or State-issued PCB storage and disposal permits with the view toward limiting concurrent Federal/State and multi-Federal permitting of PCB storage and/or disposal facilities. (Implementation of Federal requirements promulgated under section 6 of TSCA regulating the manufacture, processing, distribution in commerce, and use of PCBs would not be affected by this proposal.) Under this proposal, dual or multiple permitting requirements could be eliminated where the TSCA PCB Program would recognize PCB remediation and disposal activities that were implemented and monitored under another authority. The goal is to encourage recognition of other regulatory authorities and participation by additional States to implement some form of a PCB disposal program under, for example, an expanded State RCRA hazardous waste program. In that way, limited EPA resources could be diverted to other issues or areas where no other Federal or State PCB presence now exists. EPA was interested in obtaining information on the perceived impacts of recognizing PCB disposal programs that are implemented under either an expanded State waste management program (i.e., by listing PCBs as a hazardous waste) or a TSCA look-alike

program (i.e., by establishing a State PCB disposal program that is analogous to the TSCA PCB Program through the development of State legislation and implementing regulations). Comments were solicited on enforcement activities and other factors associated with implementing such a proposal (e.g., issues of national consistency, policy advantages and/or disadvantages, etc.). Many comments submitted in response to the ANPRM reflect a misunderstanding of the State enhancement proposal.

Roughly 30 comments were received on this issue with nearly 50 percent of the commenters in favor of the concept. Those in favor of the proposal supported any reduction in duplicative permitting requirements that would lower the cost of compliance, but viewed TSCA look-alike programs as the preferred approach.

Those opposed to the proposal voiced strongly held views that differences between Federal requirements, coupled with inconsistency among State-imposed requirements, would severely hamper and complicate compliance efforts, create confusion, result in increased costs to the regulated community, and possibly serve as a barrier to interstate commerce. Additionally, differences between the TSCA and RCRA requirements were cited as having the opposite effect of alleviating the burden for the regulated community in complying with the PCB disposal requirements. Examples cited of scenarios where each of these disadvantages would be evident include utilities operating across State lines or entities with interstate activities (e.g., natural gas transmission companies) and facilities with multi-State locations.

Several commenters questioned EPA's authority to establish a State-delegated PCB disposal program. These commenters believe that TSCA's legislative history mandated implementation of the PCB disposal program at the national level, and that anything short of a nationally orchestrated program would be

abdicating EPA's responsibility. EPA disagrees with the legal interpretation and believes that this argument is not compelling as a policy matter since PCB disposal facilities are currently subject to both Federal and State regulations governing PCB disposal. Furthermore, recognition of the actions of another authority is not an abdication since EPA retains authority to enforce the TSCA PCB regulations. Additionally, one commenter advocated transferring the PCB Disposal Program to the RCRA program, or totally suspending the TSCA disposal requirements if a State chooses to regulate PCBs under their expanded hazardous waste management program. The State enhancement proposal is not intended to serve as a mechanism for "delegating" EPA's responsibility for implementing any of the statutory requirements of TSCA. Federal oversight of PCB storage and disposal activities under State permits would still be undertaken. One commenter suggested that all facilities should be required to register the use of PCB Transformers with EPA. If the intent of such a registration program is to enhance monitoring capabilities over the disposal of this equipment, EPA believes that it would be permissible under TSCA for a State to promulgate its own requirements for that purpose.

TSCA section 18 addresses preemption of State law. Section 18 provides, with a few exceptions, that the provisions of TSCA shall not affect the authority of any State or political subdivision of a State to establish or continue in effect regulation of any chemical substance, mixture, or article containing such chemical substance or mixture. Under section 18(a)(2), however, a State or locality is preempted from regulating a chemical substance or mixture to protect against a risk of injury to health or the environment where EPA has acted under section 6 of TSCA to protect against such risk. An exception to this preemption provision applies when the State regulation concerns a requirement "described in" TSCA section 6(a)(6), i.e., the manner or method of disposal of a chemical substance or mixture. This provision, referred to as the "parenthetical exception" to preemption, is enclosed in parentheses at the beginning of section 18, subsection (2)(B). EPA has interpreted the "parenthetical exception" to mean that State PCB disposal rules are not preempted because they describe the manner or method of disposal of PCBs. Other examples of situations that would not be preempted by TSCA include: (1) A State regulation that is identical to

EPA's regulation; (2) a State requirement that is "adopted under the authority" of another Federal law; (3) a State prohibition on the use of the substance or mixture in the State (other than in its use in the manufacture or processing of other chemical substances or mixtures); or (4) when a State or local government prevails in a petition to the Administrator for a rule that would exempt them from the preemption requirement on the grounds that the State requirement is consistent with Federal requirements, providing "a significantly higher degree of protection" while not unduly burdening interstate commerce.

1. *Coordinated approval.* In the ANPRM, EPA requested comments on whether to adopt regulatory changes to reduce the need for concurrent permitting for PCB storage and disposal by allowing recognition under TSCA of PCB storage and disposal permits issued under expanded State hazardous waste or TSCA lookalike programs, or under other Federal environmental statutes (e.g., CERCLA site remediation, RCRA corrective action, and National Pollution Discharge Elimination System permitting). The regulated community often must procure both Federal and State permits prior to commencing PCB storage or disposal activities. Current Federal requirements for PCB storage and disposal under TSCA, including the permitting requirements, are set out at 40 CFR 761.60, 761.65, 761.70, and 761.75. Additional requirements are proposed in this notice at §761.61.

EPA received several comments; those commenters maintained opposite views on this proposal. Comments addressing the TSCA PCB Coordinated Approval mechanism suggested that such a "program would trigger undesirable regulatory responses under various environmental statutes for activities that fall under the jurisdiction of only one particular statute." Although section 6(e)(1)(A) of TSCA requires the Administrator to prescribe methods for the disposal of PCBs, section 9(b) of TSCA further requires the Administrator to coordinate actions taken under the Act with actions taken under other Federal laws administered in whole or in part by the Administrator. Section 9(b) further requires the Administrator to use such authorities to protect against such risk, if a determination can be made that the risk to health or the environment can be eliminated or reduced to a sufficient extent by actions taken under other Federal laws. Therefore, EPA believes the TSCA PCB Coordinated Approval provision is a viable alternative to issuing duplicative

TSCA PCB storage and disposal approvals.

As with EPA's May 19, 1980, final rule under RCRA (45 FR 33325), EPA sees little value in requiring duplicative permit proceedings and duplicate paperwork. A State that opts to expand its State hazardous waste program by including PCBs would be operating under an expanded State authority, not under a federally-authorized or delegated program. In that event, the State may elect to regulate all or some aspect of the disposal program. Standards developed by EPA under programs such as the RCRA Land Disposal Restriction Requirements, RCRA Corrective Action permits, remediation projects initiated under CERCLA, and/or expanded State hazardous waste programs which must incorporate Federal standards as their baseline regulatory requirements are likely to provide a level of protection adequate for eliminating or reducing to a sufficient extent the risks to health or the environment from exposure to PCBs and to require little or no further review under TSCA.

Remediation of PCB contamination, based on site-specific conditions, may trigger compliance with several Federal requirements such as TSCA, RCRA, CERCLA, and the National Pollution Discharge Elimination System (NPDES permitting), just to name a few. Additionally, State environmental requirements, such as the California listed or New Jersey "X-Code" waste requirements, also may need to be factored into the regulatory requirements equation. For illustrative purposes, an example of a current permitting scenario which resulted in multiple layers of various State/Federal involvement and the benefits that would be derived under this proposal are presented here:

A manufacturing facility which discharged waste waters into a river located adjacent to the facility discovered PCB contamination in the soils and the groundwater of a nearby residential community. Wells were drilled and PCB-laden oil was found. Prior to the installation of oil/water separators in 1965, untreated process and stormwater flowed into a brook (which flows through the property) and the river. This facility housed, among other things, a Transformer Division, and from 1932 to 1977 insulating oil containing PCBs was used extensively in the operation of its transformer plant. In addition, hazardous wastes, including wastes containing PCBs, were generated as a result of these and other manufacturing processes. The wastes were disposed of both on- and off-site.

PCB contamination in the river had been an issue since the late 1970s when studies conducted by EPA and the two neighboring States detected PCBs in the sediments, fish, and waters of the river. The facility had obtained a NPDES permit from EPA for discharges into a navigable waterway (in early 1978) and Interim Status under RCRA in 1980. In 1981, the facility was required by EPA and the resident State Department of Environmental Protection (DEP) to conduct three major studies focussing on: (1) the hazardous waste disposal practices at the facility, (2) a determination of the extent of on-site contamination, and (3) an assessment of the PCB contamination and corrective action alternatives for the nearby river. The studies concluded that sediment along the river was contaminated with 39,000 pounds of PCBs.

Using the authority of the State's Superfund Law, the facility was required in 1981 to install groundwater pumps and remove PCB containing oil from the top of the groundwater. In 1987, the facility installed a slurry wall to minimize migration of the PCBs towards the river. In 1988, EPA's Regional office issued a TSCA disposal permit for a high temperature, thermal oxidizer incinerator for the destruction of the oil containing PCBs. Also in 1988, the facility was required by the State DEP to make necessary repairs at the dam to decrease future transport of PCBs downstream.

Finally, in October 1988, EPA initiated the corrective action process under the provisions of the Hazardous and Solid Waste Amendments (HSWA) of 1984 to RCRA. A draft RCRA Part B permit to initiate cleanup was developed by EPA in early 1989, and the final RCRA Corrective Action Permit was issued in early 1991. In addition, EPA's TSCA PCB disposal permitting program had issued several R&D permits to conduct pilot-scale experiments of the effectiveness of various bioremediation processes as viable cleanup technologies. In summary, the facility was required to obtain operating and air emission permits from the State DEP, corrective action permits from EPA under RCRA, a TSCA operating permit for the thermal incinerator (issued by the Region), TSCA R&D permits for pilot-scale experiments (issued by EPA Headquarters), and a NPDES permit for water discharges.

If the TSCA PCB Coordinated Approval proposal were a reality, the TSCA PCB Program could have been recognized, in this case, permits that could have been issued by the State for the operation of the thermal incinerator and the R&D permits for experimental

disposal technologies if the State elected to either implement an expanded PCB program under its RCRA authority or to establish a TSCA look-alike PCB disposal program. In addition, action taken under any Federal authority (e.g., RCRA or CERCLA) to require remediation of PCB contamination could also be recognized as not posing an unreasonable risk of injury and thus suitable for a TSCA PCB Coordinated Approval.

One commenter, although supporting the concept of regulating PCB disposal activities under an expanded State hazardous waste program for stationary technologies, encouraged EPA to maintain centralized control over PCB mobile technologies. However, such an approach is not acceptable to EPA since there are limited situations whereby the Administrator can preempt the State's authority to regulate PCB disposal activities. Although the TSCA PCB Coordinated Approval provision would not require the owner or operator of a mobile, or multiple, but identical stationary unit to obtain a single approval from EPA, it also would not require the owner or operator of such a unit to obtain multiple approvals from each State in which the disposal technology will be used.

The owner or operator of a mobile, or multiple, but identical stationary unit may want to obtain a TSCA Coordinated Approval to ensure the Federal and State requirements are harmonized. A State may choose to permit mobile technologies that will be used exclusively in that State, and EPA would respect its authority to do so. However, an approval that has been obtained from one state may not be acceptable to EPA in developing a TSCA Coordinated Approval that is intended for use in multiple States.

Although the process for implementing a TSCA PCB Coordinated Approval mechanism was not discussed in the ANPRM, EPA considered establishing a self-implementing or an interactive coordinated approval process. The two approaches are discussed below.

a. Interactive approach. EPA proposes at §761.77 to recognize permits issued under other Federal laws administered by EPA and State PCB disposal authorities using an interactive TSCA PCB Coordinated Approval mechanism. EPA believes the interactive approach described below would provide the Agency the best opportunity to effectively oversee PCB activities that are conducted under another statutory authority. In addition, the interactive coordinated approval would maximize the Regional Administrator's ability to

serve in a preventative rather than a reactive role in those instances where unintentional negligence by the regulated community could result in risks of injury to health and the environment from exposure to PCBs.

At §761.77, EPA is proposing to include as a condition of the TSCA PCB Coordinated Approval all requirements, conditions, and limitations of a non-TSCA permit or other waste management document issued by a State or under another statute administered by EPA prior to the effective date of this rule. The provision allows for both simultaneous coordination under the TSCA PCB permitting authority and the other State or Federal permitting authority when a waste management document does not exist and the subsequent review and approval (or inclusion of additional conditions, if deemed appropriate) of an existing waste management document. The facility could commence PCB waste storage or disposal operations only after the Regional Administrator received and reviewed a request for a TSCA PCB Coordinated Approval that included a copy of the non-TSCA approval and a verification that the facility had submitted EPA Form 7710-53 and received an EPA I.D. Number, which most facilities would already have for their hazardous waste management permit. The Regional Administrator would either issue the TSCA PCB Coordinated Approval accepting the non-TSCA approval as written provided the relevant standards of §761.77(b) through (g) have been met, request additional information, impose additional conditions, or require the owner or operator of the facility to obtain a TSCA PCB approval.

If, at any time during the facility's operation under the TSCA PCB Coordinated Approval the Regional Administrator determined that the facility was in violation of any requirement of the Approval (e.g., failure to comply with the TSCA PCB reporting and recordkeeping requirements, violation of the conditions of a non-TSCA permit or waste management document, or operation of the facility in a manner that might result in an unreasonable risk of injury to health or the environment), the Regional Administrator could issue a notice of deficiency, revoke the TSCA PCB Coordinated Approval or require the owner or operator of the facility to apply for a Federal TSCA PCB approval. The owner or operator of the facility could continue operations until the TSCA approval was issued; however, a facility could not commence operation until it received a TSCA PCB approval

if it received a notice of deficiency from the Region. The deadline for submitting the permit application and the Regional Administrator's rationale for requiring a TSCA approval would be reflected in the Regional Administrator's written notice of deficiency.

b. *Self-implementing approach.* This approach would allow the owner or operator of a facility with a Federal environmental waste management document (e.g., signed ROD, final RCRA permit) or State-issued final PCB permit to commence operations after (1) filing EPA Form 7710-53 and obtaining an EPA identification number, (2) providing written notification to the Regional Administrator and (3) receiving confirmation of receipt of that notification from the Region. Under TSCA, the Region would intervene in the facility's operations only in those instances of non-compliance, for example, with the non-TSCA permit or TSCA reporting and recordkeeping requirements, or operation of the facility in a manner which would result in an unreasonable risk. The Federal or State agency issuing the underlying environmental waste management document would be the lead organization in the development and issuance of that document, monitoring of its implementation and enforcement of its provisions. EPA's responsibility under TSCA for oversight in those instances would include enforcement of the TSCA PCB Coordinated Approval rules and could result in the Regional Administrator exercising his/her authority to require the owner or operator of the facility to obtain a TSCA approval. A detailed description of the proposed process follows.

Under the self-implementing approach, facilities with a State issued PCB permit or a permit issued by EPA (or an authorized State Director) under another Federal law administered by EPA for PCB remediation, storage, and disposal activities would be recognized by EPA as having a TSCA PCB approval provided the permit or other waste management document generally addresses those disposal activities normally covered by a TSCA PCB approval. Additionally, the facility would have to be in compliance with the conditions of that permit and the TSCA PCB reporting and recordkeeping requirements of §761.180 and §761.202 through §761.218. Owners or operators of facilities storing or disposing of PCBs pursuant to a permit issued under another environmental statute such as a CERCLA ROD, a RCRA Corrective Action permit, or an expanded RCRA-authorized State hazardous waste program would be required to obtain an

EPA I.D. number (or confirm an existing number), provide written notification to the Regional Administrator for the Region in which the facility is located that they would like to handle PCBs in accordance with a permit that addresses the remediation, storage, and/or disposal of PCBs and receive written confirmation of receipt of the notification to the Region. A separate formal TSCA PCB approval would not be required. The owner or operator of the facility could commence operations immediately once an EPA I.D. number for PCB activities was obtained (or confirmed), written notice was given to the Regional Administrator, and the Regional Administrator confirmed that the owner's notification had been received. A Region could also respond with a notice of deficiency in those instances where the Region determines that a TSCA PCB Coordinated Approval is not available or appropriate and a TSCA PCB approval is needed.

If, after a TSCA PCB Coordinated Approval has been issued, conditions such as, but not necessarily limited to, the following exist, the Regional Administrator for the Region in which the facility is located would have sufficient basis to issue a notice of deficiency and/or require the owner or operator of the facility to submit an application for a TSCA PCB approval:

(1) Current or subsequent substantive violations of the permit conditions and/or the TSCA reporting and recordkeeping requirements.

(2) Operation of a facility in a manner that may result in an unreasonable risk of injury to health or the environment.

(3) The program under which the permit was issued has expired or the permit has been revoked.

(4) For CERCLA actions, requirements conducted pursuant to a ROD have been completed or the facility is not in compliance with the conditions of the ROD.

In the event the Region required the owner or operator of the facility to obtain a TSCA approval, the Regional Administrator would establish a deadline for the owner or operator of the facility to submit an application (generally not less than 30 days from receipt of the notice of deficiency) for a TSCA PCB approval. However, the owner or operator of the facility would be able to continue operations under the provisions of the TSCA PCB Coordinated Approval until the TSCA approval is issued (except in the instance where a notice of deficiency was issued, then a TSCA PCB approval would first be required). After issuance of the TSCA approval, EPA would no longer recognize the State or other

Federal permit for that facility as being the equivalent of a TSCA PCB approval.

The primary responsibility for compliance monitoring and enforcement of the permit or waste management document would reside with the Federal or State agency issuing that permit or waste management document. These underlying permits or waste management documents would be deemed to be requirements of TSCA whose breach is a prohibited act under section 15 of TSCA. EPA would reserve its rights to conduct inspections and take enforcement actions under TSCA or any other applicable Federal statute. It is EPA's intent to exercise its authorities in consultation with or at the request of the other Federal program or State agency issuing the permit or waste management document. However, based on any information, EPA could act without consultation, especially where a facility poses an immediate risk of injury to health or the environment or where EPA's intent is to initiate a criminal investigation or criminal or civil judicial action.

EPA proposes to add \$761.77 to reflect the interactive approach and solicits comments on the concept of a TSCA PCB Coordinated Approval and EPA's proposed implementation of this proposal.

2. *PCB State Enhancement Grants.* Also cited in the ANPRM was EPA's proposal to make resources, as appropriated by Congress, available through the TSCA section 28 State grant mechanism. A Notice of Availability for the PCB State Enhancement Grant Program was published in the Federal Register of March 4, 1991 (56 FR 9008). This notice solicited applications for financial assistance to support current State activities to establish a PCB disposal program. Funding under this program was not anticipated to continue beyond fiscal year 1992. Under the State grant proposal, EPA would partially fund efforts by the States to establish a State PCB disposal program through the development of State legislation and regulations of PCB disposal activities. States were also required to provide a "match" of 25 percent of the total cost of the project.

Several commenters were not in favor of EPA's encouragement of the listing of PCBs under State hazardous waste programs. Additionally, some commenters voiced concern that EPA was trying to delegate its responsibility to the States to enforce Federal requirements. And finally, commenters were also skeptical of whether there would be adequate funding under the grants to implement State disposal programs.

TSCA grants were to be used as "seed" money to complement ongoing State PCB disposal activities. In creating the TSCA section 28 grant provision, the intent of Congress was to provide financial assistance to selected States to complement and augment EPA's efforts authorized under the Act (Ref. 55). It had envisioned that those States most heavily impacted by chemical pollution problems, upon application and approval by EPA, would receive assistance from EPA. To be eligible for a grant, States would have to be engaged in the process of listing PCBs under its hazardous waste laws or in adopting TSCA look-alike laws for the storage and/or disposal of PCBs. The process for establishing a PCB disposal program would have to have been completed by September 30, 1992. Since the response to the Federal Register notice soliciting applications for assistance was limited, the program has been discontinued.

L. Clarification of the Requirement to Request Approval for Alternate Methods of Disposal

Section 761.60(e) of the PCB regulations states that persons who are required to incinerate PCBs and PCB Items and who can demonstrate that an alternate method exists for destroying these PCBs or PCB Items and that this alternate method can achieve a level of performance equivalent to §761.70 incinerators may submit a written request to the EPA for an exemption from the incineration requirements of §761.70 or §761.60.

It was never the Agency's intent that the submission of an application for an alternate disposal method in lieu of incineration be optional, as could be construed by the use of the word "may" in §761.60(e). EPA, therefore, proposes to amend §761.60(e) to clarify that written approval to use an alternate method of destroying PCBs or PCB Items must be obtained from the appropriate EPA official prior to any use of the method to destroy PCB waste.

M. Wet Weight/Dry Weight Clarification

This rule proposes to clarify the basis on which PCB concentrations are to be determined for the purpose of identifying applicable requirements under the PCB rules. Proposed §761.1(b) of this rule would require that PCB concentrations for non-liquid materials, which contain no liquids which pass through the filter when using the paint filter test method (EPA Method 9095 in "Test Methods for Evaluating Solid Waste" (SW-846), be determined on a dry weight basis according to the definition proposed at §761.3. The proposed rule would require the PCB

concentration to be determined on a wet weight basis for liquid PCBs as proposed to be defined at §761.3, i.e., homogeneous flowable material containing PCBs and no more than 0.5 percent non-dissolved materials. This rule would also establish requirements for determining PCB concentrations in situations where separate, distinct phases were present within samples of materials containing PCBs.

On April 6, 1990 (55 FR 12866), EPA published a proposed rule that sought to clarify how to determine the PCB concentration in media where water is present. However, several comments on the April 6, 1990 proposed rule indicated that it could be read to require determination of PCB concentrations of all samples, including liquid samples, by removing (drying, evaporating or condensing) the liquids and thus leaving only PCBs. This Notice responds to those comments by clarifying the April 6, 1990 proposal and proposes distinct requirements for determining the PCB concentration in liquids, non-liquids, and multiphasic liquid/liquid and liquid/non-liquid samples.

The April 6, 1990 Notice proposed that PCB concentrations be determined on a dry weight basis for all substances (non-liquids or liquids) regulated under part 761, including, but not limited to, dielectric fluids, contaminated solvents, oils, waste oils, heat transfer fluids, hydraulic fluids, paints, sludges, slurries, dredge spoils, soils, materials contaminated as the result of spills, and other chemical substances or combination of substances, including impurities and byproducts and any byproduct, intermediate, or impurity manufactured at any point in a process. EPA assumes that most substances or mixtures, from which samples will be taken for the determination of PCB concentrations by chemical analysis, will fall into the categories listed above, with the addition of wastewater. Water may be present in some of these substances or mixtures in varying amounts and for various reasons.

The PCB current regulations do not require a specific chemical analytical method for the determination of PCB concentrations. Many chemical analysis procedures, used to determine PCB concentrations, require accounting for the presence of water in samples in a way that accomplishes EPA's objectives in this rule. However, there are some chemical analysis procedures that could be used for PCBs, but that were developed to address more general objectives. Therefore, these more general chemical analysis procedures may either offer several options for accounting for water in samples or

require a different way to account for water than would be appropriate for determining the PCB concentration to meet the requirements and intent of the PCB regulations.

The overall purpose of the proposed revisions to §761.1(b) is to ensure a consistent and reproducible basis for determining the concentration of PCBs in the PCB-containing medium. Such a basis would enable the Agency to apply the PCB rules in a consistent manner. To determine the PCB concentration of a nonliquid, as will be discussed below, the medium of concern is the non-liquid material because it is the most likely repository of the PCBs. Therefore, any water in the sample should be accounted for in the determination of the PCB concentration of the sample because the amount of water can significantly bias the PCB concentration in the sample.

For liquid samples, however, the medium of concern is the liquid itself; therefore, to determine the PCB concentration in that medium, one may determine the PCB concentration on a wet weight basis. (For example, for water samples, the medium of concern is the water, and it would not make sense to exclude the water.)

1. *Liquid PCBs, including organic liquids and wastewater.* "Liquid PCBs" would be defined in §761.3 as homogeneous flowable material containing PCBs and no more than 0.5 percent by weight non-dissolved materials. The proposed revisions to §761.1(b) would require concentrations for liquid PCBs to be determined on a wet weight basis. "Wet weight basis" means reporting chemical analysis results by including the weight of all dissolved water in a homogeneous liquid. If the liquid is homogeneous, the PCBs will be distributed throughout the medium evenly. For nonhomogeneous liquid samples, however, PCBs are more likely to be more concentrated in one component of the sample than they are in others because of the physical and chemical properties PCBs possess (e.g., PCBs are hydrophobic). Thus, for these samples, the proposal would require each phase of a non-homogeneous liquid to be separately analyzed (on a wet weight basis). EPA recognizes, however, that even if each phase of a liquid sample is separately analyzed, some small amounts of water that are not separable may be found in a particular phase (i.e., some small amount of water may be found in oil).

For liquid samples containing water, the separable water must be removed, and each phase of the sample must be separately analyzed (on a wet weight basis). Separable water is water that may

be readily physically separated, e.g., by the use of a separatory funnel, filtration, or by decantation.

EPA notes that most organic liquids in which PCBs are found (including mineral oil dielectric fluid, heat transfer fluid, oil based hydraulic fluid, and rinse solvents) usually do not contain more than 1 or 2 percent of non-separable water. This non-separable water usually is in a suspension or in solution. Since the amount of non-separable water is usually very low compared to the amount of organic liquid, the effect of non-separable water on the concentration of PCBs in these organic liquids is relatively small. Thus, EPA believes that allowing the non-separable water to be included in the analysis would generally not affect the regulatory status of a sample. When there is non-separable water in an organic liquid, chemical analysts will normally use a desiccant to remove even this small amount of non-separable water from the liquids during chemical analysis. These small amounts of non-separable water are removed to avoid potential interference to PCB instrumental response from water and potential damage to the chemical instrumentation. Even though the small amounts of non-separable water removed by desiccation could be accounted for, they normally are not accounted for because this non-separable water has limited influence on the PCB concentration of the organic liquid.

Also, EPA notes that wastewater samples consist almost entirely of non-separable water. For wastewater samples the analyst will normally use an organic solvent to extract the PCBs from the wastewater. Even though the PCBs are removed from the water during the determination of the PCB concentration, chemical analysts do not consider this determination to be on a dry weight basis. Since wastewater may contain significant amounts of suspended materials, this rule proposes to identify how much suspended material may be present in the water to still be considered a homogenous liquid for the purpose of determining PCBs in water. If wastewater contains greater than 0.5 percent non-dissolved non-liquids, the wastewater would be considered to be "multiphasic liquid/non-liquid." If wastewater contained other immiscible liquids separable by decantation, the PCB concentrations for those other liquids would be considered to be "multiphasic liquid/liquid."

2. *Non-liquid PCBs.* "Non-Liquid PCBs" are proposed to be defined at §761.3 as PCBs which contain no liquids which pass through the filter

when using the paint filter liquids test method (EPA Method 9095 in "Test Methods for Evaluating Solid Waste" (SW-846). Proposed §761.1(b) would require PCB concentrations for non-liquid PCBs to be defined on a dry weight basis. "Dry weight basis" would be determined as reporting chemical analysis results by excluding the weight of the water from the weight of the sample.

In addition, for purposes of this proposal, any chemical analysis process which removes and/or accounts for the amount of water present in non-liquids complies with the requirement to determine the PCB concentration in non-liquids on a dry weight basis. These processes include some or all of the following: filtration, decantation, and heating at low temperatures followed by cooling in the presence of a desiccant. The determination of the PCB concentration in the non-liquid would be based on the weight of PCBs in the weight of the resulting dried non-liquids. Water separated from non-liquids through filtration or decantation would be treated as a liquid sample as described in Unit III.M.1., "Liquids Including Organic Liquids and Wastewater" above.

Soils, sediments, and sludges are examples of PCB containing media that can contain varying amounts of water and still pass the paint filter liquids test for non-liquids. In addition, there are any number of other PCB containing media such as paper, wet automobile shredder fluff, and other fiber products that can also contain varying amounts of water and pass the paint filter liquids test for non-liquids as well. These non-liquid PCBs may contain a relatively large amount of non-separable water compared to the amount of non-separable water that can be contained in the organic liquids normally encountered in PCB samples. For the purposes of determining PCB concentrations of soils, sediments, and sludges on a dry weight basis, the amount of water not separated from these non-liquid samples by filtration or decantation would have to be accounted for in reporting the PCB concentration.

3. *Mixtures of liquids and/or non-liquids.* In multiphasic samples, that is, samples containing (a) both non-liquids and liquids or (b) more than one liquid phase, chemical analysts usually separate non-liquids from liquids and immiscible liquids from each other before chemical analysis. This separation eliminates the potential consistency and reproducibility problems and also provides meaningful comparisons of PCB concentrations for regulatory purposes. The separation

techniques employed in the laboratory to separate non-liquids from liquids must result in equivalency to the paint filter liquids test in order to assume a complete separation of liquid and non-liquid materials.

In a sample containing more than one phase, where the phases are capable of being separated from each other (by procedures such as decantation and filtration), the proposed rule would require the phases to be separated from each other prior to chemical analysis, and the PCB concentration for each separate phase of the mixture sample to be determined individually. Separated non-liquids would be required to be analyzed on a dry weight basis and liquids would be required to be analyzed on a wet weight basis.

N. *Oil-filled Equipment Manufactured After the Ban*

In the applicability section of part 761 at §761.1, EPA is proposing to add paragraph (g) to provide clarification with regard to the classification of oil-filled equipment manufactured after the ban on the manufacture of PCBs took effect on July 2, 1979. The purpose of this clarification is to recognize that oil-filled equipment manufactured after the ban, accompanied either by documentation provided by the manufacturer or a label or mark affixed by the manufacturer certifying, based on test data, that the equipment does not contain PCBs, does not fall into the assumption category, under the definition of "PCB-Contaminated Electrical Equipment" at current §761.3, that all oil-filled equipment where PCB concentration is unknown must be assumed to be greater than 50 ppm PCBs. For purposes of this proposed rulemaking, the criteria for demonstrating that the transformer contains no PCBs are: the equipment must have been originally manufactured with no PCBs after the effective date of the ban (July 2, 1979), and must not have been serviced with any PCBs.

At Unit III.C. of this preamble, EPA is proposing to amend the definition of "PCB-Contaminated Electrical Equipment" to indicate that the reference to "oil-filled" means mineral-oil and that not all equipment that contains an oily substance can be assumed to be PCB-Contaminated. Similarly, proposed §761.1(g), would clarify that oil-filled (mineral or otherwise) equipment that was manufactured after the ban on the manufacture of PCBs that was certified to contain no PCBs at the time of manufacture and has not been subsequently serviced with fluids containing PCBs should not and will not

be assumed to be PCB-contaminated. In fact, this equipment is not subject to the provisions of 40 CFR part 761.

O. PCB Voltage Regulators

The current regulation at §761.30(a)(1)(xv) requires owners of mineral oil transformers that the owner had assumed to contain 50 to 499 ppm PCBs, that are tested and found to contain 500 ppm or greater PCBs, to bring those units into compliance with all the applicable provisions of part 761. EPA is proposing at §761.30(a)(1)(xvi) the same requirements for voltage regulators. Accordingly, voltage regulators, assumed to be PCB-contaminated, that are later tested and found to contain 500 ppm PCB or greater would be required to come into compliance with part 761. Voltage regulators which were marked or otherwise known to contain PCBs at greater than 500 ppm would also be required to come into compliance with all the applicable requirements of part 761. Section 761.30(h) would also be revised to reflect this change.

In many respects, voltage regulators are designed to function in a manner similar to transformers. They consume a small amount of current and adjust their output voltage with precise limits based on voltage and current needs of the power system. Though the actual size and fluid requirements of voltage regulators vary depending upon precise voltage rating, age, and manufacturer, voltage regulators of less than 100 KVA contain approximately 30 gallons of fluid and those over 100 KVA approximately 200 gallons. Voltage regulators were manufactured with mineral-oil fluid of which 14 percent contained PCBs greater than or equal to 50 ppm and less than 2 percent contained greater than or equal to 500 ppm PCBs.

Based on this data, EPA does not expect many voltage regulators to be above the 500 ppm PCB level; however, as with mineral-oil transformers later tested and found to contain above 500 ppm PCB, those that were found to be 500 ppm or greater would be treated in the same manner as transformers at 500 ppm or greater.

The impetus for this proposal is to ensure that voltage regulators that are found to contain 500 ppm or greater PCBs are properly marked while in service, their locations are marked, records are kept pursuant to §761.180, they are registered with fire departments, and they are properly disposed of when they are taken out of service. As well as soliciting comments on this proposed change in general, EPA is soliciting comments on the

appropriateness of requiring enhanced electrical protection for voltage regulators as is the case for mineral-oil transformers later found to contain greater than or equal to 500 ppm PCBs.

In addition, EPA is soliciting comments on whether it is sufficient to simply add voltage regulators to existing §761.30(a)(1)(xv) (renumbered in this proposed rule as §761.30(a)(1)(xvi)) or whether a separate subparagraph should be added to address this issue because voltage regulators containing greater than or equal to 500 ppm PCB should not be treated in the same manner as PCB Transformers. If there are compelling reasons to treat these voltage regulators differently due, for example, to their size, location, or use, EPA welcomes suggestions on the most appropriate way to regulate these pieces of PCB electrical equipment.

P. Registration Requirements for PCB Transformers Containing \geq 500 ppm PCBs

Pursuant to section 18(b) of TSCA, the State of Connecticut petitioned EPA for an exemption from the preemption provisions of section 18(a)(2) to allow the State to require, among other things, the registration of PCB Transformers (i.e., transformers with dielectric fluid at \geq 500 ppm PCB) with the Connecticut Department of Environmental Protection. Connecticut argued that this notification would provide a significantly higher degree of protection for State residents and emergency response personnel from the risks posed by PCB Transformers than the current Federal rules under TSCA because (1) State emergency response personnel often respond to fires and spills at sites throughout the State and (2) State administrative actions such as issuing warnings regarding fishing, swimming, or other activities that could increase human exposure to PCBs when fires or spills occur, could be made in a more timely manner. While EPA sees merit in these arguments, EPA believes that residents of every State would be better protected by a uniform, nationwide registration requirement, where EPA would receive the data and make it available to Federal and State emergency response personnel.

Today's rule proposes a new §761.30(a)(1)(vii) to require all owners of PCB Transformers to register their transformers with the U.S. Environmental Protection Agency, Office of Enforcement and Compliance Assistance (2245), 401 M St., SW., Washington, DC 20460 no later than 90 days after the effective date of the final rule. PCB Transformers subsequently

identified or received from another location would have to be registered with EPA no later than 30 days after identification or receipt. To minimize data gathering and processing, EPA proposes that transformer owners would only have to report information about their transformers that is currently required under §761.180(a), to be included on their annual document logs. The registration would include the following information: (1) Transformer location (address) and number of PCB Transformers, (2) kilograms of PCB liquid in each PCB Transformer, and (3) name, address, telephone number and signature of the owner, operator, or other authorized representative certifying the accuracy of the information submitted. If a PCB Transformer is transferred to a different location after it is registered, information concerning that transfer would be recorded in the former owner's annual document log. (See discussion at Unit III.E.—Transfer of Totally Enclosed PCBs.) Anyone who took possession, either through transfer of location or sale of a PCB Transformer 90 days after the effective date of this rule would be responsible for demonstrating that the newly acquired PCB Transformer was registered with EPA under this proposed provision or, if the new owner could not make that demonstration, he would have to register that PCB Transformer within 30 days of the transfer.

The regulations at §761.30(a)(1)(vi) and (vii) currently include requirements for registering all PCB Transformers with fire response personnel and owners of any nearby commercial buildings. State and local authorities may also have notification requirements for emergency response personnel. Owners of transformers at industrial sites could fulfill the current requirement by registering with their on-site fire brigade, while owners of PCB Transformers in or near commercial buildings had to register with the local fire department. Subsequent review of the regulated community's compliance with these registration requirements by the Office of the Inspector General of EPA and EPA Regional personnel found that many fire departments, including those serving large cities, had not received registration information for a large percentage of those PCB Transformers which should have been registered. In addition, many owners could not demonstrate that they had registered their transformers, as required to continue each unit's authorization for use.

Therefore, the registration requirements proposed today would extend to all PCB Transformers in use or in storage for reuse, even if a specific PCB Transformer was registered under the current requirements at §761.30(a)(1). Under proposed §761.30(a)(1)(vii)(C), this requirement would be a part of the authorization for continued use for each PCB Transformer.

EPA solicits comments on this proposal and the petition from the State of Connecticut. If EPA does not promulgate today's proposed uniform national registration requirements, then it would be inclined to promulgate an exemption under section 18(b) to allow any State to implement its own registration requirements for transformers.

Q. Rectifiers

It has come to EPA's attention that a certain number of oil-filled and solid-state rectifiers (devices that convert AC current to DC current) contain PCBs. While rectifiers are not specifically authorized for use in the PCB regulations, it is EPA's intent to authorize at proposed §761.30(r), the continued use of rectifiers in a similar manner as transformers to be consistent with EPA's use authorizations for non-totally enclosed electrical equipment.

To add specificity to this proposed authorization for rectifiers, EPA is soliciting comments and data on the following: (1) The number of rectifiers currently in use, (2) the extent of PCB contamination in rectifiers, (3) the size of such units and whether EPA should adopt a *de minimis* volume amount (as is the case with capacitors, i.e., capacitors with less than 3 pounds of fluid are considered small and generally not regulated under TSCA for disposal) at which rectifiers would be regulated under TSCA, (4) the number of oil-filled vs. solid state rectifiers, and (5) any information that will assist EPA in supporting a use authorization for this type of equipment. Proposed §761.30(r) would authorize PCBs at any concentration to be used in rectifiers and PCBs at less than 50 ppm to be used in servicing rectifiers for the remainder of their useful life.

R. Use of PCBs in Scientific Equipment

It has come to EPA's attention that certain types of scientific equipment have historically used PCBs as a medium for comparative measurements. Specifically, EPA has been made aware of the historic use of PCBs in studies of birefringence and viscoelasticity of long chain polymers (Ref. 58). The PCBs serve as a high viscosity medium to

uniformly reduce all movement to facilitate comparisons of long-chain polymers. These studies date back to well before the enactment of TSCA and have included hundreds of thousands of comparable reference data runs. Other media could be used to replace PCBs in these instruments, but none yield results comparable to the large historical reference data set using PCBs as reference standards. While PCBs are not specifically authorized for specialized uses in scientific equipment, it is EPA's intent to authorize at proposed §761.30(s), their continued use in situations where the PCBs were in use as of the date of publication of today's proposal. Additional information is requested as to why substitutes are not available or otherwise could not be used and why the continued use of PCBs presents no unreasonable risk to health and the environment.

In order to add specificity to this proposed authorization, EPA is soliciting comments and data on the following: (1) The types and number of scientific applications for which PCBs are currently in use; (2) explanations as to why substitutes can not be used in each identified scientific application; (3) the size of such units and whether EPA should adopt a *de minimis* volume amount; (4) the types of PCBs used; (5) descriptions of how releases and exposures to PCBs are minimized during preparation, operation, and disassembly of the testing equipment; and (6) any additional information that will assist EPA in supporting a use authorization for PCBs in scientific equipment. In all authorized and unauthorized scientific uses or applications of PCBs, the disposal of the PCBs and any contaminated equipment is fully regulated under TSCA.

S. Remove Outdated Material

In response to a request to remove outdated material from the Code of Federal Regulations, EPA is proposing to remove the provisions at §761.20(c)(3) that require the submission to EPA of a notice at least 30 days prior to the export for disposal of PCBs or PCB Items; the regulations had authorized export for disposal until May 1, 1980. In deleting the notification requirement, EPA proposes to retain the prohibition against exporting PCBs for disposal after May 1, 1980, as reflected at §761.20(c)(3) in today's notice.

Likewise, several use authorizations specified deadlines by which certain activities were to cease. Section 761.30(a)(1)(iii), which prohibits the installation of PCB Transformers in or near commercial buildings after October 1, 1985, contains provisions for the

continued installation of such transformers in emergency situations or for reclassification up until October 1, 1990. Since these provisions are now obsolete, EPA is proposing their removal, with the exception of the provision to allow the indefinite installation of Mineral Oil PCB Transformers, which is still valid and would be retained. Therefore, §761.30(a)(1)(iii)(A) through (D) would be deleted, with the exception of the requirements of §761.30(a)(1)(iii)(C)(2)(ii) and (C)(2)(iii), which would be retained and redesignated as §761.30(a)(1)(iii)(A) and (iii)(B), respectively. The definition of "emergency situation" under §761.3 would therefore be rendered unnecessary and also would be deleted.

The provisions at §761.30(b), which authorize the use in and servicing of railroad transformers, contain procedures for phasing in a reduction of the PCB concentration for dielectric fluids used in railroad transformers. Essentially, the use of greater than 1,000 ppm PCBs in these transformers was prohibited after July 1, 1986. Therefore, EPA is proposing to amend paragraph (b)(1) by deleting paragraphs (b)(1)(i) through (b)(1)(vii) at §761.30(b)(1) "Use restrictions." Paragraph (b)(1) would be amended to restrict the use of PCBs in the dielectric fluids of railroad transformers to <1,000 ppm after July 1, 1986 (as is currently required by §761.30(b)(1)(vi)). Further, EPA is proposing to delete §761.30(b)(2)(ii) "Servicing restrictions," and to redesignate §§761.30(b)(2)(iii) through (vii) as (b)(2)(ii) through (vi). The provisions at §761.30(c) "Use in and servicing of mining equipment" would be revised to delete the conditions listed at paragraphs (c)(1) through (c)(5) since the timeframe of the authorization for the use and servicing of mining equipment containing PCBs has lapsed and these conditions are no longer relevant. The introductory paragraph for §761.30(c) would also be amended to delete the processing and distribution in commerce servicing authorization for PCBs greater than 50 ppm used in mining equipment which expired on January 1, 1982. The authorization would be revised to allow servicing only with PCBs at a concentration level of less than 50 ppm.

Sections 761.30(d)(1) through (d)(5) set conditions on the use of PCBs at concentrations of 50 ppm or greater prior to July 1, 1984. The recordkeeping requirement under paragraph (d)(5) expired on July 1, 1989 (5 years after the deadline). Therefore, paragraphs (d)(1) through (d)(5) are effectively obsolete, and EPA is proposing their deletion.

Similar provisions for hydraulic systems under §761.30(e)(1) through (e)(5) are also being proposed for removal. The introductory paragraphs for §§761.30(d) and 761.30(e) would be amended to allow heat transfer or hydraulic systems that were in operation after July 1, 1984 at a concentration level of less than 50 ppm PCBs to be serviced to maintain a concentration level of less than 50 ppm PCBs. This action is being proposed so

that heat transfer and hydraulic systems that were in compliance (containing less than 50 ppm PCBs in their fluids) could be serviced to maintain PCB levels at less than 50 ppm should the PCB levels rise above 50 ppm because of leaching from the systems. Heat transfer and hydraulic systems could only be serviced with fluids containing PCBs at less than 50 ppm.

T. Chart of Marking and Recordkeeping Requirements

The following chart has been prepared to help clarify the marking and recordkeeping provisions discussed in this proposed rule. It summarizes the marking and recordkeeping provisions as they exist now under 40 CFR part 761, as well as the proposed changes discussed above in Unit III of this preamble.

TABLE 1.—PCB MARKING AND RECORDKEEPING REQUIREMENTS

Regulated items	Existing marking requirements	Existing in-service records ¹	Existing disposal and storage-for-disposal records ¹	Proposed changes resulting from rule
PCB Containers	ML on item, ML on transport vehicle if carrying 45 kg or more liquid PCBs	Total Kg weight of all containers, description of contents	Date container, serial or I.D. No, Kg weight of each, description of contents, dates of removal; transport; and disposal, total No. & Kg weight	Mark transport vehicle carrying over 45 Kg liquid or solids
PCB Article Containers	ML on item	Total Kg weight of all containers, description of contents	Serial or I.D. No., Kg weight of each, description of contents, dates of removal; transport; and disposal, total No. & Kg weight	Date article container
PCB Transformers	ML on item, ML on access to unit (doors, etc), ML on transport Vehicle	Total No. of units, total Kg weight, inspection & maintenance records	Date article, serial or I.D.No., Kg of fluid in each, dates of removal; transport; and disposal, total No. & Kg weight	Record of sale, record of in-service registration with EPA
PCB Large High Voltage (LHV) Capacitors.	ML on unit or on protected location	Total No (-protected location records if applicable)	Date article, serial or I.D. No., Kg of fluid in each, dates of removal; transport; and disposal, total No. & Kg weight	Record of sale
PCB Large Low Voltage (LLV) Capacitors.	ML on item when removed from use. ²	Total No.	Date article, serial or I.D. No.Kg of fluid in each, dates of removal; transport; and disposal, total No. & Kg weight	Record of sale, in-service marking
PCB Small Capacitors	(²)			
PCB Contaminated Electrical Equipment.	Not required	Not required	Not required (once drained)	Record of sale
PCB Equipment that contains Large High Voltage (LHV) Capacitors or transformers.	ML on item when removed from use or distributed in commerce	Records required for LHV Capacitors or transformers	Records required for LHV Capacitors or transformers	In-service marking, record of sale
Natural Gas Pipelines & Compressors (≥2 ppm).	ML on item			Appurtenances & air compressor systems added to definition
Bulk PCB waste	ML on container		Kg weight/quantity & dates of each batch in or out. Also disposition of each batch out, total Kg weight	
Storage areas	ML on area		Annual records as required under §761.180	Maintain inventory on site, records of inspections, generators must also file Annual Reports, records of attempts to dispose of within 1-year
Transport vehicles	ML on vehicle if contains PCB transformer(s) or 45 kg or more liquid PCBs		Marking also required if carrying 45 Kg or more solid PCBs	
Access to PCB Transformers .	ML or approved mark			

TABLE 1.—PCB MARKING AND RECORDKEEPING REQUIREMENTS—Continued

Regulated items	Existing marking requirements	Existing in-service records ¹	Existing disposal and storage-for-disposal records ¹	Proposed changes resulting from rule
PCB motors, hydraulic and heat-transfer systems ³ .	ML on item			Record of sale
Pre-TSCA Uses				ML in facility, records of historical use, air monitoring, & wipe sampling

¹ Annual recordkeeping requirements are bolded.

² Manufacturers are required to mark non-PCB Large Low Voltage capacitors, small capacitors, and fluorescent light ballasts with a "No PCBs" label until 7/1/98.

³ The use of these PCB items is no longer authorized.

IV. Proposed Amendments to the Notification and Manifesting Rule

Since the promulgation of the PCB Notification and Manifesting (N&M) rule on December 21, 1989 (54 FR 52716) a number of issues have been raised that were not contemplated when the final rule was being drafted. Some of these issues were raised by litigants who petitioned the Agency for review of the rule or by other waste handling associations. Other items which are being proposed in today's notice have been previously promulgated under RCRA regulations and seem appropriate for inclusion in the PCB N&M rule. Some of the issues below are simply clarifications and are not intended to result in changes to the codified sections of 40 CFR part 761. EPA is soliciting comments on the following proposed amendments and clarifications to the PCB N&M rule.

A. Small Quantity Exemption for Solids

On June 27, 1990 (55 FR 26204), EPA issued a correction to the N&M rule that among other things sought to clarify the definition of "Commercial storer of PCB waste" at §761.3. The word "liquid" was added to the phrase "exceeds 500 gallons of PCBs" so that the phrase now reads "exceeds 500 liquid gallons of PCBs." This excluded facilities that were storing at any one time less than 500 gallons of liquid PCB waste from the need to seek approval as a commercial storer of that waste.

In a petition for review of the N&M rule, filed with the District of Columbia Circuit Court of Appeals on September 25, 1990, the petitioner claimed that EPA acted arbitrarily when it narrowed the small volume exemption in the definition of commercial storer so that only storers of liquid PCB wastes at amounts of less than 500 gallons would qualify. EPA agreed that there were certain classes of businesses (e.g., companies performing PCB waste treatability studies and laboratories affiliated with PCB handling companies)

that on occasion may possess relatively small quantities of solid PCB waste generated by others. Under the current rule, these companies do not qualify for the exemption for small quantity liquid and, therefore, must apply for approval as commercial storers of PCB waste.

EPA agreed there may be reasons for establishing a small quantity exemption for solids to complement the rule's small quantity exemption for liquids. EPA also indicated to the petitioner that until a formal amendment to the rule was promulgated, no enforcement action would be taken against a facility storing small quantities of PCB solids without a commercial storage approval if the following requirements were met:

(1) Timely notification to EPA of its PCB waste activities.

(2) Storage at no time of more than 70 cubic feet of PCB solid waste, the approximate volumetric equivalent of 500 gallons.

(3) Compliance with all other applicable requirements as set forth in TSCA or the PCB rules.

This proposed rule would add a small volume exemption for storage of no more than 70 cubic feet of non-liquid PCBs to the definition of "commercial storer of PCB waste" at §761.3. EPA is soliciting comments on the appropriateness of this small volume exemption for solids and in particular, whether 70 cubic feet is an appropriate cutoff.

Also in the proposed amendment to the definition of commercial storer at §761.3, EPA is clarifying a point on the change of ownership or release of title of PCB waste and how that relates to a person becoming or not becoming a commercial storer of PCB waste. The following example illustrates the proposed clarification. If a facility that generates and stores its own waste (e.g., transformers) is sold (or the title otherwise changes ownership), the new owner (or holder of the title) does not become a commercial storer of PCB waste because the owner is now a storer

of waste generated by someone else. The waste, along with the facility, is now owned by the purchaser, and the purchaser is storing its own waste; therefore the purchaser is not a commercial storer.

B. Clarification of Exception Reporting

EPA is proposing to amend §761.215(b), (c), and (d), which discuss the times when a generator, commercial storer, or disposer must submit One-year Exception Reports to the EPA Regional Administrator. Currently, a disposer is required to submit a One-year Exception Report whenever both of the following occur:

(1) The PCB waste is received on a date more than 9 months from the date the PCB waste was removed from service for disposal as indicated on the manifest.

(2) The disposer could not dispose of the PCB waste within 1 year from the date of removal from service for disposal.

A generator is required to submit the Exception Report when a copy of the manifest with the hand-written signature of the owner or operator of the designated facility has not been received within 45 days of the date the waste was accepted by the original transporter. Also, a generator or commercial storer who manifests PCBs or PCB items to a disposer of PCB waste must submit the Exception Report when both of the following occur:

(1) The waste was transferred to the disposer within 9 months of the date of removal from service for disposal as indicated on the manifest.

(2) The generator or commercial storer has not received within 13 months from the date of removal for disposal a Certificate of Disposal (CD) or they receive the CD and it indicates that the waste was disposed of on a date more than 1 year after the date of removal from service for disposal.

These sections of the regulation do not, however, indicate when the disposer, commercial storer, or

generator has to submit the One-year Exception Report to the Regional Administrator. EPA is proposing to amend §§761.215(b), (c), and (d) to require that the disposer, commercial storer, or generator submit the One-year Exception Report to the Regional Administrator no later than 30 days from the discovery of the passage of the regulatory deadlines. EPA solicits comments on the appropriateness of the proposed 30-day period.

C. Timing for Submission of the Certificate of Disposal

Section 761.218(b) requires that a Certificate of Disposal (CD) be sent to the generator indicated on the manifest that accompanied the shipment of PCB waste to the disposal facility within 30 days of the date that disposal of the PCB waste identified on the manifest was completed. Section 761.215(d)(2) indicates that one of the occasions when a generator or commercial storer should submit a One-year Exception Report to the Regional Administrator is when the CD is not received from the disposer within 13 months from the date of removal from service for disposal (DORFSFD).

EPA wishes to clarify that there may be different DORFSFD dates for different individual items on any given manifest. This means that some items listed on the manifest will need to be disposed of earlier than others to meet the 1-year time limit for storage and disposal. Due to the fact that there may be different disposal dates for different items on the same manifest, there will also be different CDs associated with those different disposal dates (unless of course, the entire shipment listed on the manifest is disposed of before the 1-year anniversary of the item with the earliest DORFSFD). The generator may either submit more than one manifest per shipment based on whether or not there are different DORFSFDs for the items in the shipment or attach a continuation sheet to reflect the different DORFSFDs. This may be time consuming initially, but will ensure that the generator receives a proper CD that identifies the specific PCB items (noting the generator's identifying number, if assigned) to close the disposal loop on the generated waste. EPA wants to make clear that it is not appropriate to base the disposal of the item on the manifest with the latest DORFSFD or, correspondingly, to send the CD based on that item.

D. No Manifest for Pre-1978 <50 ppm Spills

EPA proposes to amend §761.207(j). This section describes what wastes,

based on PCB concentration and factoring in whether or not dilution has occurred, are subject to the manifesting requirements. The section now states that if the waste contains less than 50 ppm PCBs, but comes from a source that contained greater than 50 ppm PCBs, the waste is subject to the manifesting and disposal requirements. Cited as an example is PCB spill cleanup material containing less than 50 ppm when the spill involved material containing greater than 50 ppm.

The proposed amendment at §761.207(j) would specify that there is no manifest requirement for material currently below 50 ppm that derives from pre-April 18, 1978, spills (of any concentration) or pre-July 2, 1979 spills less than 500 ppm. This is because (1) the material "as found" is below the regulatory threshold that would make it subject to the disposal requirements of subpart D, and (2) the original spilled material was either below or not subject to the disposal requirements of part 761, subpart D at the time of the original spill.

In addition, the manifest requirement does not apply to material derived from spills that have been decontaminated in accordance with EPA's spill cleanup policies. In other words, material containing PCBs that has been decontaminated to the policy standards to a level below 50 ppm would not be treated as if it contained greater than 50 ppm PCBs for disposal purposes, and could be disposed of in a municipal landfill or by other non-PCB disposal methods. This position is consistent with EPA's regulations that permit material that has been contaminated as the result of a spill of PCBs to be distributed in commerce if the material is decontaminated in accordance with the applicable spill cleanup policies. (See 40 CFR 761.20(c)(5).)

EPA is soliciting comments on the proposed amendment to §761.207(j) to make it clear as to when one does or does not have to manifest PCB waste material that is less than 50 ppm.

E. Notification by Transporters

It has come to the Agency's attention that there is some confusion in the regulated community as to whether a subcontractor or a "permanently leased operator" can use the EPA Identification Number (EPA ID number) issued to an unrelated company that has notified as a transporter.

Since any person engaged in the transportation of regulated PCB waste must, under current §761.205, apply for and receive an EPA ID number, a "permanently leased operator" or a subcontractor must notify separately

and receive a separate and distinct EPA ID number to transport PCB waste. The intent of the PCB N&M rule would be subverted if this were not the case. The Agency would have no record of who was doing the actual physical transport of PCB waste. Theoretically, a company could apply for a master ID number that could be used by hundreds of permanently leased operators or subcontractors. This would be clearly contrary to the intent of the N&M rule which is to have a record of each PCB waste handler. The regulations at §761.3 define a "Transporter of PCB waste" as "...any person engaged in the transportation of regulated PCB waste ..." and §761.205 requires that all transporters notify EPA of their PCB waste handling activities.

F. Renotification for Changes in Facility Operations

Sections 761.202 and 761.205 discuss who must obtain an EPA ID number and how to obtain such an ID number through the use of EPA Form 7710-53. EPA wishes to clarify that when a facility has previously notified the Agency of its PCB waste handling activities using EPA Form 7710-53 and those activities change (e.g., the owner or operator of the facility notified EPA as a commercial storer and now wants to engage in the transport of PCB waste, or notified as a transporter and a commercial storer but no longer wishes to engage in the activity of transporting PCB waste), the notifier must resubmit EPA Form 7710-3 to reflect those changes. Other examples of when a PCB waste handler must renotify the Agency include, but are not limited to, when the company stops handling PCB waste or changes the facility's location. Indication in a cover letter or on the form itself that this is a resubmission based on changes in facility operations and not a new submission will help to facilitate the process.

EPA is proposing to add this requirement for resubmission of EPA Form 7710-53 when there is a change in a facility's status to new §761.205(f). EPA is proposing that the resubmission be submitted to EPA no later than 5 work days after the change was made.

G. Transfer of Ownership of Commercial Storage Facilities

EPA is proposing to amend §761.65 by adding a new paragraph (j) to include language on the procedures and timing associated with the transfer of ownership of a commercial storage facility. The timing and procedures would apply to facilities with either interim or final approval.

Existing commercial storage facilities had until August 2, 1990, to submit a completed application to EPA and receive interim status to operate until the application was formally approved or denied. Section 761.65(d)(3) describes the information that must be included in the application, such as a closure plan, closure cost estimate, and financial assurance for closure. The N&M rule did not, however, discuss procedures and criteria for transferring ownership of a facility with interim status or final approval to operate (as is the case under the regulation implementing RCRA at 40 CFR 270.72(a)(4)). The Agency is soliciting comments on the following proposed procedure as a way to address the issue of transfer of ownership of commercial storage facilities.

The Agency would recognize the transfer of interim status or final approval for commercial storage facilities if all the following conditions were met:

(1) The transferee demonstrated it had established, by the date of transfer, financial assurance for closure pursuant to §761.65(g) using a mechanism effective as of the date of final approval. This would assure that there would be no lapse in financial assurance for the transferred facility.

(2) The transferee submitted a new and complete application for final storage approval.

(3) Any significant deficiencies (e.g., technical operations, closure plans, cost estimates) that EPA had identified in the application of the transferor, were resolved in the new application by either the transferor or by the transferee.

The new application would also have to include all the elements listed in 40 CFR 761.65(d)(3), including but not limited to, a demonstration that the applicant and its principal and key employees were qualified to engage in the business of commercial storage of PCB waste, the facility had the capacity to handle the PCB waste estimated by the applicant, certification of compliance with the storage facility standards at §761.65(b) and/or (c)(7), a written closure plan, demonstration of financial responsibility for closure, demonstration that operation of the facility would not present an unreasonable risk of injury to health or the environment, and the environmental compliance history of the applicant and its principals and key employees.

Before the transfer of interim status or final approval could occur, EPA would have to review the new application and deem it "complete," i.e., all the required elements were included in the application. The application would also

have to correct any significant deficiencies previously identified. Of course, EPA would reserve the right to deny the transfer of the interim approval status or final approval if upon interim review of the new application, EPA determined that the transferee was not qualified or was unable or unwilling to achieve and maintain its operations in compliance with TSCA and the PCB rules. In addition, a determination by the EPA Regional Administrator that the transfer of interim status or final approval could occur would not be determinative of the final decision that would be made regarding the commercial storage application. EPA would also reserve the right to deny any subsequent transfer request respecting a particular facility if EPA believed that such a transfer was undertaken to avoid the requirement of seeking a final commercial storage approval.

The requirements proposed above would have to be met before EPA would recognize the transfer of interim status. For example, Company "X" is interested in acquiring ownership of Company "Y", which has interim status to operate as a commercial storer of PCB waste. If EPA does not recognize the transfer of interim status before Company "X" takes legal title of ownership of the facility from Company "Y", Company "X" may be in violation of the commercial storage regulations because it did not have interim status to operate at the time it took legal title.

To facilitate the transfer of ownership, the Agency also solicits comments on whether a "new" application is entirely necessary. If, for example, the transferee accepted the contents of the old application, the only parts of the application that would have to be amended (excluding any deficiencies that have yet to be corrected) would be the financial assurance for closure, a new list of principles and key employees, and the compliance history of any business with which those individuals had been affiliated in the preceding 5 years. This submission of an "amended" application would save both the transferee and the EPA time and money and ultimately facilitate the transfer process.

H. Modifications to Storage Facilities

Section 761.65(e)(4) discusses when a commercial storage facility must submit a request to EPA for a modification to its storage approval to amend its closure plan. The Agency is proposing a similar requirement for revising the financial assurance for closure when there are modifications to the commercial storage facility, for example, where the facility is enlarged and the maximum inventory

of waste increases sufficiently to warrant an increase to the financial assurance mechanism. EPA is proposing to add §761.65(g)(9) to indicate that when a modification to the storage facility occurs that warrants establishing a new financial assurance mechanism or amending the existing financial assurance mechanism, the owner or operator shall have established and activated the new financial assurance mechanism no later than 30 days after the Regional Administrator (or Director, CMD) is notified of the completion of the modification of the facility, but prior to the use of the modified portion of the facility. In addition, the Regional Administrator (or Director, CMD) would have to be notified in writing no later than 7 days of completion of the modification to the facility. EPA is also soliciting comments on the appropriateness of adding those requirements to the existing language at §761.65(f)(3) since this section also addresses modifications (in this case closure) rather than adding a new paragraph (g)(9) to §761.65.

I. Clarification of Which Disposers Must Submit Annual Reports

Section 761.180(b)(3) requires that each owner or operator of a PCB disposal or commercial storage facility shall submit an annual report to the Regional Administrator of the EPA Region in which the facility is located by July 15 of each year, that briefly summarizes the records and annual document log required to be maintained and prepared under paragraphs (b)(1) and (b)(2) of that section. Sections 761.180(b)(1) and (b)(2) are recordkeeping requirements including information obtained from manifests that are generated or received by the facility. If a disposal facility disposed of only its own waste and, therefore, never received or generated a manifest, it would still have to prepare an annual document log as per the requirements at §761.180(b)(2)(iii). However, the annual report requirements of §761.180(b)(3) should not be misinterpreted as not applying to such a facility simply because they do not receive or generate manifests.

It was not the intent of the Agency to exclude disposers of PCB waste as defined at §761.3 who dispose of their own waste from the requirement to submit an annual report. To remedy this discrepancy, EPA is proposing amendments to §761.180(b)(3) that would state that a disposer's obligation to submit an annual report is based on the act of disposing of PCB waste material and not necessarily whether or not manifests were received or

generated at the facility. This should clarify EPA's intent on receiving annual reports from all disposers of PCB waste, including those disposing of their own waste.

J. Financial Assurance Mechanism: Non-Parent Corporate Guarantee

EPA is proposing to reference 40 CFR 264.143(f)(10) of the regulations implementing RCRA (final rule September 16, 1992, 57 FR 42832) to add an additional financial assurance mechanism for closure of PCB commercial storage facilities. This mechanism allows for the corporate guarantor to also be a firm with a "substantial business relationship" (as in RCRA Subtitle C) with the owner or operator of the commercial storage facility. This additional financial mechanism would be added to §761.65(g) by adding it as paragraph (g)(7) and redesignating existing paragraph (g)(7) as paragraph (g)(8).

K. Notification and Manifesting of Samples

1. *General.* The PCB N&M rule requires that generators prepare (§761.207(a)) and transporters sign and date (§761.208(b)(2)) a manifest for each shipment of PCB waste. The rule exempts "laboratory samples" from the manifesting requirements when the samples are, among other things, "being transported to a laboratory for purposes of testing" (§761.65(i)(2)). The Agency's policy is that media containing PCBs at >50 ppm which are being sent to validate PCB disposal methods are not subject to the manifesting requirements of §761.207 and §761.208.

Unlike the requirements promulgated for hazardous wastes under RCRA at 40 CFR 261.4, the final PCB N&M rule did not include an exemption from the manifesting requirements for treatability study samples. While the N&M rule adopted almost verbatim 40 CFR 261.4(d) regarding laboratory samples, it did not incorporate 40 CFR 261.4(e) regarding treatability study samples.

Accordingly, at this time, the exemption applies only to PCB samples sent to a laboratory to determine concentration.

Under the existing TSCA requirements, the treatability medium is not an exempt "laboratory sample" for two reasons. First, the medium is not being transported "for the purposes of testing". The preamble to the N&M Rule strongly suggests that "for purposes of testing" means analysis to determine the sample's concentration (e.g., is it ≥ 50 ppm?). As the preamble to the N&M rule states, samples that are sent to a laboratory to determine the PCB concentration are implicitly authorized

for use and not subject to the disposal requirements until the analysis is complete or use in an enforcement case has ended. (See 54 FR 52716, 52719 (Unit III.D.), December 21, 1989.)

Treatability studies, on the other hand, are in essence small-scale disposal experiments and not efforts solely to determine PCB concentration. The concentration of treatability media is already known to be greater than 50 ppm. The purpose of testing is not to determine the PCB concentration but to determine whether the disposal method under review works.

In addition, the preamble makes it clear that to be exempt from the requirements of the N&M rule, laboratories must be "independent" from any company whose activities involve PCB waste handling, storage, treatment, and disposal. Where the entities receiving the media containing PCBs are themselves engaged in treatment and disposal activities and are affiliated with companies whose other activities also involve PCBs, they would be unable to satisfy the definition of "laboratory" in §761.3.

2. *Definitions.* In order to promote regulatory uniformity with the exemption for treatability study samples under RCRA and to help promote and facilitate research and development into alternate disposal and treatment technologies for PCB waste, the Agency is proposing a new self-implementing PCB disposal approval at §761.60(j) for research and development for PCB disposal of limited quantities of PCBs, including treatability studies, and to add §761.80(i) to create a class exemption for processors and distributors of limited quantities of media containing PCBs for research and development. This disposal approval is explained in greater detail in unit II.D.3.j. of the preamble and the class exemption is explained in greater detail in Unit III.J. of this preamble. In addition, EPA is proposing to amend §761.3 to add the definition of "Treatability Study" that would essentially mirror the existing definition under RCRA at 40 CFR 260.10. Treatment is a form of disposal under the PCB rules.

L. Clarification of the Term "Facility"

In today's proposed rule, the Agency is soliciting comments on the need to clarify the terms "facility" and "facilities". The term is used in different contexts throughout the regulatory text of 40 CFR part 761. The impetus for the Agency raising this need for a clarification of the term arose after reviewing a section of preamble language in the PCB Notification and

Manifesting rule (54 FR 52716). In the preamble on page 52722, column 2, the discussion focusses on the requirement for generators with on-site storage facilities to notify the Agency of their PCB waste handling activities. The first two sentences in the last paragraph read, "In submitting their notifications to EPA, members of this class of generator/storer will submit a notification form for each of their storage areas that is subject to § 761.65. EPA will issue a unique identification number to each notifying storage facility, and this identification number will correspond to the physical location of the facility."

Here the terms "storage area" and "storage facility" are used interchangeably; in the first case to mean a particular building, structure, cell, or unit, and in the second instance, all structures on contiguous land or specified piece of property. As a matter of record, it was not the Agency's intent to require notification for each storage unit on the contiguous piece of property, which would result in multiple, individual identification numbers for that property. The facility, regardless of the number of storage areas or units on the piece of property, need only notify once for that contiguous piece of property. Therefore, in this instance, the term facility means, all contiguous land and structures used for the storage of PCB waste.

There are, however, other sections of the PCB regulations where the term facility means an individual unit or structure; most notably at §761.65(b)(1). Here the regulation states that a facility used for the storage of PCBs and PCB Items shall have an adequate roof, walls, and floor; continuous curbing with a minimum 6 inch high curb; no floor drains or expansion joints, etc.; and shall not be located at a site below the 100-year flood water elevation. It is clear in this instance that the Agency is not referring to a contiguous piece of property but to an individual structure or unit.

In the vast majority of cases in 40 CFR part 761, the term facility refers to the contiguous piece of property including the structures or individual storage or disposal units on that property. There are, however, 10 or so citations in the PCB regulations where the term facility refers only to the individual unit or structure. It is these 10 places in the regulation where EPA is proposing to delete the term facility and insert a term whose definition will best represent the Agency's intent (i.e., an individual unit, structure, or building). The Agency solicits comments on the most appropriate term to convey this

meaning. For purposes of this proposed rule, the term "unit" will be used to indicate this change in the proposed regulatory text.

In addition, the Agency welcomes comments if it has inadvertently omitted a section or sections of the regulations where the term facility should be deleted and the term "unit" inserted or for that matter made a change where one was not appropriate.

V. Confidentiality

All comments will be placed in the public record unless the commenter claims that they contain confidential business information (CBI) and the comments are clearly labeled as containing information claimed as CBI at the time of submission. Because of the need to expedite the review of any CBI claims, each claim must be accompanied by detailed comments substantiating the claim as described in 40 CFR 2.204(e)(4). While a part of the public record, comments claimed as CBI will be treated in accordance with 40 CFR part 2. A sanitized version of all comments subject to CBI claims must be submitted to EPA for the public record by the close of the comment period.

It is the responsibility of the commenter to comply with 40 CFR part 2 so that all materials claimed as confidential may be properly protected. This includes, but is not limited to, clearly indicating on the face of the comment (as well as on any associated correspondence) that information claimed to be CBI is included, or marking "CONFIDENTIAL," "TSCA CBI," or a similar designation on the face of each document or attachment in the comment which contains the claimed CBI. EPA considers the failure to clearly identify the claimed confidential status on the face of the comment or attachment as a waiver of any such claim and will make such information available to the public without further notice to the commenter.

VI. Official Rulemaking Record

In accordance with the requirements of section 19(a)(3) of TSCA, EPA is issuing the following list of documents, which constitutes the record of this proposed rulemaking. The official records of previous PCB rulemakings are incorporated as they exist in the TSCA Public Docket. This record includes basic information considered by the Agency in developing this proposal. A full list of these materials is available for inspection and copying in the TSCA Nonconfidential Information Center from 12 noon to 4 p.m. However, any CBI that is a part of the record for this

rulemaking is not available for public review. A public version of the record, from which CBI has been excluded, is available for inspection.

A. Previous Rulemaking Records

1. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs); Disposal and Marking Rule," Docket No. OPTS-68005, 43 FR 7150, February 17, 1978.

2. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions Rule," 44 FR 31514, May 31, 1979.

3. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs); Manufacturing, Process, Distribution in Commerce, and Use Prohibitions: Use in Electrical Equipment," Docket No. OPTS-62015, 47 FR 37342, August 25, 1982.

4. Official Rulemaking Record from "Toxic Substances Control Act; Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce and Use Prohibitions; Response to Individual and Class Petitions for Exemptions," Docket No. OPTS-66008A, 49 FR 28154, July 10, 1984.

5. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions: Exclusions, Exemptions and Use Authorizations," Docket No. OPTS-62032A, 49 FR 28172, July 10, 1984.

6. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs), Manufacturing, Processing, and Distribution in Commerce Exemptions," Docket No. OPTS-66008F, 53 FR 32326, August 24, 1988.

7. Official Rulemaking Record from "Polychlorinated Biphenyls; Notification and Manifesting for PCB Waste Activities," Docket No. OPTS-62059B, 54 FR 52176, December 21, 1989.

8. Official Rulemaking Record from "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing and Distribution in Commerce Exemptions," Docket No. OPTS-66008G, 55 FR 21023, May 22, 1990.

B. Federal Register Notices

1. USEPA. 42 FR 26564, May 24, 1977, "Polychlorinated Biphenyls (PCBs) Toxic Substances Control, Proposed Rule." OTS 68005.

2. USEPA. 43 FR 7150, February 17, 1978, "Polychlorinated Biphenyls (PCBs); Disposal and Marking: Final Rule." OTS 68005.

3. USEPA. 44 FR 31514, May 31, 1979, "Polychlorinated Biphenyls

(PCBs); Manufacturing Processing, Distribution in Commerce, and Use Prohibitions: Final Rule."

4. USEPA. 45 FR 33290, at 33325, May 19, 1980, "Consolidated Permit Regulations: RCRA, Hazardous Waste; SDWA Underground Injection Control; CWA National Pollutant Discharge Elimination System; CWA Section 404 Dredge or Fill Programs; and CAA Prevention of Significant Deterioration: Final Rule."

5. USEPA. 46 FR 22144, April 15, 1981, "Hazardous Substances: Notification of Treatment, Storage and Disposal Facilities: Notice of Availability of Form 8900-1, Interim Interpretative Notice and Policy Statement."

6. USEPA. 47 FR 37342, August 25, 1982, "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions: Use in Electrical Equipment: Final Rule." OPTS-62115.

7. USEPA. 49 FR 28172, July 10, 1984, "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions: Exclusions, Exemptions, and Use Authorizations: Final Rule." OPTS-62032.

8. USEPA. 49 FR 28154, July 10, 1984, "Toxic Substances Control Act; Polychlorinated Biphenyls (PCBs); Manufacturing, Processing, Distribution in Commerce and Use Prohibitions; Response to Individual and Class Petitions for Exemptions: Final Rule." OPTS-66008A.

9. USEPA. 49 FR 44978, November 13, 1984, "Hazardous Waste Management System; Identification and Listing of Hazardous Waste: Final Rule and Denial of Rulemaking Petition."

10. USEPA. 52 FR 10688, April 2, 1987, "Polychlorinated Biphenyls Spill Cleanup Policy: Final Rule." OPTS-62051.

11. USEPA. 53 FR 32326, August 24, 1988, "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing and Distribution in Commerce Exemptions: Proposed Rule." OPTS-66008F.

12. USEPA. 54 FR 22524, May 24, 1989, "Reportable Quantity Adjustment—Radionuclides: Final Rule."

13. USEPA. 54 FR 52176, December 21, 1989, "Polychlorinated Biphenyls; Notification and Manifesting for PCB Waste Activities: Final Rule." OPTS-62059.

14. USEPA. 55 FR 8666, March 8, 1990, "National Oil and Hazardous Substances Pollution Contingency Plan: Final Rule."

15. USEPA. 55 FR 12866, April 6, 1990, "Polychlorinated Biphenyls; Wet

Weight/Dry Weight Clarification: Proposed Rule." OPTS-62082.

16. USEPA. 55 FR 21023, May 22, 1990, "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing and Distribution in Commerce Exemptions: Final Rule." OPTS 66008G [sic] OPTS 66008H.

17. USEPA. 55 FR 26204, June 27, 1990, "Polychlorinated Biphenyls (PCBs); Notification and Manifesting for PCB Wastes Activities; Correction to Final Rule." OPTS 62059.

18. USEPA. 55 FR 30798, July 27, 1990, "Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule."

19. USDOT. 55 FR 52402, December 21, 1990, "Performance-Oriented Packaging Standards; Changes to Classification, Hazard Communication, Packaging and Handling Requirements Based on UN Standards and Agency Initiative: Final Rule."

20. USEPA. 56 FR 9008, March 4, 1991, "PCB State Enhancement Grant Program; Notice of Availability and Review." OPTS-280004.

21. USEPA. 56 FR 26738, June 10, 1991, "Disposal of Polychlorinated Biphenyls; Advanced Notice of Proposed Rulemaking." OPTS-66009.

22. USEPA. 56 FR 26745, June 10, 1991, "Disposal of Polychlorinated Biphenyls; Availability of Draft Guidance." OPTS-66010.

23. USEPA. 56 FR 30200, July 1, 1991, "Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Liability Requirements: Final Rule, Technical Amendment."

24. USEPA. 57 FR 7349, March 2, 1992, "Polychlorinated Biphenyls (PCBs); Manufacturing, Processing and Distribution in Commerce Exemptions and Use Authorization: Proposed Rule." OPTS-66011.

25. USEPA. 57 FR 21450, May 20, 1992, "Hazardous Waste Management System; Identification and Listing of Hazardous Waste: Proposed Rule."

26. USEPA. 57 FR 37194, August 18, 1992, "Land Disposal Restrictions for Newly Listed Wastes and Hazardous Debris."

27. USEPA. 57 FR 42832, September 16, 1992, "Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Financial Responsibility for Third-Party Liability, Closure, and Post-Closure: Final Rule."

28. Nuclear Regulatory Commission. 40 FR 19439, May 5, 1975, "Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents: Final Rule."

29. USEPA. 57 FR 20602, May 13, 1992, "Hazardous Waste Management System; Notification Concerning the Basel Convention's Potential Implications for Hazardous Waste Exports and Imports; Notice."

C. Reference Documents

1. ASTM. *Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography. Standard D-4059-91*, (April 1991):12pp.

2. Chemical Waste Management Inc. In the United States Court of Appeals for the District of Columbia Circuit. *Chemical Waste Management, Inc., Petitioner, v. United States Environmental Protection Agency, Respondent. Petition for Review under Section 19 of TSCA. Case No. 90-1469*, (September 25, 1990):3pp. Submitted by J.B. Molloy, et al. of Piper Marbury, counsel.

3. Chemical Waste Management. U. S. Court of Appeals, District of Columbia Circuit. *Chemical Waste Management, Inc., Petitioner, v. U.S. Environmental Protection Agency, Respondent. Motion for Voluntary Dismissal - Case No. 90-1469*, (March 4, 1991):2pp. Prepared by J.B. Molloy, et al., of Piper Marbury, counsel.

4. Midwest Research Institute. Letter from K. Boggess to J. Smith, Chemical Regulations Branch, EED, OPTS, USEPA, Subject: "PCB surface decontamination experiments using kerosene", EPA Contract No. 68-DO-0137, MRI Project No. 9801-A, Work Assignment No 30, (June 25, 1992):4pp.

5. Pepper, Hamilton Scheetz. Letter from W.J. Walsh, Counsel for Rollins Environmental Services (NJ) Inc., et al. to W.K. Reilly, Administrator, USEPA. Subject: Transmittal of a TSCA section 21 petition regarding PCB disposal provisions, (February 2, 1990):4pp. [OPTS Docket 210025]

6. Pepper, Hamilton Scheetz. *Petition to Initiate a Proceeding for a Clarifying Amendment to 40 CFR 761.60 [under Section 21 of TSCA]*. Submitted to the USEPA by W.J. Walsh, counsel for Rollins Environmental Services (NJ), Inc., et al. (February 2, 1990):40pp. [OPTS Docket 210025]

7. USEPA, OSWER. *Test Methods for Evaluating Solid Waste, Third Edition. SW-846*, (November, 1986): *Method Number 9095 Paint Filter Liquids Test* (4pp.).

8. USEPA, OSWER. *Test Methods for Evaluating Solid Waste, Third Edition. SW-846*, (November, 1986): *Method 8080 Organochlorine Pesticides and PCBs* (27pp.).

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VI. Regulatory Assessment Requirements

A. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. Under section 3(f), the Order defines a "significant regulatory action" as an action that is likely to (1) have an annual effect on the economy of \$100 million or more, or adversely and materially affecting a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities (also referred to as "economically significant"); (2) create serious inconsistency or otherwise interfering with an action taken or planned by another agency; (3) materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients

thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

Pursuant to the terms of this Executive Order, OMB determined that this rule was "significant" because of the substantial cost savings estimated in association with the changes proposed. As such, this rule was submitted to OMB for review and any changes made in response to OMB comments are available for review in the docket.

B. Regulatory Flexibility Act

Section 603 of the Regulatory Flexibility Act (15 U.S.C. 8091 et seq. Pub. L. 96-534, September 19, 1980), requires EPA to prepare and make available for comment a regulatory flexibility analysis in connection with rulemaking. The initial regulatory flexibility analysis must describe the impact of the proposed rule on small business entities. If, however, a regulation will not have a significant impact on a substantial number of small entities, no such regulatory impact analysis is required.

The proposed amendments to the PCB regulations will generate a variety of regulatory and deregulatory impacts on the diverse entities and industries affected by PCB handling and disposal requirements. This section examines the compliance costs and cost savings the regulated community will experience as a result of the proposed amendments. It also assesses how the PCB amendments will affect a variety of small businesses that handle and dispose of PCB items and PCB wastes.

1. *Cost estimation methodology.* This section describes compliance costs and cost savings estimated for each of the proposed revisions to the PCB regulations. The cost estimates use various economic data inputs. In several cases, wage rate estimates were used for estimating the labor costs or cost savings from regulatory changes. The wage rates are derived from an EPA study and represent standard wage rate estimates used in OPPT studies. The hourly wage rates used are:

	Wage rates(hourly)
Managerial	\$60.42
Scientific	52.39
Technical/Foreman	43.80
Legal	80.69
Clerical	21.73

Several additional factors were considered in the cost analysis, including:

- Treatment of compliance costs for paragraphs that codify an existing EPA policy (i.e., elements that are presently in effect but are not part of the existing regulation).

- Compliance with the existing and the proposed regulation.

- Treatment of the effect of the proposed amendments on disposal capacity and disposal prices.

- Consideration of the time horizon for compliance costs, given the declining quantities of PCBs in use.

- Cost annualization methods.

Each topic is discussed below.

Treatment of costs for provisions that codify EPA policy. In several instances, an EPA policy has been developed in response to new information received by EPA or concerns about compliance problems, and the proposed rule would codify these policies. Because the existing regulations differ from EPA's policies, two sets of cost estimates were prepared based on two different baselines. The strict language of the existing regulations served as the first baseline, which was used to generate cost estimates for all sections of the proposed regulations. Actual EPA policy or practice was used as the baseline for 29 provisions of the amendments. In cases where the current EPA policy and the existing regulations do not differ, a single cost estimate was prepared and applied in either case.

Compliance with the existing and the proposed regulations. All cost estimates were prepared assuming full compliance with the existing and the proposed regulations, although in reality, many companies are not in full compliance with the existing regulations. This study is designed only to estimate the costs of the proposed regulations; the actions necessary to achieve compliance with the existing regulations are not considered.

Treatment of the effect of the proposed amendments on disposal capacity and disposal prices. The analysis does not reflect possible effects of the proposed amendments on either disposal capacity or disposal costs for PCB wastes. The proposed amendments include several elements that could reduce demand for disposal of PCB wastes in chemical landfills, such as allowing for longer storage of some wastes and for use of alternative disposal technologies. It is reasonable to anticipate that the availability of alternatives to TSCA permitted landfills and incinerators will lower costs for disposal at those facilities. Nevertheless, these market changes were not modeled in this study.

Consideration of future declines in the volume of PCB waste requiring disposal.

In future years the amount of PCB waste will decline. Discussions with various industry representatives, however, indicated that this waste stream still would be substantial for a number of years. Disposal of PCB-contaminated soils from remediation sites, one of the major categories of wastes addressed in the proposed regulations, is likely to continue for several decades.¹ Given that the time horizon for waste disposal remains so long, a declining time horizon for compliance costs or cost savings was not taken into account for this study.

Cost annualization. In several cases, the compliance costs or cost savings would be incurred solely in the first year after regulatory implementation. Examples of such regulations include one-time requirements for the registration of transformers. Since most new elements create recurring annual costs or cost savings, consistency required that the one-time elements be annualized. The one-time items were annualized over 5 years at 3 percent per year (annualization factor of 0.2184). The 5-year time horizon was chosen as most appropriate for the administrative and recordkeeping tasks most numerous among the first-year requirements; a longer annualization schedule would have suggested long-term investments, such as in durable assets and equipment; a shorter term annualization schedule would suggest regulatory requirements that need to be renewed.

2. *Aggregate net cost estimates.* Table 4-1 of the Regulatory Impact Analysis developed for this rulemaking presents the aggregate net cost savings for the PCB regulations under the two baselines. The net cost impact of the proposed amendments, using either current EPA policy or the EPA regulation as the baseline, is a cost savings of over \$4 billion per year. This figure was based on cost savings of \$4.2 billion to \$4.8 billion per year under the alternative baselines, and compliance costs of \$11.6 million. As noted in the previous section, these cost savings would likely extend indefinitely into the future. The difference between the two baselines occurs because current EPA policy took into account exceptional compliance difficulties that arose when previously unknown sources of PCB contamination were discovered. A strict interpretation of the existing PCB regulations in these areas

¹ The estimated time horizon for disposal of PCB wastes from remediation sites is based on estimates of the time needed for remediating hazardous waste sites in the Superfund program. EPA estimated that at the current rate of cleanup, remediation of the sites on the National Priority List will take 48 more years (U.S. EPA, 1993).

would have generated large compliance costs for various users of PCBs.

The specific areas of additional compliance costs (i.e., incremental to baseline conditions) and cost savings are discussed below.

a. *Areas of additional cost.* The total incremental costs for new compliance requirements in the proposed regulations were estimated to be \$11.6 million. This estimate does not include certain cost items that are included in paragraphs that show a net cost savings. The effect of these additional items on the total compliance costs, however, is quite modest. The compliance cost estimate is the same for either baseline since the existing regulatory environment does not influence the cost of new requirements. Table 4-2 of the Regulatory Impact Analysis developed for this rulemaking lists the sections of the proposed regulation that will lead to additional costs.

Six provisions of the proposed regulations describe new recordkeeping or reporting requirements for facilities with PCB equipment or wastes. The two most costly of these requirements are under §761.180(a)(1)(iii) and (iv), which require recordkeeping and the preparation of an inventory of PCB equipment. These two sections would generate estimated annual compliance costs of \$3,771,180.

Another major cost increment would be generated by §761.60(b)(6)(ii), the disposal of drained PCB Articles. While the existing policy did not regulate the disposal of these articles, the proposed regulations specify acceptable disposal means. The total additional costs are estimated to be \$3.5 million, generated primarily by greater costs for disposing of PCB-Contaminated Transformers. Most transformers now are disposed of via industrial furnace, but certain of these facilities would not meet the furnace standards specified in proposed §761.60(a)(4), and the furnaces no longer would be able to accept this equipment. It is likely that most of these PCB Articles would be incinerated or placed in chemical waste landfills.

Costs of \$1.3 million and \$1.1 million per year were estimated for §761.40(k) and §761.30(a)(1)(vi), which cover the marking of PCB Large Low-Voltage Capacitors and Transformers and the registration with EPA of PCB Transformers in use, respectively. Many facilities are estimated to require 4 hours or more to locate, mark, and register these items. Similarly, the transformer registration requirement would require electric utilities and a variety of industrial facilities to submit information on their PCB Transformers. While this amendment requires only the

submission of information that the firms should have readily available, a large number of facilities would incur some expense to register their PCB Transformers.

Other proposed provisions estimated to generate incremental cost include:

- Section 761.67(a) limits the storage for reuse of PCB Articles to less than 3 years and prevents the indefinite storage of equipment. Incremental costs are estimated to be \$0.9 million per year.

- Sections 761.40(d) and (h) extends marking requirements to cover transport vehicles carrying non-liquid PCBs. Incremental annual costs are estimated to be \$236,000.

- Section 761.60(b)(4) specifies the amount of time PCB-Contaminated Electrical Equipment must be drained and adds language to indicate appropriate options for the disposal of drained equipment. The added costs are estimated to be \$131,400 per year.

b. *Areas of cost savings.* Cost savings of \$4.2 billion to \$4.8 billion per year are estimated using either existing EPA policy or the existing regulations as the baseline. The areas of estimated cost savings are summarized in Table 4-3 of the Regulatory Impact Analysis developed for this rulemaking.

The provision expected to result in the largest cost savings (estimated at slightly over \$4.0 billion per year) is proposed §761.61, which covers the disposal of remediation wastes when the existing EPA regulations are used as the baseline. This section allows an expanded set of disposal options and simplified administrative procedures, where the existing regulation allowed only chemical waste landfilling and incineration. There is, however, uncertainty about the estimate of the remediation rate (i.e., the amount of waste that is remediated annually); the variation in the plausible values of this estimate produces a range for the annual cost savings of \$2 billion to \$6 billion.

The disposal of non-remediation waste, covered in proposed §761.62, is estimated to generate another large annual cost savings (\$150 million per year) compared to either the existing regulations or EPA policy. The proposed rule establishes disposal options other than chemical waste landfills or incineration for non-remediation wastes containing PCBs in concentrations <50 ppm.

Additional substantial cost savings of the PCB amendments were estimated at \$500 million per year for proposed §761.30(q), the Continued Use of Pre-TSCA PCBs. The proposed section provides that PCB Items (such as HVAC gaskets, plastic, plasticizers, electric cable, and others) would be authorized

for use for the remainder of their useful life, whereas the existing regulations banned the use of these items. The large estimated savings for this section are based on the estimates of the number of buildings with PCB contamination for which continued use is allowed under the regulatory amendments. The number of these locations is not known, however, and thus cost savings can only be roughly approximated.

Another provision that would result in cost savings is proposed §761.60(b)(5), which covers the abandonment and disposal of PCB-Contaminated natural gas pipelines. An annual cost savings of close to \$63 million is generated because the proposed regulations would allow considerably greater latitude in dealing with this waste stream than did the existing regulations. Under the existing regulations, all PCB-Contaminated natural gas pipelines that are inaccessible for characterization or that contain PCBs in concentrations >500 ppm require excavation and either incineration or disposal in chemical waste landfills. Based on existing EPA policies, which are similar to the proposed regulations, the annual cost savings is much smaller—\$387,310.

Another area of cost savings is estimated for proposed §761.60(b)(6)(iii), which identifies disposal options for nonporous surfaces, including metal ship and submarine hulls and air handling systems contaminated by PCBs at concentrations <100 µg/100 cm². The existing regulations require these materials to be disposed of via chemical waste landfill or incineration. The annual cost savings of this provision is estimated to be \$37.5 million, using either the existing regulations or EPA policy as the baseline.

A cost savings of \$10.6 million per year was estimated for §761.77, Coordinated Approval, using either the existing regulations or EPA policy as the baseline. These proposed regulations would acknowledge permits for PCB facilities (i.e., for land disposal, incineration, research and development, alternative disposal technologies, commercial storage, or site remediation) issued under other State and Federal environmental programs, including RCRA, and where states classify PCBs as hazardous wastes or regulate PCBs in a similar fashion to the TSCA regulations.

Additional proposed provisions estimated to generate significant cost savings include:

- Section 761.65(c)(1)(iv) allows temporary storage of PCB containers with liquid PCBs at concentrations ≥50 ppm, provided that a Spill Prevention

Plan has been prepared. Existing measures allow temporary storage only when concentrations are 50 ppm up to 500 ppm. The estimated annual savings is \$3.0 million, using either the existing regulations or EPA policy as the baseline.

- Section 761.65(a) extends the allowable storage period for PCB wastes and allows EPA to grant storage time extensions in cases where the owner has shown due diligence in trying to dispose of wastes. The estimated savings compared to either the existing regulations or EPA policy, is \$1.1 million per year.

- Section 761.63 allows the disposal of PCB-containing household wastes at municipal and industrial landfills. Only a small portion of household hazardous wastes contain PCBs; they previously were not addressed in the regulations. The annual savings is estimated to be \$840,000.

- Section 761.65(c)(6) allows the use of a wider range of DOT approved containers for storing liquid and non-liquid PCBs, and thereby avoids the need to revise the PCB regulations after each change to the DOT regulations. A cost savings of \$565,000 per year was estimated for this provision.

- Section 761.65(c)(6)(i) acknowledges the special characteristics of radioactive waste by allowing unique container designs for such waste and generates an estimated annual cost savings of \$132,000, compared to the existing regulations.

Refer to Table 4-3 of the Regulatory Impact Analysis developed for this rulemaking for a list of several additional cost savings estimates related to PCB import, use, storage, and exemption.

3. *Regulatory impact on small businesses.* The PCB amendments would affect a variety of small businesses that handle and dispose of PCB items and PCB wastes. This section considers the economic impacts on those businesses and addresses the analytical requirements of the Regulatory Flexibility Act (RFA). The RFA requires agencies to explore options for minimizing small business impacts whenever there is a "significant economic impact on a substantial number of small entities." While this discussion will consider the significance of the potential impacts, EPA's internal policy is to consider any impacts on any small entities (U.S. EPA, 1992d).

According to EPA's guidelines, significant impacts are produced if:

- Annual compliance costs increase the costs of production by more than 5 percent;

- Costs of compliance as a percentage of sales are at least 10 percent higher than for large entities;

- Capital costs represent a significant percentage of the total capital available; and

- The regulation is likely to shut down small entities.

a. *Economic impacts on small industrial furnace operations.* The small industrial furnace operators handling PCB-Contaminated transformers would experience negative economic impacts as a result of the proposed amendments. It was estimated that approximately 100 industrial furnace operations specialize in recovery of transformer carcasses. Most of the businesses are small, ranging from owner-operated units with fewer than 10 employees, to larger operations approaching 100 employees. The major asset for these facilities is their furnace which, in the case of Aljon-United furnaces, carries a capital cost of over \$100,000.

Through contacts with a selection of operators, their likely response to the PCB amendments was estimated. In general, firms would not be likely to invest in the new furnace equipment that would meet EPA specifications. The new equipment is quite costly and the high temperatures required would make recovery of the metals impossible. It was estimated that, on average, these operations derive approximately 15 percent of their inputs from PCB-Contaminated transformers, based on several contacts with industry personnel. The remainder of their inputs are non-PCB-Contaminated transformers and other electrical equipment. There are no financial statistics available through conventional or other sources of industry data that can provide an overview of the condition of the metal recovery furnace industry.

Given these characteristics of the affected industrial furnace operations, the EPA criteria to determine whether the economic impacts are significant were applied. None of the first three criteria shown could be evaluated, however, because they all are defined by the size of the compliance costs incurred. The industrial furnace operators would not incur direct compliance costs, choosing instead to cease handling of the PCB-Contaminated transformers. The last criterion asks whether the small firms will cease operations. Based on discussions with industry firms, it was estimated that few operations would shut down. As noted, the affected PCB transformers represent approximately 15 percent of the inputs for metal recovery operations. A corresponding 15 percent

decline in profits, while representing a hardship, should not cause many plant shutdowns. Most likely there would not be many firms whose inputs, owing to a peculiarity in their sources of supply, contain a much higher portion of PCB-Contaminated transformers than other firms. Nevertheless, some firms might experience sharper profit declines. Also, firms that are currently in poor financial condition could be weakened further as a result of the amendments and might, therefore, now face closure. The extent or likelihood of such closures cannot be estimated, however.

b. *Economic impacts on small demolition contractors.* Section 761.60(b)(2)(ii) prohibits disposal of more than 24 light ballasts as municipal solid wastes. Most waste light ballasts are generated during building demolition operations. Many demolition contractors that handle the disposal of light ballasts, and their customers, would incur increased disposal costs due to these regulations.

At present, most PCB light ballasts are disposed of as municipal solid waste. Demolition contractors, however, would be required to assemble and transport PCB-containing light ballasts for transportation to and disposal at a PCB disposal facility. The aggregate economic impact was estimated for this provision of the regulations at \$54 million for disposal of approximately 30 million PCB-containing light ballasts. This translates to an average incremental cost of approximately \$1.80 per PCB-containing light ballast, covering transportation and disposal, as derived in the specific cost estimates for this provision.

The size of the incremental cost incurred on a specific demolition job would vary directly with the size of the job. Thus, relatively small demolition jobs (those generating only slightly more than 24 PCB-containing light ballasts, for example, those with 25 to 50 ballasts) would incur incremental disposal costs of \$45 to \$90 (25 to 50 times \$1.80). In contrast, large demolition jobs, with thousands of light ballasts would incur additional disposal costs of several thousands of dollars. Thus, the incremental costs are distributed among demolition jobs according to their size, and the incremental costs would not be likely to be a large percentage increase in the cost of demolition jobs.

Demolition contractors do not vary much in their ability to handle and dispose of PCB-containing light ballasts, so there would not be much variation in the unit costs of compliance among firms. For example, virtually all demolition firms would use commercial

waste facilities to dispose of light ballasts. This consistency of impacts among firms suggests that firms would not be able to compete on their ability to dispose of PCB wastes, and therefore, would all face similar cost increases. In competitive markets, where all firms face similar cost increases, the price of services should increase to cover the increase in costs. Thus, demolition contractors would be likely to pass the incremental disposal costs to their customers, new building or land development companies, and therefore, would be able to mitigate even minor cost impacts.

The EPA criteria on small business impacts were applied to the case of demolition contractors. None of the four criteria are satisfied, however, by the regulatory impacts. Compliance costs are estimated to be less than 5 percent of the costs of production and less than 10 percent of the cost of sales in all but very exceptional circumstances. Essentially no capital cost expenditures would be required of the affected firms. Finally, few operations, if any, would likely fail due to these regulatory impacts.

c. Economic impacts on other small businesses. Small businesses in other industries also would be affected by the PCB amendments. These costs were estimated, however, to be widely distributed among small firms, and generally would be distributed in proportion to the level of PCB disposal activities. Also, the aggregate costs of these remaining items is not very large, and therefore, no significant impacts on small businesses are forecast.

Among the businesses potentially affected are a small number of companies that currently have special EPA approvals to decontaminate various types of PCB-contaminated equipment, including PCB Transformers, components of natural gas pipelines, and others. For these businesses, the proposed amendments might generate additional competition because many more companies would be able to decontaminate equipment without needing to obtain special EPA approval. It was judged, however, that impacts are likely to be modest among such firms. The companies in question are either confident that their clients would not be interested in decontaminating their own equipment (due either to the capital investments required or the relative ease of using outside contractor personnel for these functions) or the PCB-decontamination business represented a modest portion of their current operations.

C. Paperwork Reduction Act

The Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. authorizes the Director of the Office of Management and Budget (OMB) to review certain information collection requests by Federal Agencies. EPA has determined that the recordkeeping and reporting requirements of this rule constitute a "collection of information" as defined at 44 U.S.C. 3502(4).

The information collection requirements of this proposed rule have been submitted for approval to the OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request document has been prepared by EPA (ICR No. 1729), and a copy may be obtained from the Information Policy Branch (2136), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

The public burden for this collection of information is estimated to average anywhere from 140 hours to 1,977 hours per respondent depending on the PCB activities in which the respondent is engaged. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information.

Comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, should be submitted to the Chief, Information Policy Branch (2136), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. These comments should also be submitted to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked ATTENTION: Desk Officer for EPA. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

Lists of Subjects in 40 CFR Part 761

Environmental protection, Hazardous substances, Labeling, Polychlorinated biphenyls, Reporting and recordkeeping requirements.

Dated: November 21, 1994.

Carol M. Browner,
Administrator.

Therefore, 40 CFR chapter I, part 761 is proposed to be amended as follows:

PART 761—[AMENDED]

1. The authority citation for part 761 would continue to read as follows:
Authority: 15 U.S.C. 2605, 2607, 2611, 2614 and 2616.

2. In §761.1 by revising paragraph (b) and adding a new paragraph (g) to read as follows:

§761.1 Applicability.

* * * * *

(b) This part applies to all persons who manufacture, process, distribute in commerce, use, or dispose of PCBs or PCB Items. Substances that are regulated by this part include, but are not limited to: dielectric fluids; contaminated solvents; oils; waste oils; heat transfer fluids; hydraulic fluids; paints; sludges; slurries; sediments; dredge spoils; soils; materials contaminated as a result of spills; and other chemical substances or combinations of substances, including impurities and byproducts and any byproduct, intermediate, or impurity manufactured at any point in a process. Unless otherwise noted, references to volumes or weights in this part apply to total volume or weight of the material containing or contacting PCBs. Most of the provisions of this part apply to PCBs only if PCBs are present in concentrations above a specified level. For example, subpart D of this part applies generally to materials at concentrations of 50 parts per million (ppm) and above. Also, certain provisions of subpart B of this part apply to PCBs inadvertently generated in manufacturing processes at concentrations specified in the definition of "PCB" under § 761.3. PCB concentrations for non-liquid PCBs under this part shall be determined on a dry weight basis according to the definition at § 761.3. For liquid PCBs as defined in § 761.3, PCB concentrations shall be determined on a wet weight basis. For samples containing PCBs and equal to or greater than 0.5 percent non-dissolved non-liquid materials, the non-dissolved materials shall be separated and the PCB concentration determined for non-liquid PCBs; the rest of the sample shall be considered to be liquid PCBs. For multiphase non-liquid/liquid or liquid/liquid mixtures, the phases shall be separated before chemical analysis. Following phase separation, the PCB concentration in each non-liquid phase shall be determined on a dry weight basis and the PCB concentration in each liquid phase shall be determined separately on a wet weight basis. No provision specifying a PCB concentration may be avoided as a result of any dilution, unless otherwise specifically provided.

* * * * *

(g) This part shall not apply to any oil-filled equipment manufactured after July 2, 1979, that has on it a permanent label or mark affixed by the manufacturer of the equipment

indicating that it contains no PCBs or, in the absence of such a mark, is accompanied by documentation from the manufacturer certifying, based on test data, that the oil within the equipment contains no PCBs unless the oil contained in said equipment has been removed from, added to, or otherwise serviced with any PCBs; and that has not been serviced with any PCBs since the equipment was first manufactured.

§ 761.3 [Amended]

3. In § 761.3 by amending the definition of "Qualified incinerator" by changing the references to § 761.60(a)(2)(iii)(A) and § 761.60(a)(2)(iii)(B) to read "§ 761.60(a)(2)(ii)(A)" and "§ 761.60(a)(2)(ii)(B)", respectively.

4. In § 761.3 by revising the definitions for "Capacitor," "Commercial storer of PCB waste," "PCB-Contaminated Electrical Equipment," "PCB Item," and "PCB Transformer"; by removing "Emergency situation" and "Small quantities for research and development"; and by adding alphabetically definitions for "Cap," "CERCLA," "DOT," "Dry Surface," "Dry weight basis," "High exposure area," "Household waste," "Industrial furnace," "Liquid PCBs," "Low exposure areas," "Microencapsulation," "Non-liquid PCBs," "Non-porous surface," "NTIS," "Open burning," "PCB-Contaminated," "PCB field screening test," "PCB/fissionable radioactive waste or PCB/radioactive waste," "PCB non-remediation waste," "PCB remediation waste," "Porous surface," "RCRA," "Remediation site or site," "Treatability study," "TSCA," "Wet weight basis," and "Vitrification" to read as follows:

§ 761.3 Definitions.

Cap means, when referring to remediation activities, a uniform cover of minimum thickness spread over the area where remediation waste was removed.

Capacitor means a device for accumulating and holding a charge of electricity and consists of conducting surfaces separated by a dielectric. A capacitor whose PCB concentration is unknown must be assumed to contain 500 ppm or greater PCBs, unless it is known from label or nameplate information, manufacturer's literature (including documented communications with the manufacturer), or chemical analysis that the capacitor does not contain PCBs at a concentration of 500 ppm or greater. Types of capacitors are as follows:

(1) *Small capacitor* means a capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is less than 1,639 cubic centimeters (100 cubic inches) may be considered to contain less than 1.36 kg (3 lbs.) of dielectric fluid and a capacitor whose total volume is more than 3,278 cubic centimeters (200 cubic inches) must be considered to contain more than 1.36 kg (3 lbs.) of dielectric fluid. A capacitor whose volume is between 1,639 and 3,278 cubic centimeters may be considered to contain less than 1.36 kg (3 lbs.) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs.).

(2) *Large high voltage capacitor* means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates at 2,000 volts (a.c. or d.c.) or above.

(3) *Large low voltage capacitor* means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates below 2,000 volts (a.c. or d.c.).

CERCLA means the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601-9657 et seq.)

Commercial storer of PCB waste means the owner or operator of each facility that is subject to the PCB storage unit standards of § 761.65 and who engages in storage activities involving PCB waste generated by others, or PCB waste that was removed while servicing the equipment owned by others and brokered for disposal. The receipt of a fee or any other form of compensation for storage services is not necessary to qualify as a commercial storer of PCB waste. It is sufficient under this definition that the facility stores PCB waste generated by others or the facility removed the PCB waste while servicing equipment owned by others. If a facility's storage of PCB waste at no time exceeds 500 gallons of liquid or 70 cubic feet of non-liquid PCBs, the owner or operator is a commercial storer but is not required to seek EPA approval as a commercial storer of PCB waste. Change in ownership or title of a generator's facility, where the generator is storing PCB waste, does not make the new owner of the facility a commercial storer of PCB waste.

DOT means the United States Department of Transportation.

Dry surface (Where is the definition?)

Dry weight basis means reporting chemical analysis results by excluding the weight of the water in the sample.

High exposure area means a site where PCBs are located and where, during the use of the area, there is a potential exposure from PCBs to humans or animal life. High exposure areas include: residential/commercial areas and non-restricted access areas (as defined in § 761.123); and non-public areas of public and private facilities where only authorized employees have routine access.

Household waste means PCB waste that is composed of unwanted or discarded household items that contain PCBs, come from private residences and are commonly found in private households, including individually owned or rented units of a multi-unit construction. Wastes created during renovation and demolition projects are not household wastes except for paint on surfaces. Renovation or demolition projects include, but are not limited to, the conversion of industrial property to residential units or the remodeling of hotels, motels, or multiple rental units.

Industrial Furnace means an industrial furnace, enclosed device as defined in § 260.10 of this chapter, used to dispose of PCBs.

Liquid PCBs means a homogenous flowable material containing PCBs and no more than 0.5 percent by weight non-dissolved material.

Low exposure areas mean all areas 0.1 kilometer or greater distant from a residential commercial area (as defined in § 761.123) and areas other than "high exposure area" as defined elsewhere in this section.

Microencapsulation means the stabilization of debris containing PCBs with the following reagents such that the leachability of any associated PCB is reduced to specified levels: Portland cement or lime/pozzolans (e.g. fly ash and cement kiln dust).

Non-liquid PCBs means PCBs which contain no liquids which pass through the filter when using the paint filter test method (EPA Method 9095 in "Test Methods for Evaluating Solid Waste" (SW-846)).

Non-porous surface means a smooth, unpainted solid surface that limits penetration of liquid PCBs beyond the immediate surface. Examples are: smooth uncorroded metal; smooth glass,

smooth glazed ceramics; impermeable polished building stone such as marble or granite; and high density plastics that do not absorb organic solvents such as polycarbonates and melamines.

* * * * *

"NTIS" means the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161.

* * * * *

Open burning means the combustion of any PCB regulated for disposal, not approved or otherwise allowed under part 761, subpart D of this part, and without the following:

(1) Control of combustion air to maintain adequate temperature for efficient combustion.

(2) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion.

(3) Control of emission of the gaseous combustion products.

* * * * *

PCB-Contaminated means any PCBs at concentrations of 50 parts per million (ppm) to less than 500 ppm (50 - <500 ppm) PCBs. In the event that no PCB liquids or non-liquids are present on surfaces for measurement, then surfaces with PCB concentrations, measured by a standard wipe test as defined in §761.123, of greater than 10 micrograms per 100 square centimeters to less than 100 micrograms per 100 square centimeters (>10 µg - <100 µg/100cm²), are defined as PCB-Contaminated.

PCB-Contaminated Electrical Equipment means any electrical equipment, including but not limited to transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable that contain 50 ppm or greater PCB, but less than 500 ppm PCB in the contaminating fluid or greater than 10 micrograms PCB/100 square centimeters to less than 100 micrograms PCB/100 square centimeters (>10 - <100 µg/100cm²) as measured by a standard wipe test (as defined in §761.123) of a non-porous surface. This definition includes:

(1) Mineral oil-filled electrical equipment other than circuit breakers, and reclosers. Cable whose PCB concentration is unknown must be assumed to be PCB-Contaminated Electrical Equipment.

(2) Capacitors of unknown PCB concentration are assumed to contain PCBs at 500 ppm or greater.

* * * * *

PCB field screening test means a portable analytical device or kit which measures PCBs. PCB field screening tests usually report less than or greater than a specific numerical PCB concentration. These tests normally build in a safety factor which increases the probability of a false positive report and decreases the probability of a false negative report. PCB field screening tests do not usually provide: an identity record generated by an instrument; a quantitative comparison record from calibration standards; any identification of PCBs; and/or any indication or identification of interferences with the measurement of the PCBs. PCB field screening test technologies include, but may not be limited to, total chlorine colorimetric tests, total chlorine x-ray fluorescence tests, total chlorine microcoulometric tests, and rapid immunoassay tests.

PCB/fissionable radioactive waste or PCB/radioactive waste means PCBs regulated for disposal under subpart D of this part that also contain fissionable radioactive material or radioactive material subject to regulation under the Atomic Energy Act of 1954 as amended.

PCB Item means any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.

PCB non-remediation waste means non-liquid bulk wastes or debris from the demolition of buildings and other human-created structures (manufactured, coated, or serviced with PCBs); wastes from the shredding of automobiles, household and industrial appliances or other white goods; PCB impregnated electrical, sound deadening, or other types of insulation and gaskets; and all other PCB Items or PCBs for which disposal requirements are not otherwise specified in §761.60, at any concentration where the concentration at the time of designation for disposal was greater than or equal to 50 ppm PCBs. PCB non-remediation waste does not include anything defined as a PCB remediation waste; manufactured or processed PCB products such as mineral oil dielectric fluid removed from electrical equipment; inadvertently generated PCBs in a manufacturing process waste stream; hydraulic fluids; heat transfer fluids; oils removed from household appliances/equipment; bulk paint (batched household or commercial paint); and waste oil. Materials not included in the definition of PCB non-remediation waste are regulated for disposal in subpart D of this part.

PCB remediation waste means, but is not limited to, all environmental media

containing PCBs, dredged materials, municipal sewage treatment sludges, commercial or industrial sludge (contaminated as the result of a spill of PCBs) located in or removed from any pollution control device; soil, rags, and other debris generated as a result of a spill cleanup; and site removal, remediation, or corrective action wastes in liquid or non-liquid form, at any PCB concentration. PCB remediation waste includes wastes at any volume or concentration where the original source was ≥500 ppm PCB as of April 18, 1978, or ≥50 ppm PCB as of July 2, 1979, or at any concentration if the source was not authorized for use under this part. All PCBs disposed of prior to April 18, 1978 shall be regulated as a PCB remediation waste under §761.61. Examples of PCB remediation waste include, but are not limited to, gravel, sandy soil, clayey soil, loam soil, other soil types, sediments, commercial or industrial sludge contaminated with PCBs by a spill, aqueous decantate from an industrial sludge, settled sediment fines, aqueous decantate from a sediment, oily soil, porous surfaces, and non-porous surfaces. PCB remediation waste does not include anything defined as a PCB non-remediation waste; manufactured or processed PCB products such as mineral oil dielectric fluid removed from electrical equipment; inadvertently generated PCBs in a manufacturing process wastestream; hydraulic fluids; heat transfer fluids; oils removed from household appliance or equipment; bulk paint (batched household or commercial paint); gasket material; insulation material, adhesives; scrapped automobile shredder metallic and non-metallic material; scrapped household appliance shredder metallic and non-metallic material; plastic items; rubber items; natural gas pipeline, equipment, and appurtenances; processed fluorescent light ballasts with capacitors removed or intact; and manufactured PCB Items (except where a material listed above as an exclusion, is contaminating the environment). Materials not included in the definition of PCB Remediation Waste are regulated for disposal in subpart D of this part.

PCB Transformer means any transformer that contains 500 ppm PCBs or greater. A transformer is a PCB Transformer if: (1) The nameplate indicates that the transformer contains PCB dielectric fluid; (2) the owner or operator has any reason to believe that the transformer contains PCB dielectric fluid; (3) the transformer dielectric fluid has been tested and found to contain PCBs at 500 ppm or greater; (4) the

transformer does not have a nameplate; (5) records do not exist that indicate the type of dielectric fluid; (6) records do not exist that indicate the PCB concentration; or (7) a transformer is an untested mineral oil transformer and reasons exist to believe that the transformer was at any time serviced with fluid containing PCBs at 500 ppm or greater. (See §761.30(a) and (h) for provisions permitting reclassification of electrical equipment containing 500 ppm or greater PCBs to PCB-Contaminated electrical equipment.)

Porous surface means any surface that allows PCBs to penetrate or pass into itself including but not limited to painted or coated metal; corroded metal; fibrous glass or glass wool; unglazed ceramics; ceramics with a porous glaze; porous building stone such as sandstone, travertine, limestone, or coral rock; low-density plastics such as styrofoam and low-density polyethylene; coated (varnished or painted) or uncoated wood; concrete or cement; plaster; plasterboard; wallboard; rubber; fiberboard; chipboard; asphalt; or tar paper. For purposes of cleaning and disposing of PCB remediation waste, porous surfaces have different requirements than non-porous surfaces.

RCRA means the Resource Conservation and Recovery Act (40 U.S.C. 6901 et seq.)

Remediation site or site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of a cleanup of PCB remediation waste regardless of whether the site was intended for management of waste.

Treatability study means a study in which PCB waste is subjected to a treatment process to determine:

- (1) Whether the waste is amenable to the treatment process.
- (2) What pretreatment (if any) is required.
- (3) The optimal process conditions needed to achieve the desired treatment.
- (4) The efficiency of a treatment process for the specific type of waste (i.e., soil, sludge, liquid, etc.).
- (5) The characteristics and volumes of residuals from a particular treatment process. A "treatability study" is not a mechanism to commercially treat or dispose of PCB waste. Treatment is a form of disposal under this part.

TSCA means the Toxic Substances Control Act (15 U.S.C. 2601 et seq.)

Wet weight basis means reporting chemical analysis results by including the weight of all dissolved water in a homogeneous liquid.

Vitrification means to change or to make into glass through heat fusion.

5. In §761.19, the table to paragraph (b), in the second column, by changing the reference to §761.60(a)(3)(iii)(B)(6) to read §761.60(a)(3)(ii)(B)(6) and by revising the introductory text of paragraph (b) to read as follows:

§761.19 References.

(b) *Incorporation by reference.* The following material is incorporated by reference, and is available for inspection at the Office of the Federal Register, Suite 700, 800 South Capital St., NW., Washington, DC. These incorporations by reference were approved by the Director of the Office of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the *Federal Register*. Copies of the incorporated material are available for inspection at the TSCA Nonconfidential Information Center (7407), Rm. B-607, NE Mall, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Copies of the incorporated material may be obtained from the American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.

6. In 761.20, by revising the section heading, paragraphs (b), (c)(2), (c)(3) and (c)(5), and by adding new paragraphs (c)(6) and (c)(7), to read as follows:

§761.20 Prohibitions and Exceptions.

(b)(1) No person may manufacture PCBs for use within the United States or manufacture PCBs for export from the United States without an exemption, except that an exemption is not required for PCBs manufactured in an excluded manufacturing process as defined in §761.3, provided that all applicable conditions of §761.1(f) are met.

(2) No person may import PCBs or PCB Items for purposes of disposal except that:

- (i) PCBs at concentrations less than 50 ppm may be imported for disposal.
- (ii) PCBs may be imported from United States territories or possessions

outside the customs territory of the United States into the customs territory of the United States for disposal.

(iii) PCBs may be imported for disposal pursuant to paragraph (b)(3) of this section where EPA determines that it is in the interests of the United States and will not result in unreasonable risk of injury to health or the environment.

(3) PCBs may be excepted from the prohibition on import for disposal imposed by paragraph (b)(2) of this section at EPA's initiative or in response to a petition submitted in accordance with this paragraph. Any person may file a petition for an exception to the import prohibition. Petitions shall be submitted to the Director, Chemical Management Division (7404), 401 M St., SW, Washington, DC 20460. Petitions must be submitted on an individual basis for each individual subject to the prohibition. Each petition shall contain the following information:

- (i) Name, address, and telephone number of petitioner.
- (ii) Description of the import for disposal exception requested, including items to be imported and disposal method.
- (iii) Current locations of PCBs to be imported and of each proposed disposal site.
- (iv) Length of time requested for the exception.
- (v) Amount of PCB chemical substance or PCB mixture (by pounds and/or volume) to be imported and disposed of during requested exception period.

(vi) The basis for the petitioner's contention that an exception would be in the interests of the United States and would not result in unreasonable risk of injury to health or the environment. EPA will review and evaluate petitions and may request further information from the petitioner to assess the proposed exception adequately. Any exception granted under this paragraphs shall be subject to the terms and conditions prescribed by the Agency. EPA reserves the right to impose limits on the duration of each exception. EPA will inform the petitioner in writing of its decision. Denial of a petition is a final agency action.

(4) All PCBs at concentrations greater than 50 ppm imported for disposal under paragraphs (b)(2) and (b)(4), and all PCBs subject to §761.60 of this part and returned for disposal under paragraph (b)(3) of this section:

- (i) Shall be stored and disposed of in a facility which has a PCB storage or disposal approval issued under TSCA, where the approval has specific conditions concerning the import, storage, or disposal of imported PCBs.

(ii) May be decontaminated under §761.79 provided the imported PCBs are stored in accordance with the provisions of subparts D, J, and K of this part, for the commercial storage of PCB wastes.

(5) No person may export PCBs or PCB Items for purposes of disposal except that:

(i) PCBs at concentrations less than 50 ppm may be exported for disposal.

(ii) EPA may allow the export for disposal of PCBs at concentrations of 50 ppm or greater to countries with which the United States has an international agreement consistent with the international obligations of the United States relating to transboundary movement of PCBs and their disposal. Such exports would be allowed on a case-by-case basis unless EPA has reason to believe that the PCBs in question will not be properly managed, either at EPA's initiative or in response to a petition submitted in accordance with this paragraph. Any person may file a petition. Petitions shall be submitted to the Director, Chemical Management Division (7404), 401 M St., SW, Washington, DC 20460. Petitions must be submitted on an individual basis for each generator or individual requesting authority to export PCBs for disposal. Each petition shall contain the following information:

(A) Name, address, and telephone number of petitioner.

(B) Description of the export for disposal exception requested, including items to be exported and disposal facility.

(C) Current locations of PCBs to be exported and of each proposed disposal site.

(D) Length of time requested for the exception.

(E) Amount of PCB chemical substance or PCB mixture (by pounds and/or volume) to be exported and disposed of during requested exception period.

(F) Documentation of an international agreement between the United States Government and the government of the receiving country concerning export of such waste.

(G) Certification by the government of the receiving country to EPA that it has received accurate and complete information about the waste, consents to receive it, and has adequate disposal facilities to assure proper management.

(H) Identification by the exporter of any liquid PCBs or PCB-containing electrical equipment. EPA will review and evaluate petitions and may request further information from the petitioner to assess the proposed exception adequately. Any exception granted

under this subsection shall be subject to the terms and conditions prescribed by the Agency. EPA reserves the right to impose limits on the duration of each exception. EPA will inform the petitioner in writing of its decision. Denial of a petition is a final agency action.

(6) For purposes of this regulation, the following transboundary shipments will not be considered exports and imports:

(i) PCB wastes generated in the United States, transported through another country (and any residuals resulting from cleanup of spills of such wastes in transit), and returned to the United States for disposal.

(ii) PCBs that were procured domestically by the United States Government, taken overseas for use by the United States Government, and that have remained under United States Government control since the time of procurement (including any residuals resulting from cleanup of spills of such wastes during use, storage, or in transit).

(c) * * *

(2)(i) Processing activities which are primarily associated with and facilitate storage or transportation for disposal do not require a TSCA PCB disposal approval.

(ii) Processing activities which are primarily associated with and facilitate treatment or land disposal require a TSCA PCB disposal approval unless they are part of an existing approval or are part of a self-implementing activity such as §761.61(a) and §761.79 or otherwise specifically allowed under subpart D of this part.

(iii) With the exception of provisions in §761.60(a)(2) and (3), in order to meet the intent of §761.1(b), processing, diluting or otherwise blending of waste prior to being introduced into a disposal unit for purposes of meeting a PCB concentration limit shall be included in a TSCA PCB disposal approval or comply with the requirements of §761.79.

(iv) The rate of delivering liquids or non-liquids into a PCB disposal unit shall be part of the conditions of the TSCA PCB disposal approval for the unit when an approval is required.

(v) PCBs or PCB Items at ≥ 50 ppm may be distributed in commerce for purposes of disposal in accordance with the requirements of this part.

(3)(i) PCBs or PCB Items at concentrations less than 50 ppm may be exported for disposal.

(ii) EPA may allow the export for disposal of PCBs at concentrations of 50 ppm or greater to countries with which the United States has an agreement under international law concerning export of such wastes. Such exports

would be allowed on a case-by-case basis at EPA's initiative or in response to a petition submitted in accordance with this paragraph. Any person may file a petition. Petitions shall be submitted to the Director, Chemical Management Division (7404), 401 M St., SW, Washington, DC 20460. Petitions must be submitted on an individual basis for each generator or individual requesting authority to export PCBs for disposal. Each petition shall contain the following information:

(A) Name, address, and telephone number of petitioner.

(B) Description of the export for disposal exception requested, including items to be exported and disposal facility.

(C) Current locations of PCBs to be exported and of each proposed disposal site.

(D) Length of time requested for the exception.

(E) Amount of PCB chemical substance or PCB mixture (by pounds and/or volume) to be exported and disposed of during requested exception period.

(F) Documentation of an agreement in international law between the U.S. Government and the government of the receiving country concerning export of such waste.

(G) Certification by the government of the receiving country to EPA that it has received accurate and complete information about the waste, consents to receive it, and has adequate disposal facilities.

(H) Identification by the exporter of any liquid PCBs or PCB-containing electrical equipment. EPA will review and evaluate petitions and may request further information from the petitioner to assess the proposed exception adequately. Any exception granted under this section shall be subject to the terms and conditions prescribed by the Agency. EPA reserves the right to impose limits on the duration of each exception. EPA will inform the petitioner in writing of its decision. Denial of a petition is a final agency action.

* * * * *

(5) Equipment, structures, or other materials that were contaminated with PCBs because of spills from, or proximity to, a PCB Item > 50 ppm, and which are not otherwise authorized for use or distribution in commerce under this part, may be distributed in commerce or used, provided:

(i) These materials were decontaminated in accordance with a PCB approval under this part, applicable decontamination standards

and procedures in §761.61(a) or §761.79, or applicable EPA PCB spill cleanup policies in effect at the time of the decontamination or, if not previously decontaminated, at the time of the distribution in commerce or use, or that now meet a decontamination standard established in §761.79.

(ii) These materials shall not be used or reused in association with food, feed, or drinking water unless otherwise allowed.

(6) Water which contains PCBs and which has been decontaminated to meet or which meets the standards established in §761.79(h) may be distributed in commerce or used, without further restriction, under this part.

(7) Non-porous surfaces, with no free flowing liquids, which have come in contact with PCBs and which are contaminated at a concentration less than 50 ppm, regardless of the original PCB concentration of the fluid, may be distributed in commerce or reused except in association with food, feed or drinking water.

(You said that you were adding paragraph (8). Where is paragraph (8)?)

* * * * *

7. Section 761.30 is amended as follows:

a. Paragraph (a)(1) is amended by removing (a)(1)(iii)(A) through (a)(1)(iii)(C)(2)(i) and (a)(1)(iii)(D), and by redesignating (a)(1)(iii)(C)(2)(ii) and (C)(2)(iii) as (a)(1)(iii)(A) and (B), respectively; by redesignating paragraphs (a)(1)(vii) through (a)(1)(xv) as paragraphs (a)(1)(viii) through (a)(1)(xvi), respectively; by adding new paragraph (a)(1)(vii), by revising newly designated paragraph (a)(1)(xvi) introductory text; and by adding paragraph (a)(3).

b. Paragraph (b) is amended by revising paragraph (b)(1) to read as set forth below; and by removing paragraph (b)(2)(ii) and redesignating paragraphs (b)(2)(iii) through (b)(2)(vii) as (b)(2)(ii) through (b)(2)(vi).

c. By revising paragraphs (c), (d) and (e) and by adding paragraphs (h)(1)(iii), by revising paragraphs (i) and (j), and by adding paragraphs (q), (r) and (s). The revisions and additions read as follows:

§761.30 Authorizations.

(a) * * *

(1) * * *

(vii)(A) No later than (insert the date 90 days after the effective date of the final rule) all owners of PCB Transformers (including PCB Transformers in storage for reuse) must have registered their transformers with the Environmental Protection Agency, Office of Enforcement and Compliance

Assurance (2245), 401 M St. SW., Washington, DC 20460. Any PCB Transformer identified or received from another location after (insert the date 90 days after the effective date of the final rule) must be registered in writing, with the Environmental Protection Agency no later than 30 days after identification or receipt (unless a previous written registration can be demonstrated). The registration must include:

(1) The location, address and number of PCB Transformers.

(2) The kilograms of PCB liquid in each PCB Transformer.

(3) The name, address, telephone number, and signature of the owner, operator, or other authorized representative certifying the accuracy of the information submitted.

(B) A record of the registration for each PCB Transformer at each location (e.g., a copy of the registration and the return receipt signed by EPA) must be retained with the records of inspection and maintenance for each PCB Transformer required under §761.30(a)(1)(xii).

(C) The requirements identified in paragraphs (a)(1)(vii)(A) of this section must be complied with to continue the authorization for use or reuse of PCB Transformers under §761.30, pursuant to section 6(e)(2)(B) of TSCA.

(D) All owners or operators of transformers containing PCBs at ≥ 50 parts per million (ppm) must comply with any State transformer registration requirements.

* * * * *

(xvi) In the event a mineral oil transformer or a voltage regulator, assumed to contain less than 500 ppm of PCBs as provided in §761.3, is tested and found to be contaminated at 500 ppm or greater PCBs, transformers are subject to all the requirements of this paragraph and voltage regulators are subject to paragraphs (a)(1)(vii)(A), (B), (C) and (D) of this section. Voltage regulators which are marked or otherwise known to contain 500 ppm PCBs or greater are also subject to the provisions of this paragraph. In addition, efforts must be initiated immediately to bring the transformer or the voltage regulator into compliance in accordance with the following schedule:

* * * * *

(3) *State transformer registration requirements.* Any State may require the registration of a transformer containing ≥ 50 parts per million PCBs.

(b) * * *

(1) *Use restrictions.* After July 1, 1986, use of railroad transformers that contain dielectric fluids with a PCB concentration greater than 1,000 ppm is prohibited.

(c) *Use in and servicing of mining equipment.* After January 1, 1982, PCBs may be used in mining equipment only at a concentration level of less than 50 ppm.

(d) *Use in heat transfer systems.* After July 1, 1984, PCBs may be used in heat transfer systems only at a concentration level of less than 50 ppm. Heat transfer systems that were in operation after July 1, 1984 with a concentration level of less than 50 ppm PCBs may be serviced to maintain a concentration level of less than 50 ppm PCBs. Heat transfer systems may only be serviced with fluids containing less than 50 ppm PCBs.

(e) *Use in hydraulic systems.* After July 1, 1984 PCBs may be used in hydraulic systems only at a concentration level of less than 50 ppm. Hydraulic systems that were in operation after July 1, 1984 with a concentration level of less than 50 ppm PCBs may be serviced to maintain a concentration level of less than 50 ppm PCBs. Hydraulic systems may only be serviced with fluids containing less than 50 ppm PCBs.

* * * * *

(h) * * *

(1) * * *

(iii) Voltage regulators which contain ≥ 500 ppm PCBs are subject to all provisions of this part which are applicable to PCB Transformers.

* * * * *

(i) *Use in natural gas pipeline systems.* Natural gas pipeline systems include: natural gas pipe, natural gas pipeline appurtenances, and air compressor systems (including compressors, piping, receiver tanks, air lines used in instrumentation, and the instrumentation operated by the air lines). PCBs may be used indefinitely in natural gas pipeline systems as follows.

(1) PCBs may be used in the compressors, appurtenances, and liquids of natural gas pipelines at a concentration level of less than 50 ppm.

(2) PCB-Contaminated natural gas pipeline and appurtenances may be reused in natural gas pipeline systems provided all freeflowing liquids have been removed. These liquids must be disposed of pursuant to §761.60(a)(1) through (a)(3).

(3) Natural gas air compressor systems (air compressor, piping, receiver tanks, and other pressurized large volume tanks) with surface contamination at 100 micrograms PCBs or greater per 100 square centimeters ($\geq 100 \mu\text{g}/100 \text{ cm}^2$) may be reused as natural gas air compressor systems after the equipment has been decontaminated in accordance with this paragraph. All freeflowing

liquids must be drained from the system at existing drain points (such as drain plugs, blowdowns, and drips); all liquids and solvents used during the decontamination process shall be disposed of as ≥ 500 ppm PCBs pursuant to the requirements at §761.79(a). All carbon filters shall be disposed of as nonliquid PCBs with a concentration ≥ 50 ppm.

(i) For air compressors, piping, and air lines in the air compressor system: fill these items with clean kerosene (containing less than 2 ppm PCBs) and decontaminate by using either the following procedures:

(A) Allow the kerosene to sit for 8 hours, then drain the kerosene and capture any residual kerosene by circulating the air under positive pressure, first throughout the system, and finally through a carbon filter at all points in the system where air is vented to the atmosphere. The carbon filter shall be of sufficient integrity to withstand three times the venting air pressure through the filter.

(B) Circulate the kerosene through the air compressors, piping, and air lines in the air compressor system until the total volume of liquid circulated (pump rate times the time of pumping) equals ten times the total volume of the particular article being decontaminated, then drain the kerosene. Refill the system with clean kerosene and repeat the circulation and drain process.

(ii) For air receivers and other pressurized large volume tanks, decontaminate the items by using either of the following procedures:

(A) Fill the tanks with clean kerosene (containing less than 2 ppm PCBs) and use the procedures for air compressors, piping, and air lines at either paragraph (i)(3)(i)(A) or (i)(3)(i)(B) of this section.

(B) Rinse the tanks three times, each time with a volume of clean kerosene equal to or greater than 10 percent of the total internal volume of the tank. Each of the first two rinses shall be drained before adding the next successive kerosene rinse solvent. Each rinse shall either:

(1) Be sprayed under a pressure of at least 100 psi such that the spray makes at least three passes over the entire internal surface of the tank; or

(2) Contact, at atmospheric pressure, each part of the surface area for 1 hour. This may be accomplished by filling the tank, totally closing the tank, and either:

(i) Rotating the tank continuously such that all interior surfaces are contacted in a single rotation (calculations used to determine the total time of rotation and number of rotations shall be recorded and retained for a

period of 3 years after completion of the decontamination process); or

(ii) Placing the tank in a stationary position and waiting 1 hour at a sufficient number and configuration of positions so as to cover the entire interior surface of the tank.

(4) Natural gas air compressor systems may also be decontaminated in accordance with §761.79.

(5) This authorization shall also apply to other pipeline and air compressor systems contaminated with PCBs, with the written consent of the Regional Administrator for the EPA Region in which it is located.

(6) PCB-Contaminated natural gas pipeline, drained of all free flowing liquids, may also be used or distributed in commerce for use in the transport of bulk hydrocarbons, chemicals or petroleum products, as casing to provide secondary containment under transportation systems, as industrial structural material (such as fence posts, sign posts or bridge supports), as temporary flume at construction sites, as equipment skids, as culverts (less than 80 feet in length) in intermittent flow situations, for sewage service with written consent of the Publicly Owned Treatment Works (POTW), for steam service, as irrigation systems (less than 20 inch diameter) of less than 200 miles in length, and in totally enclosed compressed air systems.

(j) *Limited quantities for research and development.* For purposes of this section, permissible research and development (R&D) activities include, but are not limited to: the chemical analysis of PCBs for purposes of determining PCB concentrations; scientific experimentation on: the physical properties of PCBs, and chemical reactions of PCBs (other than the evaluation of the disposal or destruction of PCBs), and the chemical analysis of PCBs; and testing to determine: environmental transport processes, biochemical transport processes, the effects of PCBs on the atmospheric environment, aquatic environments, terrestrial environments, and the health effects of PCBs such as general toxicity, subchronic toxicity, chronic toxicity, specific organ/tissue toxicity, neurotoxicity, genetic toxicity, and metabolic products. However, R&D activities authorized pursuant to this section do not include research or analysis for the development of any PCB product. In addition, R&D activities authorized in this section do not include R&D for disposal, including, but not limited to, demonstrations for PCB disposal approvals, pre-demonstration tests, testing major modifications to approved PCB technologies, treatability-

studies, the development of new disposal technologies, and research on transformation processes such as biodegradation. R&D for disposal activities are addressed in §761.60(j). The R&D activities conducted under this section are subject to all other applicable Federal, State, and local laws and regulations. PCBs may be used for R&D in limited quantities when originally packaged in hermetically sealed containers of 5 milliliters or less, or as samples of environmental media in containers larger than 5 milliliters containing PCBs that have been packaged pursuant to applicable DOT performance standards, in a manner other than a totally enclosed manner, provided that:

(1) The Regional Administrator for the Region in which the R&D activity will occur is notified in writing at least 30 days prior to the commencement of any R&D activity authorized under this section. Each notification shall identify the person conducting the R&D activity, the location where the PCB R&D activities will be conducted, the quantity of PCBs to be treated, the type of R&D technology to be used, the general physical and chemical properties of the material being treated, and an estimate of the duration of the PCB activity.

(2) No more than 100 grams of pure PCBs is used for R&D activities under this section at a facility annually.

(3) All PCB wastes (e.g., spent laboratory samples, residuals, unused samples, contaminated media/instrumentation, clothing, etc.) are stored in compliance with the storage requirements of §761.65(b).

(4) Manifests are used for all R&D PCB wastes being transported from the R&D facility to a commercial storer and/or a disposal facility. However, no manifests are required if the residuals or unused samples of PCB wastes are returned to the site of generation.

(5) Material limitations for use of PCBs, are set out at paragraph (j)(1) of this section shall not be exceeded without prior approval from the Regional Administrator. Requests to exceed the material limitation for PCBs used in R&D as defined in this section must be submitted in writing to the Regional Administrator for the Region in which the R&D will be conducted for approval. Each request must provide a justification for the additional quantity or concentration needed, as well as specify the quantity or concentration of PCB material needed, and the duration of the activity. Any approval will be in writing and signed by the Regional Administrator. The approval will state

all requirements applicable to the R&D activity.

(q) *Pre-TSCA uses of PCBs.* Non-liquid materials that contain PCBs at any concentration (including, but not limited to, gaskets, plastics, plasticizers, fluorescent light ballast potting material, electrical cable (except oil-filled cable as described in paragraph (m) of this section), dried paints, small rubber parts, roofing and siding materials, insulation, caulking, waterproofing compounds, ceiling tile coatings, and adhesive tape) in use prior to July 2, 1979, are authorized for use and distribution in commerce provided they remain intact and in place in their existing application and location for the remainder of their useful life, subject to the conditions in paragraph (q)(1) of this section. Failure to provide documentary evidence that substantiates the historical use of such PCB materials as required in paragraph (q)(1)(i)(A) of this section may result in the rejection of such claims by the Regional Administrator.

(1) *Use conditions.* (i) The owner or operator of such PCB-containing material shall:

(A) Provide a written notification by [insert date 30 days from effective date of the final rule] or within 30 days of discovery, to the Regional Administrator for the Region in which the material is located, that a pre-TSCA PCB use has been discovered. Each notification shall include the location of the material, a description of the use, an estimate of the amount of material in use (e.g., number, square footage, pounds), PCB concentration, expected useful life of the material, condition of the material (e.g., potential for exposure) and any additional information that may be useful to the Regional Administrator. Documentary evidence that establishes the historical use of such materials shall also be included in the notification.

(B) Post the Mark ML, as defined in §761.45(a), in a prominent location near the PCB-containing material as a warning of the presence and location of PCBs.

(C) Make available to any potentially exposed employee or, upon request, to any other potentially exposed individual, information concerning the identity of the PCBs and any health risk associated therewith.

(ii) The PCB-containing material shall remain intact and in place in its existing application unless it is being removed for disposal.

(iii) Existing uses of such PCB materials exhibiting environmental releases above 0.001 mg/m³ for a 10-

hour workday, 40-hour workweek, or as measured by workplace air monitoring using National Institute of Occupational Safety and Health (NIOSH) Method 5503 sampling at a rate of 1 liter per minute for 480 continuous minutes, or surface levels as measured by a standard wipe test defined in §761.123, of exterior accessible areas in excess of 10 micrograms/100 square centimeters (10 µg/100cm²) shall be removed or contained.

(iv) Air monitoring activities shall be conducted quarterly for the first year and then annually thereafter, and results recorded until the material is removed from service. Results indicating PCB levels above 0.001 milligram per cubic meter of air (mg/m³) for a 10-hour workday, 40-hour workweek shall require containment through either a modification in the release controls, encapsulation, or the immediate removal of the PCB material. If encapsulation has been chosen as the containment option, the sampling and air monitoring procedures shall also include an inspection for damage to the encapsulation. Any deterioration of the encapsulation shall be repaired and documented.

(v) Standard wipe sampling (as defined in §761.123) of exterior surfaces shall be conducted quarterly for the first year and then annually thereafter, and the results recorded until the material is removed from service. Results indicating PCB levels above 10 micrograms per 100 square centimeter (10 µg/100cm²) shall require containment through either a modification in the release controls, encapsulation, or the immediate removal of the PCB material. If encapsulation has been chosen as the containment option, the sampling and air monitoring procedures shall also include an inspection for damage to the encapsulation. Any deterioration of the encapsulation shall be repaired and documented.

(vi) Records of measurements, inspections, and maintenance shall be maintained for review by Agency officials in a central location for a period of 3 years after the PCB material has been removed.

(vii) Within 24 hours of a measurement above the levels specified in paragraphs (q)(1)(iii), (q)(1)(iv), or (q)(1)(v) of this section, the owner or operator of the PCB-Contaminated item shall:

(A) Provide written notice, either by facsimile machine or overnight mail delivery service, to the Regional Administrator for the Region in which the material is located as to the nature and extent of the migration and the

steps that will be taken to remove or contain the PCBs and ensure compliance.

(B) Initiate action to remove the PCBs or to contain the PCBs by means of encapsulation (either with an epoxy-based or equivalent paint or a sealant) or with release controls in which a continual release is collected in a closed container and displaces only the air in the container (i.e., leak collection system) to ensure personnel are protected from dermal and inhalation exposures.

(viii) All PCB materials with a concentration of 50 ppm or greater, materials that come in contact with 50 ppm or greater PCBs, including leak collection devices, PCB-containing paint, sealant, or other encapsulation materials, and materials used during decontamination and cleanup procedures shall be handled, stored, and disposed of in accordance with the PCB storage requirements at §761.65 and the disposal requirements at §761.60 or §761.62.

(2) Non-liquid materials that contain PCBs at any concentration, that would meet the definition of household waste at §761.3 when disposed of, are authorized for continued use and are not subject to the requirements of paragraph (q)(1) of this section.

(3) Non-liquid materials, other than those authorized for continued use under paragraph (q)(2) of this section, that contain PCBs at any concentration, but which leach PCBs at less than 50 micrograms/liter as measured by the Toxicity Characteristic Leaching Procedure (TCLP), 40 CFR part 261, Appendix II, Method 1311, are authorized for continued use and are not subject to the use requirements of paragraph (q)(1) except for paragraphs (q)(1)(i)(B) and (q)(1)(i)(C) of this section.

(r) *Use in and servicing of rectifiers.* PCBs at any concentration may be used in rectifiers and may be used for purposes of servicing this electrical equipment (including rebuilding) for the remainder of their useful life, subject to the following conditions:

(1) [Reserved]

(2) *Servicing conditions.* (i) Rectifiers may be serviced (including rebuilding) only with dielectric fluid containing less than 50 ppm PCB.

(ii) [Reserved]

(s) *Use of PCBs in scientific equipment.* PCBs at any concentration may be used in scientific equipment, including but not limited to oscillatory flow birefringence and viscoelasticity instruments, to study the physical properties of polymers subject to the following conditions:

(1) *Use conditions.* (i) The PCBs must be in use in a specific scientific instrument as of [insert date of publication of the final rule].

(ii) A maximum of 100 milliliters is used in a scientific instrument at any one time.

(2) [Reserved]

8. In §761.40, by revising paragraph (a)(5), redesignating paragraphs (b) and (d) as paragraphs (d) and (b), respectively, and by revising newly designated paragraph (d), paragraphs (e) and (h), and adding paragraph (k) to read as follows:

§761.40 Marking requirements.

(a) * * *

(5) PCB Large Low Voltage Capacitors at the time of removal from use (see also paragraph (k) of this section).

* * * * *

(d) As of October 1, 1979, each transport vehicle loaded with PCB containers that contain more than 45 kg (99.4 lbs.) of PCBs at concentrations of 50 ppm or greater or with one or more PCB Transformers shall be marked on each end and each side with mark ML as described in §761.45(a).

(e) As of October 1, 1979, applicable PCB Items described in paragraphs (a)(1), (a)(6), (a)(7), and (a)(8) of this section containing PCBs in concentrations of 50 to 500 ppm shall be marked with mark ML as described in §761.45(a).

* * * * *

(h) All marks required by this subpart must be placed in a position on the exterior of the PCB Items, Storage units, or transport vehicles so that the marks can be easily read by any persons inspecting or servicing the marked PCB Items, Storage units, or transport vehicles.

* * * * *

(k) As of [insert date 180 days after the effective date of the final rule] the following PCB Items shall be marked with mark ML as described in §761.45(a):

(1) All PCB Large Low Voltage Capacitors not marked under paragraph (a) of this section shall be marked individually, or if one or more PCB Large Low Voltage Capacitors are installed in a protected location such as on a power pole, or structure, or behind a fence, then the pole, structure, or fence shall be marked with mark ML, and a record or procedure identifying the PCB Capacitors shall be maintained by the owner or operator at the protected location.

(2) All Equipment not marked under paragraph (a) of this section containing a PCB Transformer or a PCB Large High or Low Voltage Capacitor.

Subpart D [Amended]

9. By amending subpart D by removing the "Note" appearing just after the heading for subpart D.

10. Section 761.60 is amended as follows:

a. By adding introductory language to §761.60.

b. By removing paragraph (a)(2)(ii), redesignating paragraphs (a)(2)(iii) and (a)(2)(iv) as paragraphs (a)(2)(ii) and (a)(2)(iii), respectively.

c. By changing the reference in newly designated paragraph (a)(2)(ii)(C) to paragraph "(a)(2)(iii)(B)(3)" to read "(a)(2)(ii)(B)(3)".

d. By changing the reference in newly designated paragraph (a)(2)(ii)(D)(1) to paragraphs "(a)(2)(A)(6) and (7)" to read "(a)(2)(ii)(A)(6) and (a)(2)(ii)(A)(7)".

e. By changing the reference in newly designated paragraph (a)(2)(iii) to paragraph "(a)(2)(iii)" to read "(a)(2)(ii)".

f. By removing paragraph (a)(3)(ii), redesignating paragraphs (a)(3)(iii) and (a)(3)(iv) as paragraphs (a)(3)(ii) and (a)(3)(iii), respectively.

g. By changing the reference in newly designated paragraph (a)(3)(ii)(C) to paragraph "(a)(3)(iii)(B)" to read "(a)(3)(ii)(B)".

h. By changing the reference in newly designated paragraph (a)(3)(ii)(D) to paragraph "(a)(3)(iii)(B)(3)" to read "(a)(3)(ii)(B)(3)".

i. By changing the reference in newly designated paragraph (a)(3)(ii)(E) to paragraph "(a)(3)(iii)(C)" to read "(a)(3)(ii)(C)".

j. By changing the reference in newly designated paragraph (a)(3)(ii)(E)(1) to paragraphs "(a)(3)(iii)(A)(6) and (7)" to read "(a)(3)(ii)(A)(6) and (a)(3)(ii)(A)(7)".

k. By changing the reference in newly designated paragraph (a)(3)(ii)(E)(3) to paragraph "(a)(3)(iii)(B)(6)" to read "(a)(3)(ii)(B)(6)".

l. By changing the reference in newly designated paragraph (a)(3)(iii) to "§761.60(a)(2)(iii)" to read "(a)(2)(ii) of this section".

m. By revising paragraph (a)(4).

n. By removing paragraph (a)(5).

o. By removing paragraph (a)(6).

p. In paragraph (b) by adding introductory text just after the italics heading "PCB Articles", and by revising paragraphs (b)(1)(i)(B), (b)(2)(iv) introductory text, (b)(2)(vi), by adding new paragraphs (b)(2)(vii), by revising paragraphs (b)(3) and (b)(4); by redesignating paragraphs (b)(5) and (b)(6) as (b)(6) and (b)(7), respectively; by adding new paragraphs (b)(5) and (b)(6)(iii), and by revising paragraph (b)(6)(ii).

q. In paragraph (c)(3) by removing the term "facility" and substituting the term "unit" in place thereof.

r. By revising paragraph (e).

s. By removing and reserving paragraph (f)(2).

t. By adding paragraphs (g)(1)(iii) and (g)(2)(iii).

u. By revising paragraph (i)(2).

v. By adding paragraph (j).

The revisions and additions read as follows:

§761.60 Disposal requirements.

PCBs disposed of, placed in a land disposal facility, spilled, or otherwise released into the environment prior to April 18, 1978, will be presumed to be disposed of in a manner that does not present a risk of exposure and, therefore, does not require further disposal action unless a Regional Administrator makes a finding that such a disposal prior to April 18, 1978 presents a risk of exposure from PCBs. The Regional Administrator may then require the submission of an application for a risk-based disposal approval under §761.61 or §761.62. Liquid PCBs shall not be processed into non-liquid forms to circumvent the high temperature incineration requirements of paragraph (a) of this section. Open burning of PCBs is prohibited. Combustion of PCBs approved under §761.60(a) or (e), or otherwise allowed under part 761 is not open burning. When storage is desired prior to disposal, PCBs at concentrations of 50 ppm or greater shall be stored in a facility which complies with §761.65. Except as authorized in §761.30 or prohibited in §761.20, PCB waste must be disposed of in accordance with the provisions of this subpart. Any person disposing of PCBs is also responsible for determining and complying with all other applicable Federal, State, or local laws or regulations.

(a) * * *

(4) PCB-Contaminated non-liquids may be disposed of in an industrial furnace.

(i) The industrial furnace must comply with the following operating parameters and conditions:

(A) The operating temperature of the hearth must be at least 1,000° C (centigrade) at the time it is charged with any PCB-Contaminated item.

(B) Each charge containing a PCB-Contaminated item must be into molten metal or a hearth at or above 1,000° C.

(C) Successive charges may not be introduced into the hearth in less than 15 minute intervals.

(D) There shall be no visible particulate emissions from the stack during the disposal of a PCB-Contaminated item (as determined by

Method 9 in 40 CFR part 60, Appendix A).

(E) There shall be no visible fugitive particulate emissions or releases of PCBs from the industrial furnace or the building containing the furnace during the disposal of a PCB-Contaminated item (as determined by Method 9 in 40 CFR part 60, Appendix A).

(F) The industrial furnace must have an operational device which accurately measures directly or indirectly, the temperature in the hearth.

(G) A reading of the temperature in the hearth at the time it is charged with a PCB-Contaminated item must be taken, recorded and retained at the facility for 3 years from the date each charge is introduced.

(H) Industrial furnaces must either have received a final permit under the RCRA (40 CFR part 266, subpart H and 40 CFR 270.66) or be operated under a valid State air emissions permit which includes a standard for PCBs.

(I) Industrial furnaces disposing of PCBs must comply with all applicable provisions of subparts J and K of this part as well as other applicable Federal, State, or local laws and regulations.

(ii) In lieu of the requirement in paragraph (a)(4)(i)(H) of this section, upon written request by the owner or operator of an industrial furnace, the EPA Regional Administrator, for the Region where the furnace is located, may make a finding in writing, based on a site-specific risk assessment, that the industrial furnace does not pose an unreasonable risk of injury to health or the environment because it is operating in compliance with the parameters and conditions listed in paragraphs (a)(4)(i)(A), (B), (C), (D), (E), (F), and (G) of this section even though that industrial furnace does not have a RCRA or State air permit as required by this section. The written request shall include a site-specific risk assessment.

(iii) PCB liquids greater than or equal to 50 ppm may not be disposed of in an industrial furnace unless approved or otherwise allowed, under §761.60.

(b) *PCB Articles.* This paragraph does not authorize disposal if that disposal is otherwise prohibited in §761.20 or elsewhere in this part.

(1) * * *

(i) * * *

(B) In a chemical waste landfill which complies with §761.75; Provided, That the transformer is first drained, for at least 48 continuous hours, of all free flowing liquid, filled with a solvent, allowed to stand for at least 18 continuous hours, and then drained thoroughly. PCB liquids, which include both the dielectric fluid and solvents used as a flush, that are removed from

the transformer shall be disposed of in accordance with paragraph (a)(1) of this section. Solvents may include kerosene, xylene, toluene and other solvents in which PCBs are readily soluble. Precautionary measures should be taken, however, that the solvent flushing procedure is conducted in accordance with applicable safety and health standards as required by Federal or State regulations.

* * * * *

(2) * * *

(iv) Any PCB Small Capacitor owned by any person who manufactures or at any time manufactured PCB Capacitors or PCB Equipment and acquired the PCB Capacitor in the course of such manufacturing shall be placed in a Department of Transportation authorized container and disposed of in accordance with either of the following:

* * * * *

(vi) Prior to disposal in a §761.75 chemical waste landfill, all large PCB capacitors, and all small PCB capacitors described in paragraph (b)(2)(iv) of this section, shall be placed in a container meeting DOT packaging specifications. In all cases, interstitial space in the container shall be filled with sufficient absorbent material (such as soil) to absorb any liquid PCBs remaining in the capacitors.

(vii) Any person may dispose of less than 25 intact and non-leaking fluorescent light ballasts containing PCBs within a 1-year time period starting from the date when the first fluorescent light ballast was removed in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units). Disposal of PCBs as municipal or industrial solid waste is subject to the CERCLA reportable quantity requirements at 40 CFR 302.6. The disposal of fluorescent light ballasts as PCB Equipment is subject to the restrictions of paragraph (b)(2)(iv) of this section.

(3) *PCB hydraulic machines.* PCB hydraulic machines containing PCBs at concentrations of 50 ppm or greater, such as die casting machines, may be disposed of in a facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units) or by salvage in an industrial furnace, as defined in §761.3, operating in compliance with the requirements of paragraph (a)(4) of this section, or a disposal facility approved under this part, provided that the machines are drained of all free-flowing liquid and the liquid is disposed of in

accordance with the provisions of paragraph (a) of this section. If the PCB liquid contains 1,000 ppm PCB or greater, then the hydraulic machine must be flushed prior to disposal with a solvent containing less than 50 ppm PCB using transformer solvents listed at paragraph (b)(1)(i)(B) of this section and the solvent must be disposed of in accordance with paragraph (a) of this section.

(4) *PCB-Contaminated Electrical Equipment.* All PCB-Contaminated Electrical Equipment, except capacitors, shall be disposed of by draining all free flowing liquid from the electrical equipment for a period of not less than 48 hours and disposing of the drained liquid in accordance with paragraph (a)(2) or (a)(3) of this section. The drained PCB-Contaminated Electrical Equipment, including liquid remaining after draining in accordance with this paragraph, shall be disposed of in a facility which is permitted, licensed or registered by a State to manage municipal or industrial solid wastes (excluding thermal treatment units), an industrial furnace, as defined in §761.3, operating in compliance with the requirements of §761.60(a)(4), or a disposal facility approved under this part. Capacitors that contain between 50 ppm and less than 500 ppm PCBs shall be disposed of in an approved incinerator that complies with §761.70 or in a chemical waste landfill that complies with §761.75 or by an alternate destruction method approved under paragraph (e) of this section.

(5) *Natural gas pipeline containing PCBs.* This paragraph provides for disposal of natural gas pipeline by: abandonment in place or removal with subsequent action. The PCB concentrations in pipelines shall be determined by measuring condensate collected at existing condensate collection/removal points. When no condensate or free-flowing liquid is present, surface level concentrations shall be measured. Organic and aqueous condensate liquids shall be separated by decantation and the components separately analyzed using EPA Method 8080 of SW-846 which is available from NTIS, or equivalent.

(i) *Abandonment.* Natural gas pipeline containing PCBs may be abandoned in place under one of the following provisions:

(A) Natural gas pipeline containing PCBs at any concentration, with no free flowing liquids and having an inside diameter less than or equal to 4 inches, may be abandoned in the place it was used to transport natural gas if the pipeline is either:

(1) Sealed closed at each end and the pipe is included in a public service notification program, such as a "one-call" system under 49 CFR 192.614(a) and (b); or

(2) Filled to 50 percent of the volume of the pipe with grout (such as a hardening slurry consisting of cement, bentonite, or clay) or high density polyurethane foam, and each end is sealed in place.

(B) PCB-Contaminated natural gas pipeline of any diameter may be abandoned in the place it was used to transport natural gas if it contains no free flowing liquids and each end is sealed closed.

(C) Natural gas pipeline of any diameter which contains PCBs may be abandoned in the place it was used to transport natural gas if:

(1) It contains no free flowing liquids.

(2) The interior surface is cleaned using a single wash of diesel fuel with a recovery of 95 percent of the volume introduced into the system for washing and less than 50 ppm PCB in the recovered wash, or the pipeline is filled to 50 percent of its volume with grout (such as a hardening slurry consisting of cement, bentonite, or clay) or high density polyurethane foam.

(3) Each end is sealed closed.

(D) A section of natural gas pipeline containing PCBs at any concentration, but containing no free flowing liquids and located under rivers or streams, paved highways, parking lots, sidewalks, permanent buildings not associated with the pipeline; or under the adjoining rights-of-way or in rights-of-way shared with municipal drinking water mains, municipal sewer systems, telephone utilities, or electric utilities, may be abandoned in the place it was used to transport natural gas if the section is filled to 50 percent of the volume of the pipe with grout (such as a hardening slurry-like cement, bentonite, or clay) or high density polyurethane foam (except that only cement shall be used as grout under rivers or streams) and each end is sealed closed.

(ii) *Removal with subsequent action.* PCB containing natural gas pipeline, when no longer in use, shall be removed from service and disposed of under one of the following provisions unless abandoned under paragraph (b)(5)(i) of this section:

(A) The following classifications of natural gas pipeline containing no free flowing liquids may be disposed of in a facility permitted, licensed or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units); an industrial furnace, as defined in §761.3, and

operating in compliance with the requirements of paragraph (a)(4) of this section; or a disposal facility approved under this part:

(1) PCB-Contaminated natural gas pipeline where the PCB concentration was determined prior to or during removal.

(2) Natural gas pipeline containing PCBs at any concentration and having an inside diameter less than or equal to 4 inches.

(B) Natural gas pipeline containing PCBs at any concentration may be disposed of under one of the following provisions in addition to the disposal options in paragraph (b)(5)(i)(A) of this section:

(1) In an incinerator that complies with §761.70.

(2) In a chemical waste landfill that complies with §761.75, provided that all free flowing liquid PCBs have been thoroughly drained from the pipe.

(3) By an alternate disposal technology approved under paragraph (e) of this section.

(4) As a PCB non-remediation waste in compliance with §761.62.

(5) Decontaminated in accordance with the standards and procedures of §761.79.

(iii) *Characterization of pipe by PCB concentration in condensate.* (A) All PCB containing liquids removed from a segment of natural gas pipeline must be disposed of in accordance with paragraph (a) of this section based on their PCB concentration at the time of removal from the pipe.

(B) For purposes of demonstrating compliance with paragraphs (b)(5)(i) and (b)(5)(ii) of this section, a segment of natural gas pipeline must be characterized for PCB contamination by analyzing liquids found in the segment, or by standard wipe samples according to Appendix I of this part.

(6) * * *

(ii) PCB-Contaminated Articles must be disposed of by draining all free flowing liquid, for at least 48 continuous hours, from the article, disposing of the liquid in accordance with paragraph (a)(2) or (a)(3) of this section and disposing of the drained PCB-Contaminated Articles in a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units), an industrial furnace as defined in §761.3 operating in compliance with the requirements of paragraph (a)(4) of this section, or a disposal facility approved under this part.

(iii) PCB-Contaminated Articles which are not in contact with liquid PCBs, such as non-porous surfaces

including, but not limited to, ship and submarine hulls, air handling systems and other articles which can be characterized by a standard wipe test, as defined in §761.123, may be disposed of in a facility permitted, licensed or registered by a State to manage municipal or industrial solid waste (excluding thermal treatment units), an industrial furnace operating in compliance with the requirements of paragraph (a)(4) of this section, or other disposal facility approved under this part. Anyone with access to, or in direct contact with, surfaces contaminated with PCBs at levels of 10 to less than 100 micrograms PCB/100 square centimeters must be protected from dermal exposure to those surfaces.

* * * * *

(e) Any person who is required to incinerate any PCBs and PCB Items under this subpart and who can demonstrate that an alternative method of destroying PCBs and PCB Items exists and that this alternative method can achieve a level of performance equivalent to §761.70 incinerators or high efficiency boilers as provided in paragraphs (a)(2)(iii) and (a)(3)(iii) of this section, may submit a written request to either the Regional Administrator for the Region in which disposal will take place or the Director, Chemical Management Division for an exemption from the incineration requirements of §761.70 or this paragraph. Requests for approval of alternate methods that will be operated in more than one Region must be submitted to the Director, Chemical Management Division except for research and development involving less than 500 pounds of PCB material (see paragraph (i)(2) of this section). Requests for approval of alternate methods that will be operated in only one Region must be submitted to the appropriate Regional Administrator. The applicant must show that its method of destroying PCBs will not present an unreasonable risk of injury to health or the environment. On the basis of such information and any other available information, the Regional Administrator or the Director, Chemical Management Division may, in his or her discretion, approve the use of the alternate method if he or she finds that the alternate disposal method provides PCB destruction equivalent to disposal in a §761.70 incinerator or a §761.60 high efficiency boiler and will not present an unreasonable risk of injury to health or the environment. Any approval must be stated in writing and may contain such conditions and provisions as the Regional

Administrator or Director, Chemical Management Division deems appropriate. The person to whom such waiver is issued must comply with all limitations contained in such determination. Written approval to use the alternate method of destroying PCBs or PCB Items must be obtained from the appropriate EPA official prior to any use of the method to dispose of PCB waste.

(g) ***

(1) ***

(iii) Unless otherwise specified in these rules, the chemical analysis of PCBs shall be conducted using gas chromatography. There are several gas chromatographic methods that may be used depending on the material being analyzed. For that reason, there is no requirement to use a specific gas chromatography procedure. Applicable procedures include, but are not limited to, EPA Method 608, "Organochlorine Pesticides and PCBs" at 40 CFR part 136, Appendix A"; EPA Method 8080, "Organochlorine Pesticides and PCBs" of SW-846, "OSW Test Methods for Evaluating Solid Waste" which is available from NTIS and ASTM Standard D-4059, "Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography" which is available from the American Society for Testing and Materials (ASTM, 1916 Race Street, Philadelphia, PA 19103).

(2) ***

(iii) Unless otherwise specified in these rules, the chemical analysis of PCBs shall be conducted using gas chromatography. There are several gas chromatographic methods that may be used depending on the material being analyzed. For that reason, there is no requirement to use a specific gas chromatography procedure. Applicable procedures include the procedures indicated in paragraph (g)(1)(iii) of this section.

(i) ***

(2) Except for activity authorized under paragraph (j) of this section, research and development (R&D) for PCB disposal using a total of less than 500 pounds of PCB material (regardless of PCB concentration) will be reviewed and approved by the EPA Regional Administrator for the Region where the R&D will be conducted and R&D for PCB disposal using 500 pounds or more of PCB material (regardless of PCB concentration) will be reviewed and approved by the Director, Chemical Management Division.

(j) *Self-implementing requirements for research and development (R&D) for PCB disposal.* R&D for PCB disposal includes demonstrations for commercial PCB disposal approvals, pre-demonstration tests, tests of major modifications to approved PCB disposal technologies, treatability studies for approved PCB disposal technologies, development of new disposal technologies, and research on environmental transformation processes such as biodegradation. R&D for PCB disposal activities authorized in this section do not include research or analysis for the development of any PCB product or the R&D activities authorized in §761.30(j).

(1) R&D for PCB disposal may be conducted without prior written approval from EPA if the following conditions are met:

(i) A notification is filed and an EPA identification number is obtained pursuant to subpart K of this part.

(ii) The EPA Regional Administrator for the Region in which the R&D for PCB disposal activity will occur is notified in writing at least 30 days prior to the commencement of any R&D for PCB disposal activity conducted under this section. Each written notification shall include the EPA identification number of the site where the R&D for PCB disposal activities will be conducted, the quantity of PCBs to be treated, the type of R&D technology to be used, the general physical and chemical properties of material being treated, and an estimate of the duration of the PCB activity.

(iii) The amount of material containing PCBs treated annually by the facility during R&D for PCB disposal activities does not exceed 500 gallons of liquid or 70 cubic feet of non-liquid PCBs and does not exceed a maximum concentration of 10,000 ppm PCBs.

(iv) No more than 1 kilogram total of pure PCBs per year is disposed of in all R&D for PCB disposal activities at a facility.

(v) Each R&D for PCB disposal activity under this section shall be limited to no more than one calendar year.

(vi) All PCB wastes (treated and untreated PCB materials, testing samples, spent laboratory samples, residuals, untreated samples, contaminated media or instrumentation, clothing, etc.) shall be stored in compliance with the storage requirements of §761.65(b) and shall be disposed of according to concentration of PCBs prior to treatment. Only PCB materials not treated in the R&D for PCB disposal activity may be returned to the site of generation.

(vii) Manifests are used for all R&D PCB wastes being transported from the R&D for PCB disposal facility to an approved PCB storage or disposal facility. However, no manifests are required if the residuals or treated samples are returned to the site of generation.

(viii) All PCB wastes are packaged and shipped pursuant to DOT requirements.

(ix) All facilities that conduct R&D for PCB disposal must comply with all applicable requirements of this part, including the recordkeeping requirements of §761.180, the storage and disposal requirements of subpart D of this part.

(x) Material limitations set out in paragraphs (j)(1)(iii) and (iv) of this section and the time duration limitation set out in paragraph (j)(1)(v) of this section shall not be exceeded without prior written approval from EPA. Requests for approval to exceed the material limitations for PCBs in R&D for PCB disposal activities as defined in this section must be submitted in writing to the Regional Administrator for the Region in which the facility conducting R&D for PCB disposal activities is located. Each request shall specify the quantity or concentration requested or additional time needed for disposal and include a justification for each increase. For extensions to the duration of the R&D for PCB disposal activity, the request shall also include a report on the accomplishments and progress of the previously authorized R&D for PCB disposal activity for which the extension is sought. The Regional Administrator may require the requestor to obtain an R&D approval according to the requirements in paragraphs (e) and (i)(2) of this section, or §§761.70(a) or (b); or the Regional Administrator may grant a waiver in writing for an increase in the volume of PCB material, the maximum concentration of PCBs, the total amount of pure PCBs, or the duration of the R&D activity. Approvals shall be in writing and signed by the Regional Administrator. Approvals will state all requirements applicable to the R&D for PCB disposal activity.

(2) At any time the Regional Administrator for the Region in which an R&D for PCB disposal activity is conducted may make the determination under this section that a R&D PCB disposal approval under paragraphs (e) and (i)(2) of this section, or §§761.70(a) or (b) is required to conduct a specific R&D PCB disposal activity to ensure that any R&D for PCB disposal activity does

not present an unreasonable risk of injury to health or the environment.

11. By adding §§761.61, 761.62, 761.63, and 761.64 to subpart D to read as follows:

§761.61 PCB remediation waste.

PCB remediation waste shall be removed or otherwise disposed of in accordance with one of the options in paragraphs (a) through (c) of this section. Any person disposing of PCBs is also responsible for determining and complying with all other applicable Federal, State, and local laws and regulations.

(a) *Self-implementing site remediation.* Where applicable, the cleanup and disposal of PCB remediation waste may be conducted in accordance with the following requirements without a written approval from EPA.

(1) *Applicability.* The self-implementing remediation provisions do not apply to the following:

(i) Spills which result in direct contamination of:

(A) Surface and ground waters.

(B) Sediments in lakes, ponds, rivers, or streams.

(C) Sewers and sewage treatment systems.

(D) Any private or public drinking water sources or distribution systems.

(E) Grazing lands.

(F) Vegetable gardens.

(G) Areas having human populations (such as residential dwellings, hospitals, schools, nursing homes, playgrounds, parks, and day care centers) and animal populations (such as endangered species habitats, estuaries, wetlands, National Parks, National Wildlife Refuges, and commercial and sport fisheries) which might have a higher sensitivity to the toxic effects of PCBs.

(ii) PCBs which migrated to and contaminated any site described in paragraph (a)(1)(i) of this section prior to completion of the remediation of the site.

(iii) Any site that:

(A) Appears on the Comprehensive Environmental Response, Compensation, and Liability Act's (Superfund) National Priorities List at 40 CFR part 300 Appendix B.

(B) Is currently the subject of a permitting action under Subtitle C of the Resource Conservation and Recovery Act or approval under this part, or cleanup conducted under subpart G of this part.

(C) Is currently the subject of any enforcement action under any statute administered by EPA.

(2) *Notification.* (i) At least 30 days prior to the date for beginning the

remediation of a site, the person in charge of the remediation or the owner of the property where the spill is located shall notify, in writing, the appropriate Regional Administrator, the appropriate State environmental protection agency, and the appropriate county or local environmental protection agency where the remediation will be conducted of:

(A) The nature and extent of the contamination, including kinds of materials contaminated.

(B) The procedures used to sample contaminated and adjacent areas; PCB concentrations measured in each sample.

(C) The location and supposed extent of the contaminated area (including maps); and proposed remediation options for contaminated materials. Anyone conducting a remediation activity under this section may obtain a waiver of the 30-day notification requirement. To do so, they must receive a separate waiver in writing, from each of the three agencies they are required to notify under this section. The original written waiver shall be retained as required in paragraph (a)(3) of this section.

(ii) The owner of the property where the PCB remediation site is located and the party responsible for field remediation activities:

(A) Both parties shall sign and submit in writing to the Regional Administrator a certificate stating that they have on file certain documents including all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the remediation site.

(B) Shall use a sampling frequency for the remediation site characterization at least as comprehensive as that required in Appendix II of this part for verifying the completeness of the site remediation. There are no other requirements for site assessment or site characterization.

(C) May use PCB field screening tests as defined in §761.3 for characterization of PCB remediation waste under the following conditions. If both of the following requirements cannot be met, PCB field screening tests shall not be used for purposes of characterization of PCB remediation wastes through self-implementing site remediation (paragraph (a) of this section), and, at a minimum, gas chromatography with an electron capture detector (GC/EC) shall be used for analyzing for the presence and concentration of PCBs.

(1) A comparison study, using an appropriate gas chromatography (GC)

analytical procedure such as EPA Method 8080 or 8280 to analyze the PCB remediation wastes, shows that there are no materials present in the PCB remediation waste which would interfere with the screening test. (For purposes of this section, interfering with the PCB field screening test means that for the analysis of at least three samples having PCB levels greater than 10 ppm, the PCB concentration reported by the PCB field screening test is no less than 75 percent of the PCB concentration reported GC method for the same sample.)

(2) At a minimum, 25 percent of all PCB remediation waste samples taken shall be confirmed by EPA Method 8080 or equivalent. For PCB field screening tests analyzing fewer than 40 PCB remediation waste samples, at least 10 confirmation analyses are required. Confirmation analyses shall be performed on at least one sample from each different type of PCB remediation waste material (for example: soil, sludge, and/or sediment) at each site at a facility, even if this means more than 10 analyses.

(3) *Recordkeeping.* For paragraphs (a)(4) and (5) of this section, recordkeeping is required in accordance with §761.125(c)(5).

(4) *On-site cleanup and disposal of PCB remediation waste.* For purposes of cleaning or decontaminating PCB remediation waste under this section there are two general categories of waste: bulk PCB remediation waste (everything other than non-porous surfaces, such as: soil, sediments, dredged materials, debris, muds, municipal sludge, industrial sludge, and porous surfaces) and non-porous surfaces. Sampling for the verification of the cleanup of the PCB remediation wastes shall be in accordance with Appendix II of this part. Interim sampling during on-going cleanup may use PCB screening tests to determine when to take samples to verify that cleanup is complete. Requirements for the use of the PCB screening tests for this interim sampling are the same as for site characterization in paragraphs (a)(2)(ii)(B) of this section.

(i) *High exposure areas—*(A) *Bulk PCB remediation waste.* The cleanup level for bulk PCB remediation waste in high exposure areas is less than or equal to 1 ppm except as otherwise noted below. Cleanup of bulk PCB remediation waste in high exposure areas shall be accomplished by one or more of the following:

(1) Remove and dispose of all bulk PCB remediation wastes at concentrations greater than 1 ppm.

(2) Remove all bulk PCB remediation wastes at concentrations greater than 10 ppm and place a clean (less than 1 ppm PCBs) soil cover of a uniform thickness of a minimum of 25 centimeters (10 inches) over the site where PCBs remain in excess of 1 ppm. A cap of other clean non-porous material, such as concrete or asphalt at a minimum uniform thickness of 15 centimeters (6 inches) may be used in place of the clean soil cover.

(3) (i) Extract PCBs from PCB remediation wastes with a solvent extraction process where: A non-chlorinated solvent is used; the solvent extraction process occurs at ambient temperature; the extraction process is not exothermic; and no external heat is used for the extraction process.

(ii) The extraction process shall have secondary containment to prevent any solvent from being released to the underlying or surrounding soils or surface waters.

(iii) Solvent disposal, recovery, and/or reuse shall be in accordance with relevant provisions in paragraphs (b)(1) and (c) of this section and other applicable Federal, State, or local laws or regulations.

(iv) PCB remediation waste treated using a non-thermal extraction process according to paragraphs (a)(4)(i)(A)(3)(i) through (iii) of this section and left on site shall have residual levels of: Less than or equal to 1 ppm as in paragraph (a)(4)(i)(A)(1) of this section. Less than or equal to 10 ppm, and a clean (less than 1 ppm PCBs) soil cover of a minimum uniform thickness of 25 centimeters (10 inches) placed over the site where PCBs remain in excess of 1 ppm. A cap of other clean impervious material, such as concrete or asphalt at a minimum uniform thickness of 15 centimeters (6 inches) may be used in place of the clean soil cover as in paragraph (a)(4)(i)(A)(2) of this section.

(v) If the treatment process in paragraph (a)(4)(i)(A)(3)(i) through (a)(4)(i)(A)(3)(iii) of this section does not meet the measurement-based objectives required in paragraph (a)(4)(i)(A)(1) or (a)(4)(i)(A)(2) of this section, then the treated material shall be disposed of based on its existing concentration in accordance with the disposal requirements of paragraph (b) or paragraph (c) of this section.

(4)(i) Bulk PCB remediation waste may be microencapsulated or vitrified on-site. Microencapsulated PCB remediation waste must be homogenous to the point that it has no free liquid component as measured by Method 9095 (Paint Filter Liquids Test) as described in SW-846 "Test Methods for Evaluating Solid Wastes, Physical/

Chemical Methods" which is available from NTIS.

(ii) The standard for treatment of PCB remediation wastes where the PCBs have been microencapsulated or vitrified is less than 50 micrograms PCBs per liter as measured by the Toxicity Characteristic Leaching Procedure (TCLP), 40 CFR part 261, Appendix II, Method 1311.

(iii) Microencapsulated or vitrified PCB remediation waste not exhibiting the toxicity characteristic (i.e., TCLP concentration less than 50 µg/l PCB) shall be disposed of at an off-site facility according to paragraph (a)(5)(i)(B)(2) or (3) of this section.

(B) *Non-porous surfaces.* Non-porous surfaces shall be decontaminated in accordance with §761.79.

(ii) *Low exposure areas—(A) Bulk PCB remediation waste.* The cleanup level for low exposure areas is less than or equal to 25 ppm unless otherwise specified in this paragraph. Cleanup of bulk PCB remediation waste in low exposure areas shall be accomplished by one or more of the following:

(1) Remove and dispose of all materials at concentrations equal to or greater than 25 ppm PCB.

(2) Remove and dispose of all materials equal to or greater than 50 ppm PCB if the area is secured by a fence and a sign including the ML.

(3) Remove all materials greater than 100 ppm PCB and place a clean (less than 1 ppm PCBs) soil cover of a uniform thickness of a minimum of 25 centimeters (10 inches) over the site where PCBs remain in excess of 25 ppm. A cap of other clean impervious material, including concrete or asphalt at a minimum uniform thickness of 15 centimeters (6 inches) may be used in place of the clean soil cover.

(4)(i) Bulk PCB remediation waste may be disposed of onsite using a solvent extraction process where: A non-chlorinated solvent is used; the solvent extraction process occurs at ambient temperature; the extraction process is not exothermic; and no external heat is used for the extraction process.

(ii) The extraction process shall have secondary containment to prevent any solvent from being released to the underlying or surrounding soils and surface water.

(iii) Solvent disposal, recovery, and/or reuse shall be in accordance with relevant provisions in paragraphs (b)(1) and (c) of this section, and other applicable Federal, State, or local laws or regulations.

(iv) PCB remediation waste treated using a non-thermal extraction process according to paragraph (a)(4)(ii)(A)(4)(i)

through (a)(4)(ii)(A)(4)(iii) of this section and left on site shall have residual levels of: Less than or equal to 25 ppm as in paragraph (a)(4)(ii)(A)(1) of this section; less than or equal to 50 ppm, and the area shall be secured by a fence, and a sign, including the ML shall be posted, as in paragraph (a)(4)(ii)(A)(2) of this section; or to less than or equal to 100 ppm PCB, and a clean (less than 1 ppm PCBs) soil cover of a minimum uniform thickness of 25 centimeters (10 inches) placed over the site where PCBs remain in excess of 25 ppm. A cap of other clean impervious material, such as concrete or asphalt at a minimum uniform thickness of 15 centimeters (6 inches) may be used in place of the clean soil cover as in paragraph (a)(4)(ii)(A)(3) of this section.

(v) If the treatment process in paragraph (a)(4)(ii)(A)(4)(i) through (a)(4)(ii)(A)(4)(iii) of this section does not meet the measurement-based objectives required in paragraphs (a)(4)(ii)(A)(1), (a)(4)(ii)(A)(2), or (a)(4)(ii)(A)(3) of this section, then the treated material shall be disposed of off-site based on its existing concentration according to paragraphs (b)(2) and (c) of this section.

(5)(i) Bulk PCB remediation waste may be microencapsulated or vitrified on-site. Microencapsulated PCB remediation waste must be homogenous to the point that it has no free liquid component as measured by Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" which is available from NTIS.

(ii) The standard for treatment of PCB remediation wastes where the PCBs have been microencapsulated or vitrified is less than 50 micrograms PCB per liter as measured by the Toxicity Characteristic Leaching Procedure (TCLP), 40 CFR part 261, Appendix II, Method 1311.

(iii) Microencapsulated or vitrified PCB remediation waste not exhibiting the Toxicity Characteristic (i.e., TCLP concentration less than 50 µg/l PCB) shall be disposed of at an off-site facility according to paragraph (a)(5)(i)(B)(2) or (3) of this section.

(B) *Non-porous surfaces.* Non-porous surfaces shall be decontaminated in accordance with §761.79 or disposed of in a facility with a disposal approval under this part.

(C) *Change in land use for a remediation site.* Where there is an actual or proposed change in use of an area cleaned up under paragraph (a)(4)(ii) of this section, and the exposure of people or animal life in or at that area is expected to increase

resulting in a change in status from a low exposure area to a high exposure area, the owner of the area shall clean up the area in accordance with the high exposure area PCB remediation waste cleanup requirements in paragraph (a)(4)(i) of this section.

(iii) *Cap requirements.* Caps shall comply with the permeability, sieve, liquid limit, and plasticity index parameters in §761.75(b)(1)(ii) through (b)(1)(v). Caps shall be designed and constructed according to §264.310(a) of this chapter. In the case of a concrete or asphalt cap, the cap shall be of sufficient strength to maintain its effectiveness and integrity during the use of the cap surface which is exposed to the environment. A cap shall not be contaminated at a level ≥ 1 ppm PCB per Aroclor® (or equivalent) or per congener. Caps shall be visually inspected monthly for breaches such as leaks, cracks, breaks, and faults. Repairs shall begin within 48 hours of discovery for any breaches which would impair the integrity of the cap.

(iv) *Deed restrictions for caps and fences.* When a remedial activity, under this section, includes the use of a fence or a cap, the fence or cap must be maintained by the owner of the site, in perpetuity.

(A) Within 30 days of completion of a remedial activity under this section, a notice of the existence of the fence or cap and the requirement to maintain the fence or cap under paragraph (a) of this section shall be placed on the deed for the property by the owner of the site. Upon request by EPA, a copy of any notice required by this paragraph shall be sent to the EPA Regional Administrator, within 60 days of completion of a remedial activity under this section.

(B) The owner of a site being remediated under this section may remove a fence or cap after conducting additional remediation activities and achieving cleanup levels, specified in this section, which do not require a cap or fence.

(C) The notice on the deed shall be removed from the deed no earlier than 30 days after achieving the cleanup levels specified in this section which do not require a fence or cap.

(v) Wastes generated from the cleanup of PCB remediation waste shall be disposed or may be reused as follows:

(A) Non-liquid cleaning materials and personal protective equipment waste shall be disposed of in accordance with paragraph (a)(5)(ii) of this section.

(B) Cleaning solvents, abrasives, and equipment may be reused for the same purpose and shall be disposed of according to §761.79(a)(1).

(vi) Written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction Method 3540 in SW-846 and using the extraction solvent toluene/methanol (option 5.4.1.1) then followed by chemical analysis using Method 8080 in SW-846, which is available from NTIS), must be provided at least 15 days in advance of shipment from the generator, to any facility receiving PCB non-remediation waste pursuant to paragraphs (a)(4)(i)(A)(4)(iii) and (a)(4)(ii)(A)(5)(iii) of this section.

(5) *Off-site disposal of PCB remediation waste.* PCB remediation waste may be disposed of either at the site which is being remediated (on-site) or at another site (off-site) as otherwise allowed under §761.60 through §761.62. Destruction and containment of PCB remediation waste may be accomplished outside of this self-implementing site remediation provision (paragraph (a) of this section) so long as the destruction and containment has been approved according to paragraph (b) or (c) of this section.

(i) *Bulk, non-liquid material.* Bulk, non-liquid PCB remediation waste shall be disposed of off-site according to its existing concentration as follows:

(A) PCB remediation wastes containing water which can be separated or removed, such as sediments, dredged materials, muds, municipal sludges, and industrial sludges, shall be dewatered onsite and the water filtered to remove PCBs. Non-liquid filter materials must be disposed of as non-liquid PCBs according to their existing concentration or based on an assumed concentration greater than 500 ppm PCBs. Removed water shall be discharged to a facility operating under a Federal or State permit to accept water at a specified concentration of PCBs or to discharge PCBs in treated water. The dewatered PCB materials shall be disposed of according to paragraph (a)(5)(i)(B) of this section.

(B) Non-liquid PCBs shall be disposed of as follows based on its existing concentration:

(1) PCB remediation wastes with a PCB concentration of less than 50 ppm may be disposed of in any facility permitted, licensed, or registered by a State as a municipal or industrial solid waste landfill, a RCRA Subtitle C Landfill or a disposal facility approved under this part.

(2) PCB remediation wastes with a PCB concentration of less than 500 ppm may be disposed of in a RCRA Subtitle C landfill or a disposal facility approved under this part.

(3) PCB remediation wastes with a PCB concentration of 500 ppm and

greater may be treated using the solvent extraction process described in paragraph (a)(4)(i)(A)(3)(i) through (a)(4)(i)(A)(3)(iii) of this section to less than 50 ppm and then disposed of based on the post-treatment PCB concentration according to paragraph (a)(5)(i)(A)(2)(i), or treated to less than 500 ppm and disposed of according to paragraph (a)(5)(i)(A)(2)(ii) of this section. If the treatment process does not reduce the PCB levels in the bulk PCB remediation waste to less than 500 ppm, then the treated bulk PCB remediation waste shall be disposed of off-site based on its existing concentration according to paragraph (b)(1) or (c) of this section and other Federal, State or local laws or regulations.

(C) Written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction Method 3540 in SW-846, which is available from NTIS), must be provided at least 15 days in advance of shipment from the generator, to any off-site facility receiving bulk non-liquid PCB non-remediation waste.

(ii) *Other non-liquid materials.* Other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from site remediation activities, shall be disposed of off-site according to paragraph (a)(5)(i)(B)(1) of this section.

(6) *Duty to comply.* Any person conducting a remedial action under paragraph (a) of this section must fully comply with each requirement and limitation of paragraph (a) or any addition to paragraph (a) subsequently approved under paragraph (c) of this section.

(b) *Performance-based disposal.* (1) Liquid PCB remediation waste shall be disposed of according to §761.60(a)(1), (a)(2) or (a)(3) or §761.60(e) as applicable.

(2) Non-liquid PCB remediation waste shall be disposed of in a high temperature incinerator approved according to the requirements of §761.70(b), or, according to an alternate destruction method approved according to the requirements of §761.60(e), or a chemical waste landfill approved according to the requirements §761.75.

(c) *Risk-based disposal approval.* Applications for cleanup and disposal of PCB remediation waste in a manner other than prescribed in paragraph (a) or (b) of this section must be made in writing to the Regional Administrator in the Region in which the PCB remediation wastes are located. Applications for the addition of a process, procedure, or technology to paragraph (a) of this section must be

made in writing, to the Director, Chemical Management Division. Each application must contain information that, based on technical, environmental, and other considerations, indicates that the proposed cleanup levels, storage and disposal methods will not pose an unreasonable risk of injury to health and the environment. The EPA may request other information that it believes to be necessary for an evaluation of the proposed site remediation or waste management method(s) including assessment of site conditions; general risk posed by the process, procedure or technology; and analysis of the proposed alternative. In approving a disposal method for PCB remediation wastes, EPA may consider:

(1) The risk factors associated with the waste.

(2) The risk factors associated with the proposed waste management option such as the safety, reliability, and effectiveness (including the potential for concentration and volume reduction, waste minimization, long- and short-term effectiveness, permanence, technical feasibility, and availability) of the proposed waste management options.

(3) Other applicable Agency guidelines, criteria, and regulations to ensure that any treatment residues or discharges of remediation wastes that contain PCBs and other contaminants are adequately controlled to protect the environment. The EPA may also specify and approve access or use restrictions and other monitoring, institutional controls or notice requirements when PCB remediation wastes or PCB Items remain at the site.

(d) *Other requirements.* Other requirements of a risk-based disposal approval that must be followed are:

(1) The person to whom such approval is issued must comply with all conditions and limitations contained in the approval.

(2) Any approval by the EPA shall be in writing; it shall contain EPA's findings, the reason for the approval, the approval conditions, and may contain any appropriate limitations on the approved cleanup and method(s) for disposal of PCB remediation waste.

(3) Any approval by EPA for the addition of a process, procedure, or technology to paragraph (a) of this section shall be in writing, and may contain specific conditions and limitations as the EPA deems appropriate to protect health and the environment.

(e) Remediation activities conducted under paragraph (c) of this section shall not commence prior to written approval by EPA.

§761.62 Disposal of PCB non-remediation waste.

Any person disposing of PCBs is also responsible for determining and complying with all other applicable Federal, State, or local laws or regulations. PCB non-remediation waste shall be disposed of:

(a) *Performance-based disposal.* (1) In an incinerator which complies with §761.70.

(2) In a chemical waste landfill which complies with §761.75.

(b) *Leachability-based disposal.* (1) In a facility permitted, licensed, or registered by a State as a municipal or industrial solid waste landfill if the concentration of PCBs in a representative sample of the PCB non-remediation waste is less than 50 micrograms per liter as measured by the Toxicity Characteristic Leaching Procedure (TCLP), 40 CFR part 261, Appendix II, Method 1311. The representative sample shall be collected according to the procedures in Appendix III of this part.

(2) PCB non-remediation waste shall be sampled in accordance with the procedures specified in Appendix III of this part. Alternate sampling plans and procedures shall be used only after being approved in writing by EPA as part of a disposal application under paragraph (c) of this section.

(3) Written notice, including the quantity to be shipped and highest concentration of PCBs (using extraction Method 3540 in SW-846 and using the extraction solvent toluene/methanol (option 5.4.1.1) and followed by chemical analysis using Method 8080 in SW-846, available from NTIS), must be provided at least 15 days in advance of shipment from the generator, to any facility receiving PCB nonremediation waste pursuant to paragraph (b)(1) of this section.

(4) The applicable recordkeeping provisions of §761.180 must be adhered to with regard to all sampling and analysis of PCBs under this section.

(c) *Risk-based disposal approval.* (1) Upon written application, PCB non-remediation waste shall be disposed of using a disposal method or at a location approved by the Regional Administrator for the Region in which the disposal will occur. Applications for disposal of PCB non-remediation waste in a manner other than prescribed in paragraph (a) or (b) of this section must be made in writing to the Regional Administrator. The application must contain information that, based on technical, environmental, or waste-specific characteristics or considerations, indicates that the proposed storage and disposal methods or location will not

pose an unreasonable risk of injury to health or the environment. The Regional Administrator may request other information that he or she believes to be necessary for an evaluation of the alternate disposal method. In approving a disposal method or location for non-remediation wastes, the Regional Administrator may consider:

(i) The ability of the proposed method or location of disposal to destroy PCBs or isolate PCBs from the environment.

(ii) The environmental sensitivity of the proposed disposal site for any proposed land disposal of treated or untreated PCB non-remediation wastes.

(iii) Other applicable Agency guidelines, criteria, and regulations to ensure that the wastes are adequately controlled to protect the environment.

(2) Any risk-based disposal approval by the Regional Administrator shall be in writing, may contain any appropriate limitations on the approved method or location for disposal, and may impose PCB source identification and other requirements to control the level and variability of contamination in the waste stream.

(3) The person to whom such risk-based disposal approval is issued must comply with all conditions and limitations contained in the approval.

§761.63 Household waste disposal.

Household waste as defined at §761.3 may be disposed of in a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste or in an industrial furnace as defined in §761.3 and operated in compliance with the requirements of §761.60(a)(4).

§761.64 Disposal of wastes generated as a result of the chemical analysis of PCBs.

This section provides disposal requirements for wastes generated at a chemical analysis laboratory during the process of the analysis of samples containing PCBs. For determining the presence of PCBs in samples, chemical analysis includes: sample preparation, sample extraction, extract cleanup, extract concentration, addition of PCB standards, and instrumental analysis. These wastes may be regulated for disposal under other applicable Federal, State, and local laws or regulations.

(a) Portions of samples extracted for purposes of determining the presence of PCBs or concentration of PCBs are unregulated for purposes of PCB disposal.

(b) Aqueous rinse solvents may be filtered through charcoal filters, the filters disposed of as non-liquid PCBs according to §761.62, and the filtered water disposed of according to §761.79(a) and (h).

(c) Non-liquid wastes which do not exceed a volume of 54 cubic feet or a weight of 1,000 kg per year are regulated for disposal according to §761.61(a)(5)(i)(B)(1). Additional quantities of this waste may be decontaminated according to §761.79 or disposed of without decontamination according to the highest PCB concentration in the original sample materials.

(d) Organic solvents used for the extraction of PCBs during chemical analysis may be distilled and reused in chemical analysis laboratories without prior approval, and subject to the following procedures, conditions, and limitations:

(1) The distillation shall be conducted in the analytical laboratory or an adjacent room.

(2) The maximum distillation rate is 4 liters per hour.

(3) The maximum volume of all solvents containing PCBs in storage at any one time for distillation under this section is 100 liters.

(4) The final PCB concentration of each batch of distilled solvent, not to exceed 10 liters in volume, does not exceed the level set in §§761.79(a) through (h).

(5) PCBs separated from these waste solvents (usually in the form of still bottoms) are regulated for disposal according to §§761.60(a)(1) through (a)(3).

(6) The distillation apparatus may be reused indefinitely in the laboratory under this section without decontamination.

(7) If the distillation unit is removed from service as a distillation apparatus under this section, is dismantled, or is not used for a period of 90 days, then the distillation unit shall be decontaminated in accordance with the standards and procedures in §761.79. All decontamination wastes including contaminated solvents, still bottoms, and decontamination solid wastes shall be disposed of in accordance with the applicable procedures and standards in §§761.79, 761.60(a)(1) through (a)(3), and 761.62, respectively.

(e) Sulfuric acid and elemental mercury used in the cleanup of sample extracts and containing less than 2 ppm PCBs is not regulated for disposal under TSCA.

12. In §761.65 by revising paragraphs (a), (b) introductory text, (b)(1)(ii), (b)(1)(iv), and by adding paragraph (b)(2); by revising paragraph (c)(1)(iv), by removing and reserving paragraph (c)(2), by removing the term "facilities" and substituting the term "units" in paragraph (c)(4), by revising paragraphs (c)(5), (c)(6), (c)(7) introductory text, and

(c)(8); by removing the term "facility" and substituting the term "unit" in paragraph (d)(2)(iii), by redesignating paragraph (g)(7) as (g)(8) and by adding new paragraphs (g)(7) and (g)(9); by redesignating paragraph (j) as paragraph (k) and adding a new paragraph (j), to read as follows:

§761.65 Storage for Disposal.

* * * * *

(a)(1) *Storage limitations.* Any PCBs or PCB Items stored for disposal after January 1, 1983, shall be removed from storage and disposed of as required by subpart D of this part within 1 year from the date of removal from service for disposal.

(2) *One-year extension.* Any persons storing PCB waste that is subject to the 1-year time limit for storage and disposal in paragraph (a)(1) of this section may provide written notification to the Regional Administrator for the Region in which the PCB waste is stored that they have been unsuccessful in their continuing attempts to dispose of or secure disposal for their waste within the 1-year time limit. Upon receipt of the notice by the Regional Administrator, the time for disposal is automatically extended by action of this section for 1 additional year (2 years total) if the following conditions are met:

(i) The notification is received by the Regional Administrator at least 30 days before the expiration of the initial 1-year time limit and it identifies the storer, the types, volumes, and location of the waste and the reasons for failure to meet the initial 1-year time limit.

(ii) A written record documenting all continuing attempts to secure disposal is maintained until the waste is disposed of.

(iii) The written record required by paragraph (a)(2)(ii) of this section is available for inspection or submission if requested, by the Agency.

(iv) Continuing attempts to secure disposal must have been initiated within 30 days of the time the waste is first subject to the 1-year time limit requirement (i.e., the date of removal from service for disposal). A claim that disposal costs are prohibitive or failure to initiate and continue attempts to secure disposal throughout the total time the waste is in storage shall automatically disqualify the notifier from receiving an automatic extension under this section.

(3) *Additional extensions.* Upon written request, the Regional Administrator for the Region in which the wastes are stored may grant at any time, additional extensions beyond the One-year extension authorized in

paragraph (a)(2) of this section. At the time of the request, the requestor must supply specific justification for the additional extension and indicate what measures the requestor is taking to secure disposal of the waste or indicate why disposal could not be conducted during the period of the prior extension. The Regional Administrator may require, as condition to granting any extension under this section, specific actions including, but not limited to, marking, inspection, recordkeeping, or financial assurance to ensure that the waste does not pose an unreasonable risk of injury to health or the environment.

(4) *Storage at an approved facility.* Extensions under paragraph (a)(1) of this section, may be granted as a condition of any TSCA PCB Disposal approval, by the Regional Administrator for the Region in which the PCBs or PCB Items are to be stored or the Director, Chemical Management Division (CMD), as appropriate, if the Regional Administrator or Director, CMD determines that there is a demonstrated need or justification for such extension and that no unreasonable risk of injury to health or the environment will result. Criteria for extending the 1-year time limit for storage and disposal include, but are not limited to, lack of disposal capacity, the absence of a treatment technology, or insufficient time to complete the treatment/destruction process and a demonstration that relevant treatment or disposal options are being pursued. In granting such extensions, the Regional Administrator or the Director, CMD may require the submission of any information the Regional Administrator or the Director, CMD believes is necessary for an evaluation of the requested extension and periodic progress reports that demonstrate that appropriate treatment or disposal options are being pursued.

(b) Except as provided in paragraphs (b)(2), (c)(1), and (c)(7) of this section, after July 1, 1978, owners or operators of any facilities used for the storage of PCBs and PCB Items designated for disposal shall comply with the following storage unit requirements:

(1) * * *

(ii) An adequate floor that has continuous curbing with a minimum 6 inch high curb. The floor and curbing must provide a containment volume equal to at least two times the internal volume of the largest PCB Article or PCB Container or 25 percent of the total internal volume of all PCB Articles or PCB Containers stored therein, whichever is greater. PCB/fissionable radioactive wastes are not required to have a minimum 6 inch high curbing.

However, the floor and curbing must still provide a containment volume equal to at least two times the internal volume of the largest PCB Container or 25 percent of the total internal volume of all PCB Containers stored therein, whichever is greater.

* * * * *

(iv) Floors and curbing constructed of Portland cement, concrete, or continuous smooth and non-porous materials such as steel to prevent or minimize penetration of PCBs.

* * * * *

(2) PCBs and PCB Items designated for disposal may be stored in a hazardous waste container management unit:

(i) Permitted by EPA under section 3004 of RCRA; or

(ii) Permitted by a State authorized under section 3006 of RCRA to manage hazardous waste in containers; or

(iii) In a unit approved or otherwise regulated by a State under a law regulating PCBs similar to TSCA.

(c)(1) * * *

(iv) PCB containers containing liquid PCBs at concentrations of 50 ppm or greater, provided a Spill Prevention, Control and Countermeasure Plan has been prepared for the temporary storage area in accordance with 40 CFR part 112 and the liquid waste is in Department of Transportation (DOT) specification containers or stationary bulk storage tanks (excluding rolling stock such as, but not limited to, tanker trucks).

(2) [Reserved]

* * * * *

(5) All PCB Items in storage shall be checked for leaks at least once every 30 days. Any leaking PCB Items and their contents shall be transferred immediately to properly marked nonleaking containers. Any spilled or leaked materials shall be immediately cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with §761.61(b). Records of inspections, maintenance, cleanup and disposal must be maintained in accordance with §761.180(a) and (b).

(6) Except as provided in paragraph (c)(6)(i) of this section, any container used for the storage of liquid or non-liquid PCBs shall be in accordance with the requirements set forth in the Department of Transportation Hazardous Materials Regulations (HMR) at 49 CFR parts 171-180. PCBs not subject to the HMR (i.e., PCB wastes at concentrations of 20 ppm or less than 1 pound of PCBs regardless of concentration) must be packaged in accordance with 49 CFR 173.203 (for liquids) or 173.213 (for non-liquids). For purposes of describing PCBs not subject

to DOT's HMR on a manifest, one may use the term "Non-DOT Regulated PCBs".

(i) Containers other than those meeting DOT performance standards may be used for storage of PCB/fissionable radioactive waste, provided the following requirements are met:

(A) Containers used for storage of liquid PCB/fissionable radioactive wastes must be non-leaking.

(B) Containers used for storage of non-liquid PCB/fissionable radioactive wastes may need to be designed to prevent the buildup of liquids if such containers are stored in an area which meets the containment requirements of paragraph (b)(1)(ii) of this section and all other applicable State or Federal radiation protection regulations or requirements.

(C) Containers used to store both liquid and non-liquid PCB/fissionable radioactive wastes must be designed to meet Nuclear Criticality Safety requirements specified in the ANSI Standard No. 8.1, American National Standard for Nuclear Criticality Safety in Operations with Fissile Materials Outside Reactors (American National Standard Institutes, 11 W. 42nd St., New York, New York 10036). Acceptable container materials currently include polyethylene and stainless steel provided that the container material is chemically compatible with the wastes being stored. Other containers may be used to store both liquid and non-liquid PCB/fissionable radioactive wastes if the users are able to demonstrate, to the appropriate Regional Administrator and/or the Nuclear Regulatory Commission, that the use of such containers is protective of health and the environment as well as public health and safety.

(ii) [Reserved]

(7) Stationary storage containers for liquid PCBs can be larger than the containers specified in paragraph (c)(6) of this section provided that:

* * * * *

(8) PCB Items shall be dated on the item when they are removed from service for disposal. The storage shall be managed so that the PCB Items can be located by the date they were removed from service for disposal. Storage containers provided in paragraph (c)(7) of this section, shall have a record that includes for each batch of PCBs the quantity of the batch and date the batch was added to the container. The record shall also include the date, quantity, and disposition of any batch of PCBs removed from the container. (See also

record retention requirements at § 761.180.)

* * * * *

(g) * * *
(7) The "non-corporate parent guarantee" as specified in §264.143(f)(10) of this chapter.

* * * * *

(9) When a modification, such as an increase in storage capacity, to a commercial storage facility occurs that warrants establishing a new financial assurance mechanism or amending an existing financial assurance mechanism, the new or revised financial assurance mechanism must be established and activated no later than 30 days after the Regional Administrator (or Director, Chemical Management Division (CMD)) is notified of the completion of the modification to the facility, but prior to use of the modified portion of the facility. The Regional Administrator (or Director, CMD) must be notified in writing no later than 7 days from the completion of the modification to the facility.

* * * * *

(j) *Changes in ownership or operational control of a commercial storage facility.* The date of transfer of interim status or final approval shall be the date the Regional Administrator (or Director, Chemical Management Division) provides written notice of such transfer. The Agency will recognize the transfer of interim status or final approval for commercial storage facilities if all the following conditions are met:

(1) The transferee demonstrates it has established, by the date of transfer, financial assurance for closure pursuant to paragraph (g) of this section using a mechanism effective as of the date of final approval so that there will be no lapse in financial assurance for the transferred facility.

(2) The transferee submits a new and complete application for final storage approval including all the elements listed in paragraph (d) of this section.

(3) The transferor or transferee resolves any deficiencies (e.g., technical operations, closure plans, cost estimates, etc.) the Agency has identified in the application of the transferor.

* * * * *

13. Section 761.67 is added to subpart D to read as follows:

§761.67 Storage for reuse.

(a) Any PCB Article may be stored for reuse in an area which is not designed, constructed and operated in compliance with §761.65(b), for no more than 3 years from the date it was originally

removed from use (i.e., service) or 3 years from [insert the effective date of the final rule], whichever is later, subject to the following conditions:

(1) All requirements applicable to the PCB Article stored for reuse are followed.

(2) The PCB Article is labelled and records maintained, starting at the time the PCB Article is removed from use or [insert the effective date of the final rule]. The label and records must indicate:

(i) The date the PCB Article was removed from use or [insert the effective date of the final rule] if the date it was removed from service is not known.

(ii) The projected location and the future use of the Article.

(iii) If applicable, the date the Article is scheduled for repair or servicing.

(b) Any PCB Article may be stored for reuse in an area that does not comply with §761.65(b) for a period longer than 3 years, provided that the owner or operator of the Article has requested and received written approval from the Regional Administrator for the Region in which the Article is located. Requests for extensions must be submitted to the Regional Administrator at least 6 months prior to the expiration of the storage for reuse period and shall include a justification, on an item-by-item basis, for the desired extension. The Regional Administrator is authorized to attach any conditions to such approval as deemed necessary to protect health or the environment. The PCB Articles to be stored for reuse shall be subject to the other applicable provisions of this part, including the record retention requirements at §761.180(a).

14. In §761.75 by removing the term "facility" and substituting the term "unit" in paragraphs (b)(7)(i), (ii) and (iii) and by revising paragraph (b)(8)(ii) to read as follows:

§761.75 Chemical waste landfills.

(b) ***

(8) ***

(ii) An operation plan shall be developed and submitted to the Regional Administrator for approval as required in paragraph (c) of this section. This plan shall include detailed explanations of the procedures to be used for recordkeeping, surface water handling procedures, excavation and backfilling, waste segregation burial coordinates, vehicle and equipment movement, use of roadways, leachate collection systems, sampling and monitoring procedures, monitoring wells, environmental emergency contingency plans, and security

measures to protect against vandalism and unauthorized waste placements. EPA guidelines entitled "Thermal Processing and Land Disposal of Solid Waste" (39 FR 29337, Aug. 14, 1974, available from the U.S. Government Printing Office, Washington, DC 20401) are a useful reference in preparation of this plan.

15. By adding §761.77 to subpart D to read as follows:

§761.77 Coordinated approval.

(a) *General requirements.* Notwithstanding any other provision of this part, the EPA Regional Administrator for the Region in which a PCB disposal or PCB commercial storage facility described in paragraphs (b) through (g) of this section is located may issue a TSCA PCB Coordinated Approval to the persons described in those paragraphs if the conditions listed in this section are met. A TSCA PCB Coordinated Approval will designate the persons who own and who are authorized to operate the facilities described in paragraphs (b) through (g) of this section and will apply only to such persons. All requirements, conditions, and limitations of any other permit or waste management document described in those paragraphs are deemed to be conditions of the TSCA PCB Coordinated Approval whose violation is a prohibited act under section 15 of TSCA.

(1) Persons seeking a TSCA PCB Coordinated Approval shall submit a request for approval by certified mail, return receipt requested, to the Regional Administrator for the Region in which the activity will take place. Persons seeking a TSCA PCB Coordinated Approval for a new PCB activity shall submit the request for approval at the same time they seek a permit, approval, or other action for a PCB waste management activity under any other Federal or State authority.

(i) The request for approval shall include a copy of the letter from EPA announcing or confirming the EPA ID Number issued to the facility for conducting PCB activities; the name, organization, and telephone number of the individual who is the point of contact for the non-TSCA Federal, State, or local permitting authority; a description of the waste management activities to be conducted if a permit or other relevant waste management document has not been issued; a copy of the relevant permit or waste management document specified in paragraphs (b) through (g) of this section; and a certification that the person who owns or operates the facility

is aware of and will adhere to the TSCA PCB reporting and recordkeeping requirements at subparts J and K of this part. When a permit or other waste management document has been issued for the PCB waste activity, a final copy of the non-TSCA document that will be used during the PCB activity, including all requirements, conditions, and limitations, shall be submitted to the Regional Administrator. This requirement may be waived, in writing, by the Regional Administrator.

(ii) The Regional Administrator shall confirm receipt of the request for approval.

(iii) The Regional Administrator shall review the request for approval for completeness, for compliance with the requirements of paragraphs (b) through (g), and to ensure that the PCB activity for which approval is requested will not present an unreasonable risk of injury to health or the environment. The Regional Administrator shall either:

(A) Issue a written notice of deficiency explaining why the request for approval is deficient. In addition, the Regional Administrator shall either:

(1) Request additional information, or

(2) Deny the request for approval and require the person who owns or operates the PCB facility to submit an application for a TSCA PCB approval;

(B) Issue a notice of TSCA PCB Coordinated Approval acknowledging the non-TSCA approval meets the regulatory requirements under TSCA as written; or

(C) Issue a notice of TSCA PCB Coordinated Approval that includes additional conditions that are necessary to implement other sections of part 761 or that address the Regional Administrator's concerns associated with potential risks of injury to health or the environment.

(2) If the Regional Administrator determines that conditions of the approval are not met, the Regional Administrator may issue a notice of deficiency, revoke the TSCA PCB Coordinated Approval, or require the person to whom the TSCA PCB Coordinated Approval was issued to submit an application for a TSCA PCB approval. Such a determination could be based on, but would not necessarily be limited to the following:

(i) Compliance with paragraphs (b) through (g) of this section.

(ii) Operation of the approved process in a manner which may result in an unreasonable risk of injury to health or the environment.

(iii) Failure to comply with, expiration of, or revocation of the non-TSCA approval or of the program under

which the non-TSCA approval was issued.

(iv) For CERCLA actions, completion of requirements conducted pursuant to a Record of Decision (ROD) or enforcement decision document or failure of the owner or operator to comply with conditions of the ROD.

(3) The Regional Administrator shall cease to recognize the non-TSCA approval as being the equivalent of a TSCA PCB approval after a TSCA PCB approval has been issued for the facility.

(b) *Land disposal facilities.* The person who owns or operates a land disposal facility, that accepts PCB wastes and requires an approval under subpart D of this part, shall have a TSCA PCB Coordinated Approval if the person:

(1)(i) Has a permit issued by EPA or an authorized State Director under the Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984, section 3005(a) and 40 CFR parts 270 and 271, and is in compliance with all permit conditions based on the requirements of 40 CFR part 264, subpart N; or

(ii) Has a permit issued by a State Director pursuant to a State PCB disposal program no less stringent than the TSCA requirements found in this part;

(2) Complies with the conditions of that permit.

(3) Complies with the chemical waste landfill requirements at §761.75(b).

(4) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

(c) *Incinerator.* The person who owns and operates facilities used to incinerate PCB wastes may operate the facility under a TSCA PCB Coordinated Approval if the person:

(1)(i) Has a permit issued by EPA or an authorized State Director under the Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984, section 3005(a) and 40 CFR parts 270 and 271, and is in compliance with the requirements at subpart O of 40 CFR 264.340 et seq.; or

(ii) Has a permit issued by a State Director pursuant to a State PCB disposal program no less stringent than the requirements in this part.

(2) Complies with the conditions of that permit.

(3) Complies with the incineration requirements at §761.70(a)(1) through (9), (b)(1) and (2) and (c).

(4) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

(d) *Research and development.*

Persons conducting research and development (R&D) into PCB disposal

methods (regardless of PCB concentration), may conduct R&D under a TSCA PCB Coordinated Approval if the person:

(1)(i) Has a permit issued by EPA or an authorized State Director under the Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984, section 3005(a) and 40 CFR parts 270 and 271, and is in compliance with all permit conditions based on the requirements of 40 CFR parts 264 and 270.65, (or)

(ii) Has a permit issued by a State Director pursuant to a State PCB disposal program no less stringent than the requirements in this part.

(2) Complies with the conditions of that permit.

(3) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

(e) *Alternate disposal technologies.*

Any person operating an alternative disposal method that provides PCB destruction equivalent to disposal in a \$761.70 incinerator or a \$761.60 high efficiency boiler and will not present an unreasonable risk of injury to health or the environment may operate under a TSCA PCB Coordinated Approval if the person:

(1) Has a permit issued by a State Director pursuant to a State PCB disposal program no less stringent than the requirements in this part.

(2) Complies with the conditions of that permit.

(3) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

(f) *Commercial storage facility.* The person who owns and operates commercial storage facilities used to store PCB wastes and is required to have an approval under subpart D of this part, shall have a TSCA PCB Coordinated Approval if the person:

(1)(i) Has a permit issued by the EPA or an authorized State Director under the Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984, section 3005(a) and 40 CFR parts 270 and 271, and is in compliance with all permit conditions based on the requirements at 40 CFR part 264, subparts J, K and L, or

(ii) Has a permit issued by a State Director pursuant to a State PCB disposal program no less stringent than the requirements in this part.

(2) Complies with the conditions of that permit.

(3) Complies with the storage requirements of §§761.65(a), (c), (d)(2).

(4) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

(g) *Site remediation.* Any person conducting a cleanup of PCB remediation waste may conduct the cleanup under a TSCA PCB Coordinated Approval if the person:

(1)(i) Has a permit issued by EPA or an authorized State Director under the Solid Waste Disposal Act as amended by the Hazardous and Solid Waste Amendments of 1984, section 3005(a) and 40 CFR parts 270 and 271, and is in compliance with all permit conditions based on the requirements of 40 CFR part 264 et seq.,

(ii) Has a permit issued by a State Director pursuant to a State PCB disposal program, or

(iii) Is conducting a remedial action under CERCLA as amended, pursuant to a signed record of decision, consent order or decree.

(2) Complies with the conditions of that permit, record of decision, consent order or decree.

(3) Complies with the reporting and recordkeeping requirements in subparts J and K of this part.

16. In §761.79 by adding an introductory paragraph, redesignating paragraphs (a) and (b) as (b) and (c), respectively, adding new paragraphs (a), (d), (e), (f), (g), and (h) to read as follows:

§761.79 Decontamination.

• Solvents and other decontamination materials shall meet all use, safety, health, and disposal standards as required by applicable Federal, State, and local laws and regulations.

Compliance with the standards and procedures for decontamination in this section does not provide relief or protection from any other applicable Federal, State, or local laws and regulations.

(a) The purpose of this section is to establish for this part, regulatory levels and self-implementing or standardized decontamination levels and procedures for removing PCBs from equipment, structures, non-porous surfaces, liquids or other materials to allow for reuse. Any person conducting a decontamination activity under this section becomes a new generator of a PCB waste.

(1) For purposes of decontamination under this section, the solubility of PCBs in any solvent used must be 5 percent or more by weight. The solvent may be reused for decontamination until it contains 50 ppm PCBs. All hydrocarbon solvent used or reused for decontamination under this section that contains <50 ppm PCB may be burned and marketed in accordance with the requirements for waste oil as promulgated in §761.20(e) or decontaminated pursuant to this

section. All chlorinated solvent at any concentration or other solvents ≥ 50 ppm PCB used for decontamination under this section shall be disposed of as a PCB in accordance with §761.60(a) or decontaminated pursuant to this section. All other liquid or non-liquid PCBs resulting from decontamination under this section and not otherwise regulated for disposal shall be disposed of in accordance with the provisions of §761.60(a)(1) through (a)(3) or §761.61(a)(5)(i)(B), respectively, or decontaminated pursuant to this section.

(2) All equipment, structures, surfaces, liquids, or other materials decontaminated in accordance with the procedures and standards of this section may be distributed in commerce or used in accordance with the provisions of §761.20(c)(5) or (6).

(3) A written record must be established and maintained for a period of 3 years from the date of any decontamination under this section. The record must show sampling locations and analytical results and must be retained at the site of the decontamination or a copy of the record must be made available to EPA in a timely manner, if requested. This recordkeeping requirement does not apply when sampling is not required under this section.

(4) For purposes of decontamination under this section, filtering, soaking, wiping, stripping of insulation, chopping, scraping or the use of abrasives to remove or separate PCBs from contaminated surfaces or liquids does not require a disposal approval under subpart D of this part.

(5) Any person conducting decontamination activities under this section shall take measures to ensure that no solvent, dust or particulate emissions containing PCBs are released to the environment from the decontamination area. Workers shall wear or use protective clothing or equipment to protect against direct dermal contact or inhalation of PCBs or materials containing PCBs.

* * * * *

(d) The decontamination standard for non-porous surfaces is less than or equal to 10 micrograms PCB/100 square centimeters ($\leq 10 \mu\text{g}/100\text{cm}^2$) as measured by a standard wipe test (§761.123).

(e) Any non-porous surface in contact with free flowing mineral oil dielectric fluid (MODEF) at levels equal to or less than 10,000 ppm PCBs ($\leq 10,000$ ppm PCB) may be decontaminated as follows:

(1) Drain the free flowing MODEF and allow the residual surfaces to drain for an additional 15 hours.

(2) Dispose of drained MODEF according to §761.60.

(3) Submerge and soak the contaminated or potentially contaminated surfaces in sufficient clean (containing less than 2 ppm PCBs (<2 ppm PCBs)) kerosene such that there is a minimum of 800 milliliters (ml) of kerosene for each 100 square centimeters (cm^2) of contaminated or potentially contaminated surface for at least 15 hours at room temperature (20°C or greater).

(4) Drain the kerosene from the surfaces.

(5) Dispose of the drained kerosene in accordance with paragraph (a)(1) of this section.

(6) Confirmatory sampling is not required, but any person using this section to claim that a surface is decontaminated must be able to substantiate that claim with records, photographs, video recordings, or other forms of documentation.

(f) Any non-porous surface in contact with free flowing MODEF containing greater than 10,000 ppm PCB (>10,000 ppm PCB) in MODEF or askarel PCB (up to 70 percent PCB in a mixture of trichlorobenzenes and tetrachlorobenzenes) may be decontaminated as follows:

(1) Drain the free flowing MODEF or askarel and allow the residual surfaces to drain for an additional 15 hours.

(2) Dispose of drained MODEF or askarel according to §761.60.

(3) Submerge and soak the contaminated or potentially contaminated surfaces in sufficient clean kerosene (containing <2 ppm PCBs) such that there is a minimum of 800 ml of kerosene for each 100 cm^2 of contaminated or potentially contaminated surface for at least 15 hours at room temperature (20°C or greater).

(4) Drain the kerosene from the surfaces.

(5) Dispose of the drained kerosene in accordance with paragraph (a)(1) of this section.

(6) Submerge and soak the surfaces previously submerged, soaked, and drained pursuant to paragraph (f)(3) of this section in sufficient clean kerosene such that there is a minimum of 800 ml of kerosene for each 100 cm^2 of surface for at least 15 hours at 20°C .

(7) Drain the kerosene from the surfaces.

(8) Dispose of the drained kerosene in accordance with paragraph (a) of this section.

(9) Confirmatory sampling is not required, but anyone using this section to claim that a surface is

decontaminated must be able to substantiate that claim.

(g) The decontamination standard for water containing PCBs is less than or equal to 0.5 micrograms per liter (i.e., approximately ≤ 0.5 parts per billion (ppb)) PCBs.

(h) The decontamination standard for organic liquids containing PCBs, except for PCB remediation wastes, is less than 2 milligrams per liter (i.e., approximately <2 parts per million (ppm)) PCBs.

17. In §761.80, by adding paragraph (e); by revising paragraphs (g); by adding paragraph (i); by revising paragraphs (n) and (o); and by adding paragraph (p) to read as follows:

§761.80 Manufacturing, processing, and distribution in commerce exemptions.

* * * * *

(e) The Administrator grants a class exemption to all research and development (R&D) facilities for a period of 1 year to manufacture PCBs, provided such manufacturing activities do not exceed 454 grams (or 1 lb) of PCBs and the manufactured PCBs are used solely in a facility's own research for the development of PCB disposal technologies, provided the following conditions are met:

(1) A petition for an exemption from the PCB prohibition on manufacturing PCBs must be received by EPA by [insert date 60 days from the effective date of the final rule] or 60 days prior to engaging in these activities.

(2) The Regional Administrator must be notified in writing 30 days prior to the commencement of any R&D activity authorized under this section. This notification requirement shall be waived if the EPA has issued a TSCA PCB R&D Approval pursuant to §§761.60(e) and (i)(2), and §§761.70(a) or (b) that contains a provision regarding the manufacture of PCBs.

(3) Requests for renewal must be filed pursuant to 40 CFR 750.11. EPA will deem any properly filed request for the renewal of the exemption by any member of the class as a renewal request for the entire class.

* * * * *

(g) The Administrator grants a class exemption to all processors and distributors (including distribution for purposes of export) of limited quantities of PCBs used for R&D in accordance with §761.30(j) provided that the following conditions are met:

(1) All processors and distributors must maintain records of their PCB activities for a period of 3 years after ceasing processing and distribution operations. The records must include the sources of the PCBs, the person to

whom the PCBs were shipped, and the amounts of PCBs received, processed, and distributed in commerce annually.

(2) The quantity of PCBs processed or distributed annually must not exceed 100 grams (.22 lb). Any person or company which expects to process or distribute in commerce more than 100 grams (.22 lb) of PCBs in 1 year must request approval from the Director, Chemical Management Division to exceed the limitation established by this provision and must identify the sites of PCB activities and the quantity of PCBs to be processed or distributed in commerce.

(3) The PCBs are packaged in one or more hermetically sealed containers of a volume of no more than 5.0 milliliters each.

(4) The PCBs are used only for purposes of scientific experimentation or analysis, or chemical research on, or analysis of PCBs, but not for research or analysis for the development of a PCB product.

* * * * *

(i) The Administrator grants a class exemption to all processors and distributors of limited quantities of media containing PCBs for research and development, provided the following conditions are met:

(1) Notification in the form of a petition for an exemption from the PCB prohibitions on processing and distributing PCBs in commerce must be received by EPA by [insert date 60 days from the effective date of the final rule] or 60 days prior to engaging in these activities.

(2) The quantity of PCBs processed or distributed annually in contaminated media must not exceed 100 grams by total weight of pure PCBs.

(3) For a period of 3 years after ceasing processing and distribution operations, all processors and distributors must maintain records of their PCB activities that include: the sources of the PCBs, the persons to whom the PCBs were shipped, and the amounts of PCBs received, processed, and distributed in commerce annually.

(4) All PCB materials must be distributed in DOT-authorized packaging.

(5) All treated and untreated regulated material and material coming into contact with regulated material must be disposed of in an approved PCB disposal facility according to subpart D of this part.

* * * * *

(n) The 1-year exemption granted to petitioners in paragraphs (a) through (c)(1), (d), (f), and (m)(1) through (m)(6) of this section shall be renewed

automatically as long as there is no increase in the amount of PCBs to be processed and distributed, imported (manufactured), or exported, nor any change in the manner of processing and distributing, importing (manufacturing), or exporting of PCBs. If there is such a change, a new exemption petition must be submitted to EPA and it will be addressed through rulemaking. In such a case, the activities granted under the existing exemption may continue until the new petition is addressed by rulemaking, but must conform to the terms of the existing exemption approved by EPA. The 1-year exemption granted to petitioners in paragraphs (c)(2), (e), (h) and (m)(7) of this section may be extended pursuant to §750.11(e) or §750.31(e).

(o) The 1-year class exemption granted to all processors and distributors of PCBs in limited quantities for use as standards in chemical analysis in paragraph (g) of this section shall be renewed automatically. The Director, Chemical Management Division may grant approval, without further rulemaking, to any processor and distributor in paragraph (g) of this section, to increase the quantities of PCBs that are processed or distributed in commerce pursuant to paragraph (g)(2) of this section.

(p) The 1-year class exemption granted to all processors of limited quantities of media containing PCBs for research and development in paragraph (i) of this section shall be renewed pursuant to §750.31(e)(1). EPA will deem any properly filed request for the renewal of the exemption by any member of the class as a renewal request from the entire class. The Director, Chemical Management Division may grant approval, without further rulemaking, to any processor and distributor in paragraph (i) of this section, to increase the amount of PCBs processed or distributed under this exemption.

§ 761.125 [Amended]

18. In §761.125, by amending paragraph (a)(1) introductory text to revise the phrase "under the National Contingency Plan all spills involving 10 pounds or more" to read "under the National Contingency Plan all spills involving 1 pound or more".

§ 761.180 [Amended]

19. By amending §761.180 as follows:

a. By changing the references in paragraph (e)(1) to "§761.60(a)(2)(iii)(A)(8) and §761.60(a)(3)(iii)(A)(8)" to read "§761.60(a)(2)(ii)(A)(8)" and "§761.60(a)(3)(ii)(A)(8)", respectively.

b. By changing the references in paragraph (e)(2) to "§761.(a)(2)(iii)(A)(7) and §761.60(a)(3)(iii)(A)(7)" to read "§761.60(a)(2)(ii)(A)(7)" and "§761.60(a)(3)(ii)(A)(7)", respectively.

c. By changing the reference in paragraph (e)(3) to "§761.60(a)(3)(iii)(B)(6)" to read "§761.60(a)(3)(ii)(B)(6)".

20. Section 761.180 is further amended by adding paragraphs (a)(1)(iii), (a)(1)(iv), (a)(2)(ix) and paragraphs (b)(1)(iii) and (b)(1)(iv), and by revising paragraph (b)(3) introductory text to read as follows:

§ 761.180 Records and Monitoring.

* * * * *

(a) * * *

(1) * * *

(iii) Records of inspections and cleanups performed in accordance with § 761.65(c)(5).

(iv) A current recorded inventory of PCBs and PCB Items in storage for disposal must be maintained on site at the storage unit and must be made available for inspection upon request by authorized representatives of EPA.

(2) * * *

(ix) Whenever a PCB Item, excluding small capacitors, with a concentration of 50 ppm or greater is distributed in commerce for reuse pursuant to §761.20(c)(1), the name, address, and telephone number of the person to whom the item was transferred, date of transfer, and the serial number of the item or the internal identification number, if a serial number is not available, must be recorded in the annual document log. The serial number or internal identification number shall be permanently marked on the equipment.

(b) * * *

(1) * * *

(iii) Records of inspections and cleanups performed in accordance with § 761.65(c)(5).

(iv) A recorded inventory of PCBs and PCB Items currently in storage for disposal must be maintained on site at the unit, and must be made available for inspection, upon request by authorized representatives of EPA.

* * * * *

(3) The owner or operator of a PCB disposal facility (including an owner or operator who disposes of its own waste and does not receive or generate manifests) or a commercial storage facility shall submit an annual report, that briefly summarizes the records and annual document log required to be maintained and prepared under paragraphs (b)(1) and (b)(2) of this section to the Regional Administrator of the Region in which the facility is

located by July 15 of each year, beginning with July 15, 1991. The first annual report submitted on July 15, 1991, shall be for the period starting February 5, 1990, and ending December 31, 1990. The annual report shall contain no confidential business information. The annual report shall consist of the information listed in paragraphs (b)(3)(i) through (b)(3)(vi) of this section.

* * * * *

21. In §761.205, by adding paragraph (f) to read as follows:

§761.205 Notification of PCB waste activity (EPA Form 7710-53).

* * * * *

(f) When a facility has previously notified EPA of its PCB waste handling activities using EPA Form 7710-53 and those activities change, the facility must resubmit EPA Form 7710-53 to reflect those changes no later than 5 working days from when a change is made. Examples of when a PCB waste handler must renotify the Agency include, but are not limited to the following: the company stops handling PCB waste; the company changes location of the facility; or the company had notified solely as a commercial storer of PCB waste and now wishes to engage in another PCB waste activity (e.g., transporting PCB waste).

22. In §761.207, by revising paragraph (j) to read as follows:

§761.207 The manifest — general requirements.

* * * * *

(j) The requirements of this section apply only to PCB wastes as defined in §761.3. This includes PCB wastes with PCB concentrations below 50 ppm where the PCB concentration below 50 ppm was the result of dilution; these PCB wastes are required under §761.1(b) to be managed as if they contained PCB concentrations of 50 ppm and above. An example of such a PCB waste is spill cleanup material containing less than 50 ppm PCBs when the spill involved material containing PCBs at a concentration of 50 ppm or greater. However, there is no manifest requirement for material currently below 50 ppm which derives from pre-April 18, 1978, spills of any concentration, pre-July 2, 1979, spills of less than 500 ppm PCBs, or materials decontaminated in accordance §761.20(c)(5) of this part.

23. In §761.215, by revising the introductory text of paragraphs (b), (c), and (d) as follows:

§761.215 Exception Reporting.

* * * * *

(b) A generator or other persons subject to the manifesting requirements of PCB waste shall submit an Exception Report to the Regional Administrator for the Region in which the generator is located if the generator has not received a copy of the manifest with the hand written signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The exception report shall be submitted to EPA no later than 30 days from the date on which the generator should have received the manifest. The Exception Report shall include the following:

* * * * *

(c) A disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the disposal facility is located no later than 30 days from the date the following occurs:

* * * * *

(d) The generator of PCB waste who manifests PCBs or PCB Items to a disposer of PCB waste shall submit a One-year Exception Report to the Regional Administrator for the Region in which the generator is located no later than 30 days from the date the following occurs:

* * * * *

24. By adding Appendices I, II and III to the end of part 761 to read as follows:

APPENDIX I. — Sample Site Selection, Sampling, and Analysis of Standard PCB Wipe Samples Taken for Purposes of Determining a PCB Concentration for Abandonment and Disposal of Natural Gas Pipeline

1.0 Applicability and Scope

1.1 These procedures apply to the selection of wipe sampling sites for natural gas pipe to be abandoned in place or disposed of off-site according to §761.60(b)(5).

1.2 Pipe or pipe segments always refers to natural gas pipe or segments of natural gas pipe.

1.3 Wipe sampling shall only be done when there are no free flowing liquids present.

2.0 Definition of Standard Wipe Sample

2.1 A standard wipe test is defined in §761.123. A standard wipe sample is generated for chemical analysis using the standard wipe test. The minimum surface area to be sampled shall be 100 square centimeters.

2.2 Guidance for wipe sampling appears in the document entitled "Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the Environmental Protection Agency PCB Spill Cleanup Policy," available from the TSCA Assistance Information Service, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

3.0 Sample Site Selection

3.1 There are three site selection parameters: position around the circumference of a selected pipe segment or pipe, position along the length of a selected pipe segment or pipe, and selection of a pipe segment from a length of pipe or population (group) of pipe segments.

3.2 Position around the circumference of a pipe segment or pipe.

3.2.1 When pipe or a pipe segment is accessed for sampling, the pipe shall be marked to identify the location of the bottom of the pipe or pipe segment when the natural gas pipeline was in service.

3.2.2 The inside center of the bottom of a pipe or pipe segment shall be sampled. The sample shall be centered on the bottom of the pipe, that is, the sample shall encompass an equal area on both sides of the middle of the bottom of the pipe for the entire length of the sample.

3.3 Position along the length of the pipe or pipe segment

3.3.1 The sample shall be taken 15 centimeters (6 inches) inside the end of a pipe or pipe segment at the bottom of the pipe or pipe segment as determined in procedure 3.2 of this appendix.

3.3.2 If the sample site location selected in procedure 3.3.1 of this appendix is a porous surface (for example, there is significant corrosion so as to shred the wipe material), then the sample site shall be moved inward (away from the end of the pipe or pipe segment) until there is no such porous surface.

3.3.3 There are three options in the event that there is no non-porous surface accessible by procedure 3.3.1 or 3.3.2 of this appendix.

3.3.3.1 The sample for that pipe or pipe segment shall only be taken at one end and a written notation documented in the sampling and analysis records as to why only one sample was taken.

3.3.3.2 Select another pipe segment using the random selection procedure in 3.4.2 of this appendix, or

3.3.3.3 In the event that there is no other pipe or pipeline in the population to be sampled and both ends of a pipe have porous surfaces at all possible sample collection sites, then the pipe segment or pipe shall be assumed to contain greater than 50 but less than 500 ppm PCBs.

3.4 Selection of a pipe segment from a length of pipe or population (group) of pipe segments.

3.4.1 For purposes of wipe sampling pipe segments, the segments shall not exceed 12.1 meters (40 feet) in length. In the event that a segment is longer than 12.1 meters in length, the segment shall be cut so that all resulting segments are 12.1 meters or less in length.

3.4.2 Pipe segments removed from the ground for disposal shall be sampled at each end.

3.4.2.1 When a length of pipe having seven or fewer segments is removed for purposes of disposal, samples shall be taken at each end of each segment removed.

3.4.2.2 When a length of pipe having multiple contiguous segments less than 3 miles in total length is removed for purposes of disposal, samples shall be taken at each end of the first and last segments removed

and each end of five randomly chosen segments in between. A total of seven segments shall be sampled.

3.4.2.3 When a length of pipe having multiple contiguous segments more than 3 miles in total length is removed for purposes of disposal, samples shall be taken at each end of the first segment and each end of each segment that is one-half mile distant from the segment previously sampled. A minimum of seven segments shall be sampled.

3.4.3 Sampling of Pipe to Be Abandoned in Place

3.4.3.1 Procedures in §761.60(b)(5)(iii)(B) shall be followed first to assure the absence of free flowing liquids.

3.4.3.2 Both ends of all pipe to be abandoned in place are to be sampled, samples shall be taken at each end of each pipe.

3.4.3.3 For abandonment of pipe exceeding 50 miles but less than 100 miles in length, an additional sample at the midpoint shall be taken. Sampling the midpoint sample may be taken by removing all covering soil and cutting the pipe to gain access to the sampling location in lieu of removing a segment of pipe.

3.4.3.4 For abandonment of pipe exceeding 100 miles in length, both ends and a point every 50 miles from the downstream (of the direction of the former gas flow) shall be sampled. Internal samples may be collected by removing any covering soil and cutting the pipe to gain access to the sampling location in lieu of removing segments of pipe.

4.0 Chemical Analysis

4.1 Sample Extraction and Chemical Analysis Procedures. Section 761.60(g) provides guidance on chemical analysis procedures. Extraction and cleanup of the extract shall be in accordance with applicable extraction and cleanup procedures for the analysis of PCB soil samples in SW-846, "Test Methods for Evaluating Solid Waste," which is available from either the National Technical Information Service (NTIS, U.S. Department of Commerce, 5285 Port Royal Rd, Springfield, VA 22161, telephone: (703) 487-4650) or the U.S. Government Printing Office (U.S. GPO, 710 No. Capitol St., NW, Washington, DC 20401, telephone: (202) 783-3238).

4.2 Reporting the PCB Concentrations in Samples. All sample concentrations shall be reported on the basis of micrograms of PCBs per 100 square centimeter of surface sampled.

5.0 Determining the Regulatory Status of Sampled Pipe

5.1 For purposes of disposal:

5.1.1 The analytical results of both samples from each segment sampled shall be averaged to determine the level of contamination in that segment. This average will be referred to as an averaged sample result.

5.1.2 If the averaged sample result, from any segment sampled from a removal population is greater than 10 micrograms PCB/100 square centimeters then that segment is considered contaminated with PCBs.

5.1.3 From a multiple contiguous segment removal project, all unsampled segments in the removal project are presumed

contaminated with PCBs at the same PCB concentration as was found in the segment having the highest averaged sample PCB concentration.

5.2 For purposes of abandonment:

5.2.1 The entire pipe to be abandoned shall be presumed to have the same concentration as the highest measured average sample result.

APPENDIX II — Sampling to Verify Completion of Self-Implementing Disposal of PCB Remediation Waste.

1.0 Application and Scope

1.0 The following is required when sampling to verify completion of the cleanup for self-implementing disposal of PCB remediation waste.

2.0 Minimum Number of Samples

2.0 Regardless of the amount of each type of PCB remediation waste present at a PCB remediation site, a minimum of samples shall be taken.

2.1 For each type of PCB remediation waste present at the remediation site and at each separate site within a facility, a minimum of three samples shall be taken.

2.2 For each sample, the PCB concentration shall be measured, recorded and kept on file.

2.3 This is an example of a minimum number of samples calculation at a PCB remediation waste location.

There are three distinct sites at the location: a loading dock, a transformer storage lot, and a disposal pit. The minimum number of samples appears after each type of waste for each site. The PCB remediation wastes present at the loading dock are concrete (3), and clay soil (3). The PCB remediation wastes present at the transformer storage lot are oily soil (3), clay soil (3), and gravel (3). The PCB remediation wastes present at the disposal pit are sandy soil (3), clay soil (3), oily soil (3), industrial sludge (3), sludge aqueous decantate (3) and gravel (3). For purposes of the self-implementing cleanup and disposal of these PCB remediation wastes, the minimum total number of samples needed to verify cleanup at this entire site as described is procedure 3.0 of this appendix.

3.0 Materials to be Sampled at a Site

3.0 Samples shall be collected of bulk materials and on the surface of all areas which contacted PCBs or PCB materials and which were removed for purposes of disposal during the remediation.

4.0 Determination of Sample Collection Locations

4.0 Once remediation is assumed to be complete, the following procedure shall be used.

4.1 Sample collection locations shall be based on a hexagonal grid system similar to the one employed in the document "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup" (EPA-560/5-86-017), except that the interval between adjacent sampling points shall be 1 meter. Copies of the grid sampling manual may be obtained from the TSCA Hotline by calling (202) 554-1404.

4.2 There is no upper limit to the number of samples required or allowed.

4.3 In the event that a site is sufficiently small or oddly configured that a hexagonal

grid with the grid interval of one meter will not place the minimum of three sampling points in the site, then sampling coordinates shall be selected based on the following random sampling scheme.

4.3.1 There shall be no sample compositing for this kind of small site and oddly configured sites.

4.3.2 Designate the length and width of the area as the two axes of a two-dimensional Cartesian coordinate grid system.

4.3.3 The grid system is to be oriented so that its origin is nearest to the lower left corner of the area to be sampled. When this Cartesian system is oriented this way, the entire area falls into the first (upper right or positive on both axes) quadrant of the grid.

4.3.4 Measure the length of each axis (length and width) in centimeters (or inches).

4.3.5 Select an eligible set of two coordinates in centimeters (or inches) from a random number table or random number generator for each of the minimum of three samples to be taken. Eligible means that the point defined by the selected coordinates falls in the area cleaned up.

4.3.6 A third coordinate is not necessary. Samples shall be taken on the surface of the location left after cleanup has been completed.

5.0 Collection of Samples

5.0 Sample collection procedures differ for surfaces and bulk PCB remediation wastes.

5.1 Flat non-porous surfaces shall be wipe sampled at the selected grid point. Individual surface samples shall be no smaller than 100 square centimeters.

5.2 Sampling of Bulk PCB Remediation Wastes

5.2.1 At each sampling grid point, core samples shall be collected from at least one and no more than four different locations surrounding each grid point.

5.2.2 Each core sample around the grid point shall be no closer than 10 centimeters (4 inches) and no farther than forty centimeters (16 inches) from the grid point.

5.2.2.1 If more than one core sample is taken at a grid point, all of these samples shall be composited (see procedure 6.0 of this appendix) and mixed thoroughly into a single sample representing the grid point.

5.2.2.2 Core sampling for bulk PCB remediation waste having particle size diameter of less than or equal to one centimeter.

5.2.2.2.1 Each sample shall be collected using a 2.5 centimeter (1 inch) or 2 centimeter diameter core sampler.

5.2.2.2.2 Each core sample shall be taken to a depth of 2.5 centimeters below the surface

5.2.2.3 Core sampling for bulk PCB remediation waste having particle size diameter of greater than one centimeter.

5.2.2.3.1 Each core sample shall be taken by a core having a diameter no less than two and a half times the diameter of the average particle in the material.

5.2.2.3.2 The depth of the core sample shall be two and a half times the estimated average diameter of the particles in the waste.

5.3 Sampling of Porous Surfaces

5.3.1 Porous surfaces such as asphalt, wood, and concrete, shall be core sampled as for bulk PCB remediation waste having a

particle size diameter of less than one centimeter (see procedure 5.2.2.2 of this appendix).

6.0 Compositing Samples

6.1 When compositing, all individual samples added to compose a composite sample shall be the same weight.

6.2 All chemical analyses for PCBs in composite samples shall be by means of a gas chromatography with electron capture detector (GC/EC) method such as EPA SW-846 Method 8080.

6.3 Compositing bulk PCB remediation waste samples from more than one grid point. Bulk PCB remediation waste samples from one grid may be composited so long as the PCB concentration of interest (the clean/not clean level) is divided by the number of samples in the composite. The resulting quotient shall be called the "composite action level." The composite action level eliminates the possibility that any one sample in the composite is above the PCB concentration of interest.

6.3.1 If the concentration from the analysis of the composite exceeds the "composite action level," then it shall be assumed that at least one sample in the composite exceeds the PCB concentration of interest.

6.3.1.1 For example, for bulk PCB remediation waste samples, if the concentration of interest is 50 ppm and then ten samples are composited and analyzed, then the "composite action level" is 5 ppm. If the chemical analysis results indicates less than 5 ppm, there are no samples having a concentration greater than 50 ppm (the PCB concentration of interest). If the chemical analysis is 5 ppm or greater then there may be at least one sample in the composite having a concentration exceeding the concentration of interest and further sampling and or compositing is necessary to demonstrate that no sample exceeds the concentration of interest.

6.3.2 If the concentration from the analysis of the composite is less than the "composite action level," then it shall be assumed that none of the individual samples in the composite exceeds the PCB concentration of interest.

6.4 Compositing wipe samples from non-porous samples from more than one grid point. When accounting for dilution from compositing wipe samples, it is not necessary to use samples wiped from the same total surface area so long as the "composite action level" (see procedure 6.1 of this appendix) assumes the smallest surface area from any of the wipe samples composited. This difference from bulk remediation waste sample compositing is the result of the PCB amount reported being a weight rather than a concentration.

6.4.1 For example, if the PCB concentration of interest is $\geq 10 \mu\text{g}/100 \text{ cm}^2$ and the sample gauze from three wipe samples each of an area of 200 cm^2 are composited with one sample of 100 cm^2 . If the report for this composite showed greater than $10 \mu\text{g}$, it shall be assumed that at least one of the wipe samples exceeded the PCB concentration of interest because the smallest area in the samples composited was 100 cm^2 .

7.0 Reporting the PCB Concentrations in Samples

All sample concentrations are to be reported on the basis of micrograms of PCBs per gram of dry bulk PCB remediation waste (and porous surfaces) and on a micrograms of PCBs per 100 square centimeter basis for non-porous surfaces.

8.0 Decisions Based on Sample Concentration Resulting from this Sampling Scheme

8.1 If, for the sampled type of waste at a designated site, any grid point sample PCB concentration exceeds the concentration of interest or the PCB concentration of a composite sample exceeds the composite action level, then the type of waste at the site has not been successfully cleaned up and, for purposes of self-implementing disposal, further cleanup is required.

8.2 In the event that further cleanup is required in paragraph 8.0 of this appendix, all of the type of waste at a particular site at a facility (or any portion of the site) may be recleaned.

8.3 Following the recleaning, the procedure to verify the completeness of the cleanup shall be reinitiated (starting at paragraph 4.0 of this appendix) to determine whether the requirements have been met. This "reverification" shall include that the verification sampling grid be reoriented and all of the type of waste at a particular site at the facility shall be resampled as required in paragraph 4.0-7.0 above. Cleaning a portion of the site and sampling only the portion which was recleaned does not comply with these self-implementing PCB remediation waste cleanup requirements.

For example, assume that random samples were collected to verify a site remediation under §761.61(a) and one of the samples of seven taken in a grid sampling plot had a concentration above the PCB concentration of concern. The site represented by the seven grid samples may be recleaned only in the area surrounding that one sample. However, following recleaning, the entire site must be resampled using a new set of seven grid samples, collected from a reoriented grid, to verify that the cleanup resulted in no PCBs in any of the seven grid samples above the PCB concentration of concern. This sampling procedure does not allow only resampling the areas which were recleaned. Nor does this sampling procedure allow using the arithmetic mean or any other statistical evaluation of the results from several samples to arrive at an overall "average" site concentration.

APPENDIX III. — Sampling Non-Liquid, Non-Metal Non-Remediation Waste Generated by Processing Materials Containing Recyclable Metals

1.0 Defining and Characterizing a Single Feed Source Population

1.1 A single feed source includes, but is not limited to automobiles, a mixture of a fixed ratio of automobiles plus white goods, white goods, and wire cable from a single source such as a ship.

1.2 Once a population of processed PCB non-remediation waste from a single feed source is characterized it is not necessary to recharacterize PCB non-remediation waste from that feed source so long as there are no

changes in the feed source which are expected to change the PCB content in that feed source.

2.0 Accumulate the Population to Be Sampled

2.1 Accumulate all PCB non-remediation waste generated from a single source in one location in a container, a pile or piles.

2.2 When all PCB non-remediation waste from a single source cannot be processed in a day, all source PCB non-remediation waste for one day of full-time, full-scale processing shall be accumulated in a discrete, container, several containers, or identifiable pile (or piles).

3.0 Number of Samples and Size of Samples and Sub-Samples

3.1 To characterize a population of non-liquid PCB non-remediation waste accumulated in a pile or piles, it is necessary to collect seven approximately 100 milliliter (just less than 0.5 cup or approximately 100 grams) subsamples. These seven sub-samples shall be composited into one sample in a covered wide-mouth one liter (one quart) jar.

3.2 Pieces of PCB non-remediation waste larger than half of the sub-sample size (approximately 50 milliliters, 50 grams, or 0.25 cup) shall be excluded from a sub-sample.

4.0 Sample Site Selection and Sub-Sample/Sample Collection

4.1 Selection of the Piles from which Sub-Samples Will Be Collected

4.1.1 If the processed PCB non-remediation waste from a single source consists of more than one pile or container, each pile or container shall be assigned an integer number and then seven random integer numbers shall be generated to select piles (from which sub-samples shall be collected) from the population of all piles. It is possible that this random selection procedure will result in selecting the same pile number more than once, even if seven or more piles are present.

4.1.2 If only one pile or container is present, all seven samples shall be taken from the same pile.

4.2 Collecting Sub-Samples from Flattened Piles or Containers

If possible, spread the pile(s) out to a uniform thickness of approximately 1 foot (or 30 centimeters [cm]) into a rectangular or a circular shape.

4.2.1 For a circular shape flattened pile or cylindrical container:

4.2.1.1 Use the procedures in the PCB Spill Cleanup manual (a triangular/hexagonal grid system) to select the seven surface points for each composite sample for each flattened pile or container.

4.2.1.2 Measure the depth of the pile at each sampling point in inches or centimeters. Randomly select a number of inches or centimeters down from the surface using a random number generator. Then collect a 50 gram sample at the selected depth.

4.2.1.3 Composite the seven 50 gram samples collected from the seven sampling locations into a single sample for analysis.

4.2.2 For a rectangular shape flattened pile or boxshaped container there are two options a random coordinate option (procedure 4.2.2.1 of this appendix) and a grid option (procedure 4.2.2.2 of this appendix):

4.2.2.1 Designate the length, width, and depth of the flattened pile or container as three axes of a three dimensional Cartesian coordinate grid system.

4.2.2.1.1 Measure the length of each axis (length, width, and depth) in centimeters (or inches). Using a random number generator, select an eligible set of three coordinates in centimeters (or inches) for each of seven sub-samples to be taken.

4.2.2.1.2 Collect each sub-sample at the location selected and composite the sub-samples into a single sample for analysis.

4.2.2.2 Use the grid sampling procedure in the Field Manual which is part of the "Sampling Guidance for Scrap Metal Shredders." Briefly described, this procedure divides the length and width of a flattened pile into three equal segments, intersection of the length segments with the width segments results in a 3 x 3 grid or nine cells. The length and width shall be chosen to be perpendicular. Samples shall be collected at the center of each cell on the surface.

4.3 Collecting Sub-samples from Unflattened Piles

If the pile is too large to be spread on the site to a uniform thickness of 1 foot or 30 centimeters, or there are too many piles to spread out in the working area, the following procedure can be used to sample the piles. This procedure assumes that the shape of the piles is roughly conical; that is, having a circular base with PCB non-remediation waste stacked up uniformly to a peak which is roughly a point centered above the center of the circular base. For each sub-sample, three sample site coordinates will be selected.

4.3.1 Setting Up the Sample Site Selection System

4.3.1.1 Use a rod, dowel, stake, or broom handle as a marker.

4.3.1.1.1 Nail or otherwise fasten to the top of the marker a piece of string or cord of sufficient length and strength to reach from the top of the marker to the farthest peripheral edge of the pile.

4.3.1.1.2 Pound or push the marker into the top center (apex) of the pile downward toward the center of the base at least 30 centimeters or one foot until the marker is rigidly standing on its own, even when the cord is pulled tight to the bottom of the pile. The marker shall protrude from the top of the pile sufficiently to allow easy movement around the pile with the tightened string. A side view of a pile with a marker and string is illustrated below.

4.3.2 Select the first coordinate as follows:

4.3.2.1 Use a random number to generate a number between 0 and 360. The number generated is the number of degrees from magnetic north.

4.3.2.2 In a pile containing a lot of ferrous metal, the ferrous metal may have sufficient magnetism to deflect the compass needle. Confirm the magnetic north direction at a location distant from a pile of metal before assuming that the compass is not effected by local magnetism. In the event that the compass needle is deflected by the material to be sampled, this sampling procedure shall not be used and the material to be sampled shall then be flattened. Once the material is flattened, the sampling procedures in procedure 4.2 of this Appendix shall be used.

4.3.2.3 Use a magnetic compass to determine this direction on the pile as follows:

4.3.2.3.1 Pull the cord to the bottom of the pile.

4.3.2.3.2 Orient the compass so that the needle is pointing to magnetic north (At this point it may be helpful to sketch a picture of the top view of the pile oriented to magnetic north and draw a line from the center of the pile outward in the direction of the selected coordinate. (This drawing can be used to locate the approximate coordinate in the next step and may be used to document the sampling location).)

4.3.2.3.3 With the cord slightly slack, hold the cord and walk around the outside edge of the pile to be sampled until the approximate coordinate is reached.

4.3.2.3.4 Tighten the cord and place the compass directly under the tightened cord at the bottom edge of the pile.

4.3.2.3.5 Move around the outside of the pile with the cord laying over the center of the compass and with the needle pointing to magnetic north and stop when the cord lies over the selected coordinate direction on the compass.

4.3.2.4 Mark this first coordinate by tying the cord to a peg or placing it under a heavy weight.

4.3.2.5 An illustration of the orientation of a magnetic compass and the cord with respect to a pile appears below

4.3.3 Select the second coordinate as follows:

4.3.3.1 Once the first coordinate has been fixed, along the first coordinate (the cord), measure the distance in centimeters (or inches) from the bottom edge of the pile to the point where the marker meets the top of the pile.

4.3.3.2 Select a random number between 0 and the total number of centimeters (inches) measured in paragraph 4.3.3.1 of this appendix.

4.3.3.3 Proceed up the cord, from the bottom of the pile to the top, the selected number of centimeters (inches).

4.3.3.4 Pound or push a marker rod, dowel or broom handle down into the pile until the marker is secure to mark the second coordinate point.

4.3.4 Select the third (final) coordinate as follows:

4.3.4.1 Measure or estimate the vertical distance in centimeters (or inches) from the surface of the pile at the second coordinate marker to the bottom of the pile or ground level. This distance will be referred to as "vertical distance."

4.3.4.2 Select a random number between 0 and the total number of centimeters (inches) of vertical distance.

4.3.4.3 Dig a hole straight down into the pile the selected number of centimeters (inches) from the surface of the pile. The hole shall be of sufficient distance from the second coordinate marker so as to allow the marker to remain in place.

4.3.4.4 Slowly dig over to expose the second coordinate marker and collect the sub-sample on any side of this marker at the depth selected in paragraph 4.3.4.2 of this appendix.

4.3.4.5 In the event that the measurement or estimate of the distance to the bottom of

the pile or the ground level was too large and the selected depth is below the bottom of the pile, reselect a random number as indicated in paragraph 4.3.4.2 of this appendix using the vertical distance determined by digging as indicated in paragraph 4.3.4.3 of this appendix.

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40 CFR Part 761

[OPPTS-66019; FRL-4904-5]

RIN 2070-AB20

Polychlorinated Biphenyls; Manufacturing, Processing, and Distribution in Commerce; Proposed Decisions on Exemption Petitions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed Rule.

SUMMARY: Section 6(e) of the Toxic Substances Control Act (TSCA) bans the manufacture, processing, distribution in commerce, and the use of PCBs unless the PCBs are totally enclosed. Section 6(e) gives EPA authority, however, to allow these activities if the Administrator finds that they will not present an unreasonable risk of injury to health and the environment. This proposed rule addresses 19 individual petitions under TSCA section 6(e)(3)(B) for exemptions from the prohibition against the manufacture, processing, and distribution in commerce of polychlorinated biphenyls (PCBs). In this proposed rule EPA proposes to deny eight petitions and to grant seven petitions; four petitions were withdrawn by the petitioners.

DATES: Written main comments on this proposed rule must be received by February 6, 1995. If requested in writing by December 20, 1994, an informal hearing will be held in Washington, DC on a date to be announced later.

ADDRESSES: Comments should reference docket #OPPTS-66019 and should be sent to TSCA Nonconfidential Information Center, EPA/Office of Pollution Prevention and Toxics, Room B-607, Northeast Mall, 401 M Street, SW, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Susan Hazen, Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Rm. E-543B, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, Telephone: (202) 554-1404, TDD: (202) 554-0551, FAX: (202) 554-5603 (document requests only).

SUPPLEMENTARY INFORMATION: Section 6(e) of the Toxic Substances Control Act (TSCA) bans the manufacture,

processing, distribution in commerce, and the use of PCBs unless the PCBs are totally enclosed. Section 6(e) gives EPA authority, however, to authorize these PCB activities if the Administrator finds that they will not present an unreasonable risk of injury to health or the environment. TSCA provides that EPA may set terms and conditions, including recordkeeping and reporting requirements, for granting an exemption.

I. Background

A. Statutory Authority

Section 6(e) of TSCA, 15 U.S.C. 2605(e), generally prohibits the manufacture of PCBs after January 1, 1979, the processing and distribution in commerce of PCBs after July 1, 1979, and the use of PCBs after October 11, 1977, unless otherwise permitted. While section 6(e)(2)(A) of TSCA bans the use of PCBs in any manner other than a totally enclosed manner, section 6(e)(2)(B) provides that the Administrator may by rule authorize the use of PCBs if such use will not present an unreasonable risk of injury to health or the environment. Section 6(e)(3)(A) of TSCA prohibits the manufacture, processing, and distribution in commerce of PCBs except for the distribution in commerce of PCBs that were sold for purposes other than resale before July 1, 1979. Section 6(e)(3)(B) provides that any person may petition the Administrator for an exemption from the prohibition on the manufacture, processing, and distribution in commerce of PCBs. The Administrator may by rule grant an exemption if the Administrator finds that:

(i) an unreasonable risk of injury to health or the environment would not result, and (ii) good faith efforts have been made to develop a chemical substance which does not present an unreasonable risk of injury to health or the environment and which may be substituted for such polychlorinated biphenyl. (15 U.S.C. 2605(e)(3)(B)(i)-(ii)).

The Administrator may set terms and conditions for an exemption and may grant an exemption for not more than 1 year.

Section 6(e)(1) also authorizes EPA to regulate the disposal of PCBs consistent with the provisions in section 6(e)(2) and (3). EPA has issued a regulation that authorizes the import for disposal of PCBs with concentrations below 50 ppm. PCBs with greater concentrations, currently may only be imported for disposal pursuant to an exemption granted by EPA based upon the criteria discussed above.

B. Regulatory Authority

EPA's Interim Procedural Rules for manufacturing, processing, and distribution in commerce exemptions describes the required content for the manufacturing, processing, and distribution in commerce exemption petitions and the procedures EPA follows in rulemaking on exemption petitions. Those rules are codified at 40 CFR 750.10 through 750.41. These rules were amended effective April 11, 1994, by notice in the *Federal Register* (59 FR 16991). EPA's Procedural Rule for rulemaking under section 6 of TSCA, which governs use authorizations for PCBs, is found at 40 CFR 750.1 through 750.9.

C. History of this Rulemaking

EPA received for consideration 18 new exemption petitions and 1 renewal petition under TSCA section 6(e)(3)(B) which are the subject of this proposed rule. The requests for exemption are as follows:

1. S.D. Myers submitted four individual petitions seeking approvals to import PCB Transformers from Canada for disposal, to import PCB Capacitors from Canada for metal recovery and disposal, to import PCB fluids from Canada for disposal, and to import PCB containing light ballasts from Canada for disposal.

2. Electrical Apparatus Service Association (EASA) submitted a petition seeking to renew their approval to process and distribute in commerce for reuse non-porous component parts from PCB-Contaminated Transformers that have been double washed/rinsed.

3. MTM Research Chemicals, Inc. submitted a petition seeking approval to export PCBs that had been shipped illegally to the United States and also to import four PCBs (less than 500 grams per chemical) to be distributed in commerce for use in microscopy (this petition was withdrawn by the petitioner).

4. Sigma-Aldrich Corporation submitted a petition seeking approval to process and distribute in commerce for export small quantities of PCBs for research and development.

5. Millipore Corporation in conjunction with Immunosystems Inc. submitted two petitions, one petition seeking approval to process and distribute in commerce for export small quantities of PCBs for research and development and the other petition seeking approval to process and distribute in commerce small quantities of PCBs for research and development, characterized as the development of a PCB product (the second petition was withdrawn by the petitioner).

6. Triangle Labs submitted a petition seeking approval to import small quantities of PCBs in water, soil and air matrices for purposes of analysis (this petition was withdrawn by the petitioner).

7. General Electric submitted a petition seeking approval to manufacture small quantities of PCBs for use on-site in EPA-authorized research activities.

8. Edwin Kraemer submitted a petition seeking approval to process and distribute in commerce products made from PCB-contaminated fluff.

9. Jaco Analytical Laboratory submitted a petition seeking approval to import transformer oil samples for testing.

10. ENSR submitted a petition seeking approval to use carbon drums to filter PCBs from silicone-filled transformers and to transfer these drums between customers as in-service equipment (this petition was withdrawn by the petitioner).

11. Chemsyn Science Laboratories submitted a petition seeking approval to manufacture and import PCBs for export and domestic use for the production of analytical standards.

12. Dangerous Goods Consultants submitted a petition seeking approval to import laboratory samples from Canada for treatability.

13. Supelco, Inc. submitted a petition seeking to manufacture small quantities of PCBs for research and development.

14. National Institute of Standards and Technology submitted a petition seeking to export small quantities of PCBs for research and development.

15. ERTSCO Environmental Service, Inc. submitted a petition seeking to import transformer oil samples for analysis.

II. Findings Necessary to Grant Petitions

A. Unreasonable Risk Finding

Before granting an exemption petition, section 6(e)(3)(B)(i) of TSCA requires the Administrator to find that granting an exemption would not result in an unreasonable risk of injury to health or the environment in the United States. Consistent with the principle that persons seeking an exemption from a legislative prohibition bear the burden of demonstrating eligibility for that exemption, EPA has interpreted this provision to require a petitioner to demonstrate that the proposed activity would not pose an unreasonable risk.

To determine whether a risk is unreasonable, EPA balances the probability that harm will occur to health or the environment against the

benefits to society from granting or denying each petition. (See generally, 15 U.S.C. 2605(c)(1).) Specifically, EPA considers the following factors:

1. *Effects of PCBs on human health and the environment.* In deciding whether to grant an exemption, EPA considers the magnitude of exposure and the effects of PCBs on humans and the environment.

a. *Health effects.* EPA has determined that PCBs are toxic and persistent. PCBs can enter the body through the lungs, gastrointestinal tract, and skin, can circulate throughout the body, and can be stored in the fatty tissue.

b. *Environmental effects.* Certain PCB congeners are among the most stable chemicals known, which decompose very slowly once they are released in the environment. PCBs are absorbed and stored in the fatty tissue of higher organisms as they bioaccumulate up the food chain through invertebrates, fish, and mammals. This ultimately results in human exposure through consumption of PCB-containing food sources.

c. *Risks.* Toxicity and exposure are the two basic components of risk. Based on animal data, EPA concluded that in addition to chloracne, PCBs may cause developmental toxicity, reproductive effects, and oncogenicity in humans. EPA also concluded that PCBs present a hazard to the environment.

A lengthy discussion of these factors is provided in the preamble to the August 24, 1988 proposed exemption rule (53 FR 32327).

2. *Benefits and costs.* The benefits to society of granting an exemption vary, depending on the activity for which the exemption is requested. The reasonably ascertainable costs of denying an exemption vary, depending on the individual petition. EPA has taken benefits and costs into consideration when evaluating each exemption petition.

B. Good Faith Efforts Finding

Section 6(e)(3)(B)(ii) of TSCA also requires the Administrator to find that "good faith efforts have been made to develop a chemical substance which does not present an unreasonable risk of injury to health or the environment and which may be substituted for [PCBs]." Based upon general legal principles allocating the burden of proof to the person seeking to qualify for an exemption, EPA has interpreted this provision to require that a petitioner has the burden of demonstrating that it has made the requisite good faith efforts. EPA considers several factors in determining whether good faith efforts have been made. For each petition, EPA considers the kind of exemption the

petitioner is requesting and whether the petitioner expended time and effort to develop or search for a substitute. In each case, the burden is on the petitioner to show specifically what they did to substitute non-PCB material for PCBs or to show why it was not feasible to substitute non-PCBs for PCBs. To satisfy this finding for requests for an exemption to import PCBs, a petitioner must show why such activity must occur in the United States and what steps will be taken to eliminate the need to import PCBs in the future.

III. Explanation of Class Exemption for Research and Development

Distinct from its authority to exempt PCBs from the ban on manufacturing, processing, and distribution in commerce, EPA may also authorize the use of PCBs. EPA authorized, indefinitely, the use of PCBs in small quantities for research and development in the Use Authorization Rule, 40 CFR 761.30(j) published in the *Federal Register* of July 10, 1984 (49 FR 28154). "Small quantities for research and development" is defined at 40 CFR 761.3 as "any quantity of PCBs (1) that is originally packaged in one or more hermetically sealed containers of a volume of no more than 5.0 milliliters, and (2) that is used only for purposes of scientific experimentation or analysis, or chemical research on, or analysis of PCBs, but not for research or analysis for the development of a PCB product."

The processing and distribution in commerce of PCBs in small quantities for use in research and development is allowed under a class exemption in the PCB Exemptions Rule, 40 CFR 761.80(g), published in the *Federal Register* of August 8, 1986 (51 FR 28556). This rule eliminated the need for each person who wishes to process and distribute small quantities of PCBs in commerce for research and development to file an individual exemption petition. EPA placed the following terms and conditions on the class exemption: That all processors and distributors maintain records of their PCB activities for a period of 5 years; and that any person or company that expects to distribute in commerce 100 grams (0.22 lb.) or more of PCBs for research and development within a 1-year period must report to EPA and identify the sites of PCB activities and the quantities of PCBs to be distributed in commerce. The processor or distributor could process and distribute PCBs in commerce and, provided it gives proper prior notification to EPA, increase the amounts of PCBs that are processed and distributed in commerce, until EPA takes action to issue a final

rule that changes (e.g., terminates) the applicability of the exemption at \$761.80(g) to the processor or distributor.

In granting a class exemption, EPA retains the authority to terminate the class exemption, or to exclude any distributor from the class exemption, upon determining the activities allowed in the class exemption will pose an unreasonable risk of injury to health or the environment. Any changes in the disposition of the class exemption, or the status of individuals within the class exemption, will be accomplished through notice and comment rulemaking and members of the class will be allowed to continue activities until a final rule is promulgated.

IV. Disposition of Pending Exemption Petitions

A. Import

EPA received eight exemption petitions to import PCBs. Two of these petitions were withdrawn by the petitioners.

1. *S.D. Myers, Inc. (Myers).* EPA has received a total of four petitions from S.D. Myers, Inc. of Talmadge, Ohio, to import large volumes of PCB waste from Canada for disposal. The first petition was received by EPA on May 15, 1991, the second and third were both received on September 9, 1992, and the fourth was received on October 27, 1993.

a. *Current petitions.* Myers processes PCBs for disposal. It has received approval from EPA to: disassemble, decontaminate, and recycle capacitors, to operate a mobile PCB disposal process, and it has received interim approval to commercially store PCBs.

The petition received on May 15, 1991 (Petition 1) is to import drained PCB Transformers from Canada for purposes of disposal at Myers' facility in Talmadge, Ohio. The petition requests a 5-year exemption, without a limit on quantity. Petition 1 cites data that 21,000 PCB Transformers are in storage for disposal in Canada, and that an additional 10,000 PCB Transformers are still in service, but could be imported for disposal. Myers estimates that if all 31,000 transformers were imported into the United States, approximately 1.8 million pounds of PCBs in those transformers would enter the United States. Once at Myers' facility, the transformers would be disposed of in accordance with Myers' permit from EPA Region V. The transformers would be disassembled, metallic portions would be decontaminated and subsequently smelted for metal recovery, and residual PCBs and porous

materials would be shipped off site to a TSCA-permitted incinerator.

Myers' second petition, received on September 9, 1992, (Petition 2) is to import intact, non-leaking PCB Capacitors from Canada for disposal. The capacitors would be disposed of by Myers through a disassembly, decontamination, and materials recycling process similar to its transformer process. Myers is permitted by EPA Region V to process capacitors for disposal. Petition 2 requests a 5-year exemption, with no limit on quantity. Myers states that there are 18.6 million pounds of PCB capacitors in Canada, and estimates that 13 million pounds of PCB waste requiring incineration would be generated by the processing of these capacitors at its facility.

The third petition, also received on September 9, 1992, (Petition 3) is a request to import askarel PCB liquids (500 ppm and over) from Canada to the United States for purposes of disposal. The petition cites data that 40 million pounds of high-concentration fluid is present in Canada. Myers would transport the PCBs to a TSCA-approved incinerator for disposal. The PCBs would not be disposed of at Myers' Talmadge, Ohio, facility, but some might be stored there before being incinerated elsewhere. Myers is a permitted PCB transporter and has interim approval as a commercial storer of PCBs. Petition 3 also requests a 5-year period with no limit on quantity.

Myers' fourth petition, received by EPA on October 27, 1993, (Petition 4) is to import intact, non-leaking PCB-containing fluorescent light ballasts from Canada for disposal. The ballasts would be taken to Myers' facility, where they would be processed to recover reclaimable metals, and the contaminated materials remaining would be shipped off site to a TSCA-approved incinerator. EPA Region V has permitted Myers' ballast disposal method. Myers is requesting an exemption for a 5-year period, and estimates that 60 million pounds of PCB containing light ballasts are present in Canada [Canadian Government data from 1991 actually estimates that there are 60 million units present in Canada, which have a total weight of 220 million pounds (see "Canadian PCB Summary: A Summary of National PCB Inventory" January, 1991)]. Myers provides estimates that indicate about 20 percent of the ballast weight would consist of unrecoverable PCB waste [44 million pounds] requiring incineration.

In all four petitions, Myers asserts that since EPA has permitted their disposal processes based on the fact that these processes do not pose an unreasonable

risk of injury to health or the environment, this finding should be applied to any PCB waste imported from Canada for purposes of disposal. Petition 3, which does not involve in-house disposal activities but only transportation and storage, cites the overall safety record and safety procedures of the company as grounds for a no unreasonable risk finding, and specifically asserts that Myers' PCB tank truck fleet "has not had an accident or spill when moving PCBs."

In terms of benefits, Myers estimates in Petition 1 that by importing all of Canada's PCB transformers, it would generate \$180 million in service fees, and an additional \$20 million in scrap metal sales. Petitions 2, 3 and 4 are estimated to generate revenues of \$46 million, \$30 million, and \$45 million, respectively. Myers estimates that Petition 3 would earn a profit of \$20 million for Myers and the incinerators (the other petitions do not provide profit estimates). In addition, Petitions 2 and 4 state that each would create an additional 20 jobs. Other benefits mentioned in the petitions include speeding the removal of PCBs from North America and a lowering of disposal costs for companies in Canada.

In response to the good faith efforts criteria of TSCA section 6(e)(3)(B)(ii) have been met, Myers maintains in all four petitions that this criteria is not applicable to his petitions. Petition 1 does, however, go on to state that Myers has investigated the possibility of destroying these wastes in Canada, but concluded that it would not be politically or economically feasible to do so.

b. Proposed decision on petitions. EPA proposes to deny all four petitions from S.D. Myers. EPA has determined that the petitioner has failed to establish that there is no unreasonable risk as required in TSCA section 6(e)(3)(B). The petitioner has not demonstrated how the benefits accruing from granting these petitions would outweigh the risks inherent in the importation of PCB waste as proposed by petitioner. In addition, EPA believes that the petitioner has failed to demonstrate that it has made a good faith efforts to investigate and develop alternatives to import.

EPA has already made a general determination that the import of PCBs into the United States and the distribution in commerce of PCBs present an unreasonable risk of injury to human health and the environment [See 40 CFR 761.20 and 44 FR 31514, May 31, 1979]. EPA has also stated that "[i]t is the clear intent of TSCA to minimize the addition of PCBs to the environment

of the United States." Id. Moreover, while EPA believes that there is always some risk inherent in the import of any quantity of PCBs, the large quantities that Myers would import significantly increases the risk.

All four of Myers' petitions would involve the importation, transportation, and disposal of very large quantities of PCB waste. Taken together, they would account for most of Canada's PCB fluids at concentrations over 500 ppm, as well as all of its PCB Transformers, PCB Capacitors and PCB-containing fluorescent light ballasts. Myers indicates in the four petitions that over a 5 year period it wishes to import a total of approximately 300 million pounds of PCB waste for disposal. Based on the data supplied in the petitions and supplemental information (see note to docket "Calculations"), EPA calculates that the four petitions could involve the importation of up to 457 million pounds of PCB waste into the United States, for disposal either at Myers' Talmadge, Ohio facility, or, in the case of Petition 3, at an unspecified TSCA-approved incinerator.

Prior to disposal, Myers would transport large quantities of PCB waste through the United States either to the Ohio site or to an incinerator. Subsequent to Myers' disposal activity in Ohio, an additional 60 to 90 million pounds of concentrated PCB waste (not counting any additional solvents and process waste that Myers would generate) would have to be transported from Ohio to a TSCA-approved incinerator. Currently, the closest available incinerator is located in Coffeyville, Kansas (Aptus, Inc.). In information supplemental to the petitions, Myers estimates that an average truckload for such waste would weigh 40,000 pounds. Using this estimate, EPA calculates that 7,500 to 11,750 truckloads of waste would be shipped to Talmadge, and an additional 1,500 to 2,250 truckloads would be shipped from Talmadge for incineration.

Myers has failed to demonstrate that the proposed activity would not pose a risk to health and environment in the United States. The introduction and disposal of large volumes of PCBs would pose some risk of exposure, even if the PCBs are disposed of in an EPA-permitted facility such as Myers' Ohio facility or other TSCA-approved incinerator. In addition, the large volumes of PCBs that would be transported to various facilities in different parts of the United States pose a potential risk of spills or other exposure to PCBs despite the past safety record of the transporting company.

Myers also has failed to submit adequate information with respect to the benefits of the proposed activity. Myers states that one of the benefits would be additional revenues for the company. With the exception of Petition 3, however, Myers has provided revenue information only with respect to gross revenues. Gross revenue estimates tend to overinflate the actual financial benefit to the petitioner. To properly evaluate the financial impacts, EPA needs additional information regarding any costs that might offset projected gross revenues.

In addition, Myers has failed to substantiate its claim that the United States would benefit by the removal of PCBs that are stored in Canada and the elimination of possible risk of crossborder contamination. EPA acknowledges that there is a possibility that some PCBs stored in Canada could pose some risk to health or environment in the United States. Myers, however, has not presented factual information to demonstrate why PCBs stored in Canada pose such a risk or to show the extent of the risk to health and environment in the United States.

The Canadian government regulates the storage and disposal of PCBs in that country which should provide adequate protection against releases or spills that could threaten the United States. Moreover, Canada possesses a domestic disposal facility, and is in the process of expanding its PCB disposal resources (Memo from Bryan to Greenwood, June 25, 1991). The government also has some mobile disposal facilities. Id. Some of these facilities may be available to dispose of the PCBs that Myers proposes to import into the United States.

Myers also states that lowered disposal costs for Canadian companies constitute an additional benefit of the proposed activities. Under TSCA, however, EPA does not consider benefits that may occur accrue to foreign businesses, just as it does not consider risks that do not threaten domestic health or the environment.

EPA is proposing to deny Myers' petitions because Myers has failed to demonstrate that the risks of the proposed activity are reasonable when weighed against the benefits, particularly in view of the limited information available to substantiate the alleged benefits.

Myers contends that the proposed disposal activities do not pose an unreasonable risk by noting that the facilities that would dispose of the PCBs are permitted by EPA pursuant to 40 CFR 761.60(e). Section 761.60(e) authorizes EPA to issue a permit if the

method of destroying PCBs will not present an unreasonable risk of injury to health or the environment. Under this provision, EPA weighs the risk of the disposal methodology against the benefits to the health and environment in the United States. The fact that EPA has determined that the benefits outweigh the risks when the activity involves the disposal of domestic PCBs that are already present in the United States, however, does not demonstrate that the benefits outweigh the risks when the activity involves disposing of foreign PCBs that would be introduced into this country. The introduction of additional PCBs that would otherwise not be in the United States adds an additional factor to the risk/benefit equation.

EPA further finds grounds to deny the petitions based on the good faith efforts criteria of TSCA section 6(e)(3)(B)(ii). Petition 1 maintains that this criteria is "not really applicable," in that Myers only wishes to import PCBs for disposal, and not for use in commerce; however, the petition does go on to discuss other disposal options. The subsequent three petitions simply state that the good faith efforts criteria does not apply, and provide no discussion of alternatives. While, strictly speaking, section 6(e)(3)(B)(ii) refers to finding substitute chemicals, EPA believes that under this section it must generally consider the issues of the availability of alternatives, and the overall necessity for granting an exemption. The alternative to importation of Canadian PCB waste into the United States for destruction is to destroy those wastes in Canada itself. Myers maintains in Petition 1 that it has investigated the possibility of setting up a facility in Canada to recycle/destroy PCB Transformers, and it concluded that it would be uneconomical and politically difficult to establish a facility in Canada. However, Myers fails to demonstrate that establishing a facility in Canada is not feasible; rather, Myers only forwards arguments as to why doing so is less expedient and less profitable for Myers than importing the waste to its existing facility in the United States. Myers does not provide any evidence that it made substantial good faith efforts to pursue such an option before it petitioned the Agency for this exemption. More importantly, Canada already possess a domestic disposal facility, and is in the process of expanding its PCB disposal resources. There are no technological barriers to the effective destruction of PCBs in Canada that would necessitate their shipment to the United States for safe disposal. Myers has not demonstrated

the necessity for the PCBs in question to be imported to the United States for disposal, and accordingly EPA finds that all four petitions have failed to meet the good faith efforts criteria.

Although Myers has not submitted adequate information to allow the Agency to make the requisite findings for these four specific exemptions to import Canadian PCBs for disposal, EPA is considering whether to amend existing PCB disposal rules to modify the general restriction on the import of PCBs with 50 ppm or greater for disposal. EPA believes that opening the border to allow import for disposal may have far-reaching consequences and that it is preferable to raise the issue of the transboundary movement of PCB waste generally in the proposed disposal rules rather than to examine it in isolation in the context of individual company's petitions for exemption. In the proposed disposal rules, EPA is requesting comment on the circumstances under which the United States border should be opened to the transboundary shipments of PCBs for disposal. The proposal, if finalized, would retain the general prohibitions on import of PCB wastes at concentrations of 50 ppm or greater, with certain exceptions described in more detail in the preamble to the proposed disposal rule.

2. *Gene Rideout Dangerous Goods Consultants, Inc. (DGC)*. On December 27, 1993, Dangerous Goods submitted an exemption petition to import laboratory samples from Canada for treatability studies. DGC is a consulting firm which is based in Ontario, Canada, and which also is incorporated in the state of New Jersey.

a. *Current petition*. The petitioner requests to import PCB waste samples, primarily soil samples, not to exceed 5 kilograms total weight. DGC estimates that samples would be shipped no more than once a week. Assuming weekly shipments of 5 kilograms each, approximately 260 kilograms of soil and other media would be imported annually. If granted an exemption, DGC expresses an intent to renew their exemption for up to 5 years. Treatability analysis would be conducted at unidentified client laboratories in the United States (DGC is a consulting firm and does not operate its own laboratory facilities). The petitioner claims that PCBs in the waste samples would normally be destroyed during treatment and analysis, but if any remained, the residuals could be returned to Canada if EPA so stipulates. According to DGC, the capability to treat/analyze such PCB waste samples does not exist in Canada at this time, but at least one U.S. laboratory possesses such technology

DGC believes that such capability should be developed in Canada within 4 or 5 years time. DGC does not claim any economic losses to the United States would result from a petition denial, but it maintains that without this exemption, PCB-contaminated soil in Canada will remain untreated until Canada develops this laboratory technology domestically.

b. *Proposed decision on petition.* EPA proposes to deny this exemption petition. EPA has determined that, in general, the import (manufacture) of PCBs into the United States and the distribution in commerce of PCBs present an unreasonable risk of injury to health and the environment [See 40 CFR 761.20 and 44 FR 31514, May 31, 1979]. EPA has also stated that "[i]t is the clear intent of TSCA to minimize the addition of PCBs to the environment of the United States." Id. DGC has not demonstrated what benefits would accrue to the United States through the granting of its petition, and how those benefits would outweigh the risk inherent in importation of PCB wastes. Accordingly, EPA cannot make the finding that granting this petition will not present an unreasonable risk of injury to health or the environment.

In addition, EPA finds that the petitioner has failed to satisfy the good faith efforts criterion, i.e., DGC has not demonstrated that there is no viable alternative to importing these samples into the United States. According to the Canadian Association for Environmental Analytical Laboratories, there are laboratories within Canada capable of conducting PCB analysis. The petition does not provide any details on the unidentified U.S. laboratory's techniques, why the Canadian laboratories are unable to provide such analysis, or why developing such technologies would take Canadian laboratories so long. Further, the petition fails to justify how the shipment of individual laboratory samples to the United States will expedite the cleanup of PCB-contaminated sites in Canada: cleanup of these sites will not occur until the Canadians develop their own domestic ability to apply such technologies *in situ* on a large commercial scale. EPA notes that the primary reason it closed the border in 1980 was to encourage foreign countries to develop their own capacity for properly handling and disposing of PCB waste. [See 45 FR 29115, May 1, 1980]. The Agency believes that granting this petition might actually hinder Canadian efforts to develop a domestic treatment capability.

3. *Jaco Analytical Laboratory, Inc. (Jaco).* On June 14, 1993, Jaco (formerly

National Chem Lab) submitted an exemption petition to import oil samples from transformers from Canadian utilities to test for PCBs, and to return (export) to the Canadian utilities any unused samples that test positive for PCBs following their analysis. On May 13 1994, Jaco amended its petition and notified EPA that National Chem Lab has been acquired by Jaco.

a. *Current petition.* The sample sizes would be 2.5 milliliters per sample of oil. These samples would then be analyzed for PCB content. Following their analysis, waste oil 499 ppm or less would be recycled in a high efficiency boiler at Big Stone Utility; and waste oil 500 ppm or greater would be sent to Aptus for incineration. Jaco estimates that based on a submittal rate of 50,000 samples per year, the total volume of PCBs to be imported would be 6 gallons. Jaco maintains that historical laboratory data indicates that less than 5 percent of the samples are in the PCB classification (over 50 ppm). In addition, Jaco estimates that their volume of waste oil greater than 499 ppm would only increase by 3 gallons annually.

During analysis, Jaco states that the 1 microliter injected into the Gas Chromatograph (GC) is destroyed in the destructive detector and the residual oil from this process contains no PCBs since the extraction process removes the PCBs from the oil. Further, the 9.4 milliliters of 2,2,4-trimethylpentane that is used in the extraction process and remaining after the GC sample is run, is separated from the acid and reclaimed in a distillation process for reuse. This recycling of the solvent used in the extraction eliminates the need for solvent disposal.

Jaco states that the economic consequences of denial would be greater for the Canadian utilities. In their petition, Jaco indicates that Canadian utilities currently pay \$100.00 per sample, while Jaco's cost is \$15.00 per sample. Jaco maintains that denial of their petition would limit the growth of Jaco (4 additional jobs) and the number of non-farm jobs available in Eastern Washington State.

b. *Proposed decision on petition.* EPA proposes to deny this exemption petition. EPA has determined that the petitioner has failed to establish that there is no unreasonable risk as required in TSCA section 6(e)(3)(B). The petitioner has not demonstrated how the benefits accruing from granting these petitions would outweigh the risks inherent in importation of PCB waste.

EPA has determined that the import (manufacture) of PCBs into the United States and the distribution in commerce

of PCBs present an unreasonable risk of injury to health and the environment (See 40 CFR 761.20 and 44 FR 31514 and 31537, May 31, 1979). EPA has also stated that "[i]t is the clear intent of TSCA to minimize the addition of PCBs to the environment of the United States." Id. In 1980, EPA issued a policy that encouraged foreign countries to develop their own capacity for properly handling and disposing of PCB waste. (See 45 FR 29115, May 1, 1980).

Further, EPA has determined that the petitioner has not met the good faith efforts criterion. Although no non-PCB substitutes can be used for the analysis of PCBs, the petitioner has not demonstrated or provided any convincing rationale as to why there is a necessity for the PCBs to be imported into the United States, solely for the purpose of analysis. According to the Canadian Association for Environmental Analytical Laboratories (CAEL), there are analytical laboratories within Canada for conducting PCB analysis (See CAEL lists of accredited and certified labs - January, 1994). EPA does not want to encourage the expansion of PCB products or PCB services for companies when there are feasible alternatives already in place.

4. *ERTHCO Environmental Service, Inc. (ERTHCO).* On March 4, 1994, ERTHCO submitted an exemption petition requesting to import from the Philippines samples of oil for PCB analysis.

a. *Current petition.* The petitioner states that the oil samples from transformers and other electrical equipment would be in vials of 5 milliliter or less. These samples would be collected from clients of their Manila Branch Office and submitted through the Rancho Cordova/Sacramento Office to Analytical Associates Inc. located at 4011 Power Inn Road, Suite G, Sacramento, CA, 95826.

The petitioner states that the analytical evaluations (e.g., dielectric breakdown voltage, acid number, dissipation factor, etc.) of these samples is in an effort to assist power utilities in understanding the inner performance of their electrical equipment. The petitioner expects that a maximum of 3 liters of fluid (250 ml or 50 samples less than 5 milliliters), with a PCB concentration range from 0 to 100 percent, would be imported in 1 year.

The petitioner states that PCB release prevention measures would be implemented for their shipments. In addition, the petitioner would require all contracting laboratories to handle the samples in an environmentally sound manner, throughout the process and up to final disposal.

The petitioner states that the no unreasonable risk criteria would be met because no handling of the PCBs would take place outside of an experienced laboratory. Transportation of the samples would be according to International Air Transportation Authority (IATA) guidelines. In quantifying the economic consequences if their petition were denied, the petitioner states that there is major economic benefit to be realized, but an accurate estimate of the economic impact cannot be given at this time. Moreover, the petitioner believes that it may be liable if this activity is not allowed because the petitioner's operation in the Philippines would not be able to properly determine risks to personnel safety and the environment.

b. *Proposed decision on petition.* EPA proposes to deny ERTSCO's exemption petition. EPA has determined that the petitioner has failed to establish that there is no unreasonable risk as required in TSCA section 6(e)(3)(B). The petitioner has not demonstrated how the benefits accruing from granting these petitions would outweigh the risks inherent in importation of PCB waste.

EPA has determined that the import (manufacture) of PCBs into the United States and the distribution in commerce of PCBs present an unreasonable risk of injury to health and the environment (See 40 CFR 761.20 and 44 FR 31514 and 31537, May 31, 1979). EPA has also stated that "[i]t is the clear intent of TSCA to minimize the addition of PCBs to the environment of the United States." Id. In 1980, EPA issued a policy that encouraged foreign countries to develop their own capacity for properly handling and disposing of PCB waste. (See 45 FR 29115, May 1, 1980).

Further, EPA has determined that the petitioner has not met the good faith efforts criterion. Although no non-PCB substitutes can be used for the analysis of PCBs, the petitioner has not demonstrated or provided any convincing rationale as to why there is a necessity for the PCBs to be imported into the United States, solely for the purpose of analysis. EPA does not want to encourage the expansion of PCB products or PCB services in the United States when there are feasible alternatives already in place.

C. Export

EPA received four petitions to export PCBs. One of these petitions was withdrawn by the petitioner.

1. *Sigma-Aldrich Corporation (Sigma-Aldrich).* On May 6, 1992, Sigma-Aldrich submitted an exemption petition to export small quantities of PCBs for research and development to

the international monitoring community for use in the identification and quantification of environmental contaminants. On May 24, 1994, Sigma-Aldrich submitted an amendment to its petition.

a. *Current petition.* Sigma-Aldrich states that they obtain PCBs for environmental monitoring purposes from companies already exempted by EPA. These PCBs are analyzed for quality control by highly trained chemists using gas chromatography and then prepared as analytical reference standards.

The PCB standards are prepared in concentrations not exceeding 1,000 micrograms per milliliter in organic solvent. The standards will be packaged in volumes of 1 milliliter in flame sealed amber glass ampules. The ampules will be packaged using die-cut cardboard inserts that hold the ampules securely in place inside a rigid cardboard box which will be overpacked in a box that has been tested, certified and labelled according to Department of Transportation (DOT) specifications. Sigma-Aldrich also states that all shipping will be done in observance of all domestic and foreign transportation requirements. The processing of these standards will be performed at the Sigma-Aldrich facility at 3500 DeKalb Street, St. Louis, Missouri. The maximum total volume of PCB solution will not exceed 5 liters and the maximum total PCB volume contained in the solution will not exceed 5 milliliters. Sigma-Aldrich estimates that the total amount of PCBs to be exported in 1 year will not exceed 100 grams or 0.220 pounds.

According to Sigma-Aldrich the analytical work will generate a wastestream that contains a maximum of 2.5 milligrams of PCBs, while the processing wastestream will not exceed 5.0 milligrams of PCBs. Sigma-Aldrich states that these wastestreams will be handled in accordance with 40 CFR part 761, subpart K. In its petition, Sigma-Aldrich also states that through customer screening they will ensure proper handling of the materials by qualified personnel. Sigma-Aldrich estimates that denial of this petition will result in a loss in revenue of \$60,000 per year.

In a letter dated March 24, 1994, Sigma-Aldrich amended their petition to include an exemption to export small quantities of Carbon 14-labelled PCBs for sale to foreign customers for use in the performance of metabolic and environmental fate studies. Sigma-Aldrich synthesizes Carbon 14-labeled PCBs in small quantities for metabolism and environmental research according

to their existing exemption. Sigma-Aldrich's existing exemption for manufacturing PCBs for these products is in the name of Pathfinder Laboratory which is now the Radiochemicals Department of Sigma Chemical Company (part of Sigma-Aldrich Corporation).

The petitioner states that these Carbon-14 PCBs are analyzed by highly trained chemists using high pressure liquid chromatography in a quality control laboratory. Packaging for these items consists of flame-sealed glass ampules containing less than 0.5 milliliters of solvent. The primary container is overpacked using packing material and a second box that is DOT specified and labeled. The petitioner also states that if the petition is granted, applicable foreign requirements for air, land and water transportation will be followed. In addition, the wastestream that is produced during the synthesis and analysis will be absorbed on silica gel and solidified in concrete prior to storage in compliance with Nuclear Regulatory Commission requirements. The activity for this petition will be conducted at 11542 Fort Mims Drive, St. Louis, Missouri.

The petitioner maintains that the total number of ampules to be distributed in a year will not exceed 500, at less than 5 milligrams of PCBs per ampule. The petitioner also states that through a customer screening procedure, the PCBs would be handled by qualified personnel and should not present a risk of injury to health or the environment. The petitioner estimates that denial of this petition would result in a loss of up to \$100,000 per year in sales from foreign distributors.

b. *Proposed decision on petition.* EPA proposes to grant the Sigma-Aldrich an exemption for 1 year to export small quantities of PCBs for research and development under §761.80(c). The Agency generally treats petitions for exemption to export PCBs more stringently than petitions to distribute PCBs within the United States. This is because once the PCBs cross beyond our borders, the United States loses its ability to monitor the handling and distribution activities, to inspect the receiving facilities for any regulatory violations, or to protect health or the environment from releases of those PCBs that might lead to additional PCB contamination in this country. However, EPA believes that those concerns are mitigated in the export of PCBs in small quantities for research and development particularly given the viscosity, quantity, marking, and packaging of the PCBs, as well as the careful handling of the PCBs by trained personnel as

described in the petition and amendment. Since there are no substitutes for PCB analytical samples, the good faith efforts finding has been met.

Sigma-Aldrich would be prohibited from exporting PCBs in excess of the amounts and quantities specified in its petition (i.e., less than 100 grams/year - Petition 1 and less than 2.5 grams/year - Amendment), and would be required to petition EPA and obtain an exemption prior to an increase in the quantity or a change in the manner of handling PCBs under the Sigma-Aldrich exemption. EPA would consider any such change as a new exemption petition and address the request by rulemaking. If Sigma-Aldrich were to wish to continue its export activities beyond the 1-year timeframe under the EPA approved exemption, a certified letter, pursuant to the amended Interim Procedural Rules, would have to be submitted to EPA at least 6 months prior to the expiration of the exemption.

2. Millipore Corporation and ImmunoSystems, Inc. On May 6, 1992, Millipore Corporation and ImmunoSystems, Inc. requested an exemption to process and distribute in commerce for export small quantities of PCBs for research and development.

a. Current petition. The petitioners seek to process and distribute for export small quantities of PCBs for research and development. Specifically, the petitioners seek to export their product, the EnviroGard® PCB Test Kit to 42 of their international distribution subsidiaries. The petitioners state that the EnviroGard® PCB Test Kit is an immunoassay-based test kit for the analysis of PCBs in soils, water, oil and other liquids. The petitioner currently processes and distributes in commerce small quantities of PCBs under the class exemption at 40 CFR 761.80(g).

The components of the kits which contain PCBs (Aroclor 1248) are EnviroGard® PCB Positive Calibrators at 7 ppm, 10 ppm and 45 ppm in methanol. The EnviroGard® PCB Test Kit is an analytical test kit that is used by trained professional chemists and engineers who are involved in the remediation of PCBs.

The petitioners predict that 250 to 500 kits will be sold overseas per year. Based on these numbers each kit would contain 6.7 micrograms of Aroclor 1248 in 0.3 milliliters of methanol, yielding a total of 0.0017 to 0.00335 grams of Aroclor 1248 in 75 to 150 milliliters of methanol exported in a year. The petitioners state that the kits will expand existing conventional technologies such as gas chromatography and mass spectroscopy

by offering a safe, reliable, economic, and expedient way of screening negative samples from positive samples. Positive samples are later confirmed with conventional techniques and are disposed of in accordance with applicable regulations.

There are no substitutes available which can be used to accurately determine the presence of PCBs, since known concentrations of PCBs must be used in the calibrators that contain known concentrations of PCBs. The petitioners estimate that the cost of denial of this petition could cause a loss in revenue amounting to \$0.25 million the first year and \$2 to 4 million in 5 years.

b. Proposed decision on petition. EPA proposes to grant Millipore Corporation and ImmunoSystems, Inc. an exemption for 1 year to export small quantities of PCB for research and development under §761.80(c). As stated above, EPA generally treats petitions for exemption to export PCBs more stringently than petitions to distribute PCBs within the United States. This is because once the PCBs cross beyond our borders, the United States loses its ability to monitor the handling and the distribution activities, to inspect the receiving facilities for any regulatory violations, or to protect health or the environment from releases of those PCBs that might lead to additional PCB contamination in this country. However, EPA believes that those concerns are mitigated in the export of PCBs in small quantities for research and development particularly given the viscosity and quantity of the PCBs involved, as well as the careful handling of the PCBs by trained personnel as described in the petition. Further, since no PCB substitutes exist that can be used to determine the presence of PCBs, the good faith efforts criterion has been met.

The petitioners would be prohibited from exporting PCBs in excess of the amounts and quantities specified in their exemption petition, and would be required to petition EPA to obtain an exemption prior to an increase in the quantity or a change in the manner of handling PCBs under the Millipore/ImmunoSystems exemption. EPA would consider any such change as a new exemption petition and address the request by rulemaking. If the petitioners were to wish to continue its export activities beyond the 1-year timeframe under the EPA approved exemption, a certified letter, pursuant to the amended Interim Procedural Rules, would have to be submitted at least 6 months prior to the expiration of the exemption.

3. National Institute of Standards and Technology (NIST). On July 1, 1991,

NIST submitted an exemption petition to export small quantities of PCBs for research and development to the international monitoring community for use in the identification and quantification of environmental contaminants.

a. Current petition. NIST currently offers for sale Standard Reference Materials (SRMs) that were produced and/or characterized with financial support from U.S. Government Agencies, including EPA. These SRMs were used for environmental monitoring and research. The petitioner states that these SRMs in the form of Aroclor mixtures and as individual isomers, both neat and in solution are distributed in sealed 2 milliliter ampules pursuant to the class exemption at 40 CFR 761.80(g).

NIST states that the PCBs they analyze are obtained from commercial sources. Once received, these PCBs are analyzed by their Organic Analytical Division and/or the Gas and Particulate Science Division. The petitioner maintains that the material is handled by professional scientists and technicians. Once the analysis is complete, the petitioner states that the liquids are packaged in hermetically sealed ampules and the sediment is contained in amber bottles by trained staff following proper safety precautions. The materials are packaged using the NIST logo which indicates the presence of PCBs. The petitioner states that the PCB materials received for SRM development are analyzed for their content only, no residual material is produced. Each SRM is accompanied by a certificate that provides the results of the characterization and indicates the intended use of the material. In addition, the petitioner states that because of their congressional mandate to serve as the nation's physical laboratory and the legal ramifications of a certified NIST SRM, other governments, industry and others seek out NIST for its SRMs.

The petitioner states that estimating the economic consequences of denying their petition is difficult to quantify. However, when monitoring the import of goods and produce containing PCBs residues, the petitioner believes an inaccurate PCB analysis could cost human lives and billions of dollars in produce.

b. Proposed decision on petition. EPA proposes to grant the NIST's petition. The Agency generally treats petitions for exemption to export PCBs more stringently than petitions to distribute PCBs within the United States. This is because once the PCBs cross beyond our borders, the United States loses its

ability to monitor the handling and distribution activities, to inspect the receiving facilities for any regulatory violations, or to protect health or the environment from releases of those PCBs that might lead to additional PCB contamination in this country. However, EPA believes that those concerns are mitigated in the export of PCBs in small quantities for research and development particularly given the viscosity, quantity, and packaging of the PCBs, as well as the careful handling of the PCBs by trained personnel as described in the petition. Since there are no substitutes for PCB analytical samples, the good faith efforts finding has been met.

NIST would be prohibited from exporting PCBs in excess of the amounts and quantities specified in its petition (i.e., less than 500 grams/year), and would be required to petition EPA and obtain an exemption prior to an increase in the quantity or a change in the manner of handling PCBs under the NIST exemption. EPA would consider any such change as a new exemption petition and address the request by rulemaking. If NIST were to wish to continue its export activities beyond the 1-year timeframe under the EPA approved exemption, a certified letter, pursuant to the amended Interim Procedural Rules, would have to be submitted to EPA at least 6 months prior to the expiration of the exemption.

D. Processing and Distribution in Commerce

EPA received one petition requesting an exemption to allow the processing and distribution in commerce of PCBs.

Edwin C. Kraemer. On January 30, 1993, Edwin C. Kraemer requested an exemption to process and distribute in commerce products made from PCB containing car shredder waste or fluff.

a. Current petition. In the petition, Edwin Kraemer states that he seeks to use a procedure that converts car shredder waste or fluff (less than 50 ppm) into a product filler which will constitute a commodity in trade. The process Mr. Kraemer proposes to use is a mechanical process which specializes in grinding to a microstructure size resulting in filler material. Mr. Kraemer maintains that these fillers can be flame retarding, lightweight, compressible, absorbent, and have sound proofing, thermal insulating and energy absorbing characteristics. As described in the petition, items to be manufactured using this process include, but are not limited to: product filler, absorbent, solid bulk filler, substitute for concrete fill, ceiling tile, adobe block, brick, concrete block, insulation panels for walls and ceilings, packaging, furniture and mattress

stuffing, gymnastics mats, safety barriers, sound insulation, replacement for asbestos, injection moulding filler, fire retardant coating, plaster board or building panel filler.

Mr. Kraemer proposes to conduct his initial work using material from the Orange County Steel Salvage Company which he states is considered one of the most contaminated sites in the country where 50,000 tons of contaminated material has been stockpiled. Based on the 50,000 tons of contaminated material, Mr. Kraemer estimates that 10,000,000 lbs. will be processed onsite at a concentration of 30 ppm PCBs, for a total of 300 lbs of PCBs. Mr. Kraemer also asserts that the PCB contamination is not the result of shredding appliances, motors and transformers or PCB Items, but is actually attributable to the use of plastics and finishes in products.

The petitioner maintains that due to the low concentrations and the anticipated nonfriable uses, that any release of PCBs to the environment is unlikely. In addition, the petitioner states that the predictable and anticipated level of inadvertently generated PCBs in any end product will be kept under 25 ppm; therefore, the manufacturing or processing for commercial purposes of products with PCB concentrations of less than 50 ppm should be excluded from the prohibitions of TSCA section 6(e)(2) and (3). The petitioner states that he does not see a need for any special labelling, disposal and recordkeeping requirements, since he is not producing a PCB Item, article, equipment or container.

The petitioner states that denial of this petition would eliminate a potential \$18.5 million (cost for disposal) savings for the State of California and a potential \$50 million in profit. If the exemption is granted and the process is successful, the petitioner states that it would generate employment, eliminate a hazardous waste, recycle a strategic material, conserve landfill space and protect the environment and public safety on a long term basis.

b. Proposed decision on petition. EPA proposes to deny the petition submitted by Edwin C. Kraemer. Although EPA agrees that conversion of fluff into viable products for trade might ameliorate the disposal problem in the area of PCB-contaminated fluff, EPA would not be able to make a finding of no unreasonable risk to health and the environment in this instance due to insufficient data to support such a finding. EPA encourages the petitioner to continue to pursue research in this area in order to generate more data in

support of this petition. The good faith efforts criterion would have been met because the use of a substitute is not applicable in this instance in that this proposal seeks to provide an alternative to disposal for PCB-contaminated fluff.

E. Manufacture

EPA received two petitions to manufacture PCBs.

1. General Electric (GE). On November 16, 1992, GE submitted a petition to manufacture small quantities of PCBs for use on-site in EPA-authorized research activities.

a. Current petition. GE seeks to synthesize small quantities of PCBs for use on-site in EPA-authorized activities. In the petition GE states that ongoing and future research involving the remediation of PCB-contaminated media requires ready access to a supply of individual PCB congeners of a known quality and quantity, which is currently not readily available commercially. This activity would be conducted at GE-Corporate Research and Development, River and Van Antwerp Roads, Niskayuna, New York, 12309.

The petitioner states that the PCB congeners will be synthesized only as necessary for specific EPA-authorized research experiments while the amount of PCBs to be synthesized will be determined by the project specific requirements. The petitioner estimates that the total amount of PCBs to be synthesized will be limited to 2 kilograms per year, and the total amount of PCBs synthesized with bench-scale laboratory procedures will be limited to a maximum theoretical yield of 150 grams or less per experiment.

The petitioner maintains that the accidental release of PCBs is prevented by the use of apparatus such as condensers, cold traps, molecular sieves, or filters for retaining all reactants and reaction products. Also, reaction products and waste materials will be analyzed for PCB content, handled and disposed of in accordance with applicable regulations.

As described in the petition, PCB congeners are needed for research into developing alternative PCB remediation methods and innovative PCB destruction methods; therefore, use of a PCB substitute would not be feasible.

b. Proposed decision on petition. EPA proposes to grant GE an exemption for 1 year to manufacture small quantities of PCBs for use on-site in EPA-authorized activities. Because the research is being conducted by highly trained and experienced professionals under controlled conditions and only small quantities are involved, EPA finds that no unreasonable risk will result

from granting an exemption to GE to manufacture small quantities of PCBs for use on-site in EPA-authorized research activities. The good faith effort criterion has been met, because for research in development of alternative PCB remediation methods and PCB destruction methods, use of a PCB substitute may not be possible.

GE would be prohibited from manufacturing PCBs in excess of the amounts and quantities specified in their exemption petition, and would be required to petition EPA to obtain an exemption prior to an increase in the quantity or a change in the manner of handling PCBs under the GE exemption. EPA will consider any such change as a new exemption petition and address the request by rulemaking. If GE were to wish to continue its export activities beyond the 1-year timeframe according to the EPA approved exemption, a certified letter, pursuant to the amended Interim Procedural Rules, would have to be submitted at least 6 months prior to the expiration of the exemption.

2. *Supelco Inc. (Supelco)*. On July 31, 1990, Supelco submitted a petition to manufacture PCBs in small quantities for use in research and development.

a. *Current petition*. Supelco seeks approval to manufacture individual pure PCB isomers in quantities of 0.02 to 0.04 pounds (i.e., 10 to 20 grams) each at its Supelco Park facility in Bellefonte, PA. The petitioner estimates that a 10 to 20 gram production lot of an individual pure PCB isomer would represent a 3 to 5 year supply. Total annual production is projected at less than 1 pound (i.e., 454 grams). The PCBs would be diluted in the microgram range and packaged for distribution in sealed vials for solids and amber ampoules for liquids in either 5 milliliter or 1 milliliter quantities. Waste materials from the manufacture of PCBs would be manifested off-site for incineration in accordance with TSCA regulations.

To produce unsymmetrical PCBs, Supelco proposes to use a modified Gomberg-Bachmann reaction. An aromatic amine, an organic nitrite, and excess substrate are heated for several hours. Distillation under vacuum removes the remaining substrate. Column chromatography and/or high pressure liquid chromatography yields the product. Supelco asserts the merits of the method are that most of the starting materials are readily available from commercial sources, the synthesis is a simple one-step reaction, the final products following chromatography are sufficiently pure (>97 percent), and the yields are relatively good (30 to 35 percent).

To produce symmetrical PCBs, Supelco proposes to use replacement reaction of biphenylsulfonic acid with carbon tetrachloride. The reactants are heated in a Parr reactor for several hours at 250° C and, after removal of excess solvent, the final product is obtained in high purity (>98 percent) and high yield (>80 percent).

The synthesis of PCBs would be conducted in a controlled access laboratory that has been constructed for the preparation of hazardous chemicals by specially trained personnel in compliance with the Occupational Safety and Health Administration's (OSHA's) requirements at 29 CFR part 1910, subpart Z. Standards would be distributed in sealed glass ampoules, no larger than 5 milliliters, to analytical laboratories with personnel trained in the handling of hazardous materials. Processing and distribution in commerce activities would be conducted pursuant to the class exemption at §761.80(g), and although processing activities would be expected to reach a maximum of 150 grams, distribution activities would not be expected to exceed 100 grams and therefore would not trigger the reporting requirement of the class exemption.

Supelco maintains that since it has been selected as the private industry participant in a Cooperative Research and Development Agreement (CRADA) to produce and distribute organic quality control samples for EPA's EMSL-Cincinnati laboratory, the consequences of EPA's denial of its exemption would be a serious inconvenience to the EPA and an economic loss of not less than \$100,000 annually in potential sales to Supelco, Inc.

b. *Proposed decision on petition*. EPA proposes to grant Supelco an exemption for 1 year to manufacture PCBs for use in small quantities for research and development under §761.80(f). EPA believes that, due to the careful handling of PCBs by trained personnel as demonstrated in the petition, there would be no unreasonable risk presented by granting this exemption petition request. All manufacturing, processing and distribution activities would be performed at the Supelco, Inc. facility at Supelco Park, Bellefonte, PA.

Since no PCB substitutes exist for analytical standards, the good faith effort criterion does not apply. Granting an exemption would benefit society by allowing important health, environmental, and analytical research to continue.

EPA proposes to prohibit Supelco from manufacturing PCBs in excess of the amounts and quantities specified in

its petition (i.e., not to exceed 1 pound). Further exemptions beyond the 1-year period would be subject to the amended Interim Procedural Rules at 40 CFR part 750. Supelco would be required to petition EPA to increase the amount of PCBs handled, and to change the type of activities, the procedures for handling the PCBs, and any other term under the Supelco exemption. EPA would consider any such change as a new exemption petition and address the request by rulemaking. If Supelco were to wish to continue its manufacturing activities beyond the 1-year timeframe, a letter sent by certified mail would have to be received by EPA at least 6 months prior to the expiration of the exemption pursuant to the amended Interim Procedural Rules.

F. *Manufacture, Import and Export*

EPA received one petition to manufacture, import and export PCBs.

Chemsyn Science Laboratories (Chemsyn). On October 22, 1993, Chemsyn Science Laboratories submitted an exemption petition to manufacture/import and export PCBs in small quantities for research and development. Chemsyn is a manufacturer of chemical samples based in Lenexa, Kansas, and associated with Wellington Laboratories in Ontario, Canada. Chemsyn distributors are located in the United States, the Netherlands, Spain, Japan, and Italy. Chemsyn manufactures small quantity, high purity chemicals for use by industry, universities, government agencies, etc., for basic scientific research. Chemsyn produces standards such as radiolabelled, stable isotope labeled, and unlabelled environmental contaminants, including dibenzo-*p*-dioxins, chlorinated dibenzofurans, and EPA Method 1613 and 513 Standard Solutions. Samples are intended exclusively for laboratory applications.

a. *Current petition*. Chemsyn wishes to add PCB analytical standards to its current selection of environmental contaminant standards. The petition estimates that not more than 50 grams of PCBs would be produced annually. Chemsyn will produce each PCB congener in milligram quantities, and then diluted to the necessary concentration for the appropriate standard. Chemsyn also will import some standards containing PCBs that will be made in Canada by its partner, Wellington Laboratories. All the PCB standards will be flame sealed in 2 ml ampoules, and will contain less than 1 µg PCB per vial dissolved in 1.2 ml solvent. The PCB standards will be packaged and shipped in accordance with DOT shipping requirements.

Chemsyn literature indicates that all toxic preparations are shipped with documentation sheets describing known hazards. Chemsyn expects production waste generation to be minimal due to the small production rate and batch size involved. These wastes will be treated as PCB wastes. Chemsyn asserts that it has a highly trained staff, including chemists involved in the development of PCB chemistry and standards with Midwest Research Institute. Chemsyn estimates annual sales from PCB standards would be approximately \$30,000.

b. *Proposed decision on petition.* EPA proposes to grant the Chemsyn petition for manufacture, import, and export PCBs. EPA has previously established the need for analytical standards [49 FR 28154, July 10, 1984]. Because of this need, the small quantity limitations, and the carefully controlled conditions of PCB manufacture, EPA finds that no unreasonable risk would result from granting an exemption to Chemsyn to manufacture PCBs in small quantities for research or development. This finding also applies to the import of samples from Chemsyn's Canadian partner, Wellington Laboratories, provided that the imported samples are prepared, packaged, and labeled in the same manner as domestically produced samples. Because the manufacture of these analytical standards is being conducted by highly trained and experienced professionals under controlled conditions and only small quantities are involved, EPA finds that no unreasonable risk would result from granting this exemption. As such, EPA does not believe that the importation of these standards, when compared with their domestic manufacture, would pose any added risk to health or the environment.

The Agency generally treats petitions for exemption to export PCBs more stringently than petitions to distribute PCBs within the United States. This is because once the PCBs cross beyond our borders, the United States loses its ability to monitor the handling and distribution activities, to inspect the receiving facilities for any regulatory violations, or to protect health or the environment from releases of those PCBs that might lead to additional PCB contamination in this country. However, EPA believes that those concerns are mitigated in the export of PCBs in small quantities for research and development particularly given the quantity, marking, and packaging of the PCBs, as well as the careful handling of the PCBs by trained laboratory personnel. This finding would be consistent with previous determinations regarding the

export of PCB analytical samples for research and development [49 FR 28154].

EPA has determined that the good faith efforts finding would be met for petitions to manufacture, import, distribute or export PCBs in small quantities on projects consistent with the overall purposes of section 6(e) of TSCA, such as using PCBs as standards for the purpose of measuring PCB concentrations or using PCBs in the study of health and environmental effects of PCBs, because, in these cases, there are no PCB substitutes. There will always be a need for pure analytical standards to be developed to support laboratory analysis for PCBs. Also, pure PCBs are needed in critical health and environmental research because commercial PCBs contain mixtures of isomers and contaminants which may adversely affect experimental research.

Chemsyn would be prohibited from exporting PCBs in excess of the amounts and quantities specified in its petition (i.e., less than 50 grams/year), and would be required to petition EPA and obtain an exemption prior to an increase in the quantity or a change in the manner of handling PCBs under the Chemsyn exemption. EPA would consider any such change as a new exemption petition and address the request by rulemaking. If Chemsyn were to wish to continue its export activities beyond the 1-year timeframe under the EPA approved exemption, a certified letter, pursuant to the amended Interim Procedural Rules, must be submitted to EPA at least 6 months prior to the expiration of the exemption.

G. Processing and Distribution in Commerce of PCB in Buying and Selling Transformers

1. *Electric Apparatus Service Association (EASA).* On July 3, 1991, EASA submitted a petition requesting the renewal of their exemption which was originally granted in the May 22, 1990 **Federal Register** (55 FR 21023). This exemption allowed EASA members, for a period of 1 year, to process and distribute in commerce for reuse non-porous component parts from PCB-Contaminated Transformers that have been double washed and rinsed.

a. *Background.* EPA determined in granting the original exemption that, due to the non-porous nature of these component parts and, also, because of the relatively small amounts of PCBs involved, the activity of reusing component parts presents no unreasonable risk to health and the environment.

Regarding the benefits to society of granting this exemption, EASA

maintained that, without access to their stockpiles of component parts, both economic loss to the member companies and detriment to the society would be incurred. EASA asserted that its members may be put out of business if reuse of these components were prohibited, due to their inability to repair transformers during the activities of buying and selling used transformers and servicing customers' transformers.

Although EPA made no judgement regarding this claim, EPA acknowledged that without stocks of component parts, many transformers could not be repaired promptly and equipment users could experience interruptions of electrical services and could be forced to prematurely dispose of reusable units.

To support its claim of good faith efforts to reduce inventories of PCB-contaminated components, EASA submitted evidence of their efforts to develop a double-rinse method to remove PCBs from the non-porous component parts that would be reused on the PCB-Contaminated Transformers. This double-rinse procedure employs a protocol similar to that in EPA's Spill Cleanup Policy (40 CFR part 761, subpart G). EASA maintained that the introduction of double-rinsed, non-porous component parts back onto the PCB-Contaminated Transformers would not change the original parts per million PCB content of the transformer into which the component part is incorporated.

EPA concluded that the processing and distribution in commerce of the PCB residues on non-porous, double-rinsed transformer component parts as well as the buying and selling of PCB or PCB-Contaminated Transformers that have been serviced with double-rinsed, non-porous parts, meets both the no unreasonable risk and good faith effort criteria. EPA granted this class exemption for 1 year.

EPA decided that in future requests for renewal of their (EASA) exemption, that EPA would consider the petitioner's evidence of no unreasonable risk and good faith efforts by evaluating whether stockpiles of component parts have been effectively decontaminated and also whether inventories of PCB and PCB-Contaminated Transformers in EASA's contained storage areas have been reduced.

b. *Current petition.* In this petition EASA seeks to renew their exemption to process and distribute in commerce for reuse non-porous component parts from PCB-Contaminated Transformers that have been double washed/rinsed as granted in the May 22, 1990 FR 21023.

EASA has submitted two additional reports from T R Service Company to support that the double wash/rinse method is effective to decontaminate non-porous components. As described in the renewal petition, one report showed that 20 samples were taken from 10 transformers and all showed PCB concentrations of less than 10 micrograms per 100 square centimeters.

On June 12, 1990 the petitioner stated that it surveyed its members and of those that responded, only 20 percent were still handling mineral oil transformers 50 ppm or greater. In the petitioner's opinion the number of members with inventories of 50 ppm to less than 500 ppm has decreased significantly.

c. Proposed decision on petition. EPA proposes to grant EASA's request for renewal of their exemption. EPA believes that EASA has fulfilled their responsibility in seeking to renew their exemption by demonstrating efficacy, a reduction in inventory and all other conditions as set forth in their original exemption.

V. Regulatory Assessment Requirements

A. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. Under section 3(f), the order defines a "significant regulatory action" as an action that is likely to result in a rule (1) having an annual effect on the economy of \$100 million or more, or adversely and materially affecting a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities (also referred to as "economically significant"); (2) creating serious inconsistency or otherwise interfering with an action taken or planned by another agency; (3) materially altering the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raising novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

Pursuant to terms of this Executive Order, it has been determined that this rule is not "significant" and is therefore not subject to OMB review.

B. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (the Act), 5 U.S.C. 603, EPA must perform a regulatory flexibility analysis for all rules that are likely to have a "significant impact on a substantial number of small entities." Pursuant to section 605(b) of the Regulatory Flexibility Act, which provides that section 603 of the Act "shall not apply to any proposed or final rule if the Agency certifies that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities", EPA certifies that this rule will not have a significant impact on a substantial number of small entities. In addition, EPA is sending a copy of this rule to the Chief Counsel for Advocacy of the Small Business Administration. Section 6(e)(3)(A) and (B) of TSCA and EPA's PCB Ban Rule, 40 CFR part 761, prohibits the manufacture, processing, and distribution in commerce of PCBs. This rule, under section 6(e)(3)(B) of TSCA, would exempt persons from these prohibitions where petitioners have demonstrated that granting an exemption would not result in an unreasonable risk of injury to health or the environment and that they have made good faith efforts to develop substitutes for PCBs. Both small and large businesses must meet the same statutory standard. Thus, even if EPA believed that it was an economically desirable policy to grant an exemption petition for a small business, it could do so only if the small business met the requirements set forth in TSCA. This rule would not add to the burden placed on small businesses, it would only remove the prohibition placed on such businesses through granting an exemption. In essence, any impact from granting or denying a petition would only affect the petitioner.

Owners of individual small businesses who elect to petition the Administrator to engage in activities otherwise banned by the statute have already considered the economic consequences of conducting these activities, and nonetheless have opted to pursue an authorization for these activities. Finally, because this rule basically would benefit some small entities, without imposing direct economic costs on others, EPA believes that it is appropriate to certify that this rule will not have a significant economic impact on a substantial number of small entities.

C. Paperwork Reduction Act

The Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., authorizes

the Director of the Office of Management and Budget to review certain information collection requests by Federal Agencies. Under OMB Control Number 2070-0021, OMB has approved a general information collection request submitted by EPA for purposes of collecting information for rulemakings on PCB exemption petitions, and for any recordkeeping or reporting conditions to PCB exemption petitions granted by EPA.

Public reporting burden for this collection of information is estimated to average five hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

VI. Official Rulemaking Record

All of the information previously submitted and filed in docket number OPTS-66001, 66002, 66008-66008K (manufacturing, processing, and distribution in commerce exemptions) has been consolidated into docket number OPTS-66011. EPA has established this consolidated docket for the convenience of the public but did not rely upon information in that docket when proposing this rule.

A public record, along with a complete index, is available for inspection in the Nonconfidential Information Center, Monday through Friday (excluding holidays) from 12 noon - 4:00 p.m. in Room G-102, Northeast Mall (401 M St., SW., Washington, DC).

The following material is cited in the Index to the Rulemaking Record for Polychlorinated Biphenyls, Manufacturing, Processing, and Distribution in Commerce; Exemptions, Docket Number OPTS 66011 at A2-File (Insert the date of this final rule).

List of Subjects in 40 CFR Part 761

Environmental protection, Hazardous substances, Labeling, Polychlorinated biphenyls, Reporting and recordkeeping requirements.

Dated: November 23, 1994.

Susan H. Wayland,
Acting Assistant Administrator for
Prevention, Pesticides and Toxic Substances.

Therefore, 40 CFR chapter I, subchapter R is proposed to be amended as follows:

PART 761—[AMENDED]

1. The authority citation for part 761 continues to read as follows:

Authority: 15 U.S.C. 2605, 2607, 2611, 2614 and 2616.

2. In §761.80 by adding paragraphs (c)(3), (c)(4), (c)(5), (f)(9), (f)(10) and (m)(8) and by revising paragraphs (h) and (n) to read as follows:

§761.80 Manufacturing, processing and distribution in commerce exemptions.

* * * * *

(c) * * *

(3) Sigma-Aldrich Corporation, St. Louis, MO, 63103.

(4) Millipore Corporation and ImmunoSystems Inc., Bedford, MA, 01730 and Scarborough, ME, 04074.

(5) National Institute of Standards and Technology, Gaithersburg, MD, 20899.

* * * * *

(f) * * *

(9) General Electric Company, Schenectady, NY, 12301.

(10) Supelco Inc., Bellefonte, PA, 16823-0048.

* * * * *

(h) The Administrator grants the following petitioners a class exemption for 1 year to process and distribute in commerce non-porous transformer component parts which have been decontaminated of PCB residues and to buy and sell PCB Transformers or PCB-Contaminated Transformers to which only double-rinsed, non-porous component parts have been added:

(1) Electrical Apparatus Service Association, St. Louis, MO, 63123.

(2) [Reserved]

* * * * *

(m) * * *

(8) Chemsyn Science Laboratories, Lenexa, KS, 66215.

(n) The 1-year exemption granted to petitioners in paragraphs (a) through (c)(1), (d), (f), and (m)(1) through (m)(6) of this section shall be renewed automatically as long as there is no increase in the amount of PCBs to be

processed and distributed, imported (manufactured), or exported, nor any change in the manner of processing and distributing, importing (manufacturing), or exporting of PCBs. If there is such a change, a new exemption petition must be submitted to EPA and it will be addressed through rulemaking. In such a case, the activities granted under the existing exemption may continue until the new petition is addressed by rulemaking, but must conform to the terms of the existing exemption approved by EPA. The 1-year exemption granted to petitioners in paragraphs (c)(2), (3), (4) and (5), (f)(9) and (10), (h) and (m)(7) and (8) of this section may be extended pursuant to §750.11(e) or §750.31(e).

* * * * *

[FR Doc. 94-29569 Filed 11-30-94; 8:45 am]

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