SUPPLEMENTAL

RESPONSE TO COMMENTS DOCUMENT ON THE

PROPOSED RULE – DISPOSAL OF POLYCHLORINATED BIPHENYLS

STORAGE OF PCB ARTICLES FOR REUSE

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Prepared by the
Office of Pollution Prevention and Toxics
National Program Chemicals Division
Fibers and Organics Branch

Office of Prevention, Pesticides, and Toxic Substances
U.S. Environmental Protection Agency
Washington, DC 20460

INTRODUCTION

In 1998, EPA promulgated the PCB Disposal Amendments, a major revision of the rules governing use, manufacture, processing, distribution in commerce, and disposal of polychlorinated biphenyls (PCBs) (63 FR 35384, June 29, 1998). One of these amendments created new requirements for storing PCB Articles (as defined at 40 CFR 761.3) for reuse (40 CFR 761.35). These requirements were challenged in court. *Central & South West Services, Inc. v. EPA*, 220 F.3d 683 (5th Cir. 2000). While the court's decision generally upheld the requirements, the court directed EPA to address comments submitted during the rulemaking process that requested a waiver from the storage for reuse requirements for the electric utility industry. This supplement addresses those comments.

Comment 1: *Electric utilities store equipment that is electrically sound and that does not present a risk.* Several commenters stated that electric utilities typically keep an inventory of electrically sound equipment, such as capacitors, PCB Transformers, PCB-Contaminated Transformers, and voltage regulators, awaiting reuse to replace units that fail. The commenters stated that these units are tested and maintained so that they can be energized on short notice. Commenters also argued that the larger quantities of PCB-containing equipment accumulated by brokers, junk yards, and service shops pose a greater environmental risk than the inventories maintained by owners or users of such equipment (like electric utilities). Also, brokers, junk yards, and service shops are less likely to have business-related justifications for keeping the equipment. Commenters urged EPA to take enforcement action against known abusers instead of regulating others on the basis of suspected abuse, or to exempt from regulation equipment held by a company for reuse in its own system.

Source: (C1-027, C1-038, C1-122, C1-161, C1-199, C1-210, C1-217, C1-226)

Response 1: EPA imposed the new storage for reuse requirements to prevent the potentially serious environmental damage that can result from long-term unprotected storage of equipment containing PCBs. EPA acknowledges that the risks are greater where large quantities of such equipment are stored by facilities that have no intention of reusing the equipment themselves and therefore may not be concerned with its state of repair (see the preamble to the proposed PCB Disposal Amendments, 59 FR 62788, December 6, 1994, p. 62822). While risks may be greater at these facilities, unregulated storage of PCB Articles by electric utilities can also present an unreasonable risk to health and the environment.

For example, EPA inspected a facility owned by Texas Electric Cooperatives, Inc., that provided transformer repair and re-manufacturing support for member cooperatives (Complaint and Notice of Opportunity for Hearing, TSCA Docket No. VI-533C, September 27, 1991). The inspection revealed that the company maintained an area where it stored transformers for repair and future reuse. This area contained a PCB-Contaminated transformer that had leaked or spilled PCBs in concentrations $\geq$50 ppm to the ground, constituting an improper disposal of

PCBs under §761.60(a). The company consented to the assessment of a civil penalty for violations of the PCB storage and disposal regulations (Consent Agreement and Consent Order, TSCA Docket No. VI-533C, June 11, 1992).

An EPA inspector visiting a transformer storage site operated by the City of Timpson Electric Utility observed about 50 transformers stored in the open, either directly on the ground or on wooden pallets (Complaint and Notice of Opportunity for Hearing, TSCA Docket No. VI-676C(P), December 31, 1996). The utility's representative stated that some of these transformers had possible future reuse and others would not be reused. The inspector observed stains on the exterior surfaces of many of these transformers. The transformers showing stains either did not have nameplates, or the information on the nameplates did not indicate the type of dielectric fluid the transformers contained. The transformers had not been tested to determine their PCB concentration, so were required under existing regulations to be assumed to be PCB Transformers (containing PCBs $\geq$ 500 ppm). The utility's representative stated that the utility did not keep records on the use or disposal of PCBs. City of Timpson Electric Utility consented to the assessment of a civil penalty for violations of the PCB storage and disposal regulations, and agreed to dispose of 56 transformers containing PCBs and otherwise to come into compliance with the PCB regulations (Consent Agreement and Consent Order, TSCA Docket No. VI-676C(P), June 30, 1997).

EPA does not dispute the comments from electric utilities stating that they maintain as much electrically sound equipment as is needed to ensure the functioning of their electrical systems. However, these EPA inspections show that electrical equipment that a company claims is stored for reuse can present a risk to health or the environment from spills, leaks, or other unauthorized disposal.

Moreover, the commenters did not supply any data showing that the equipment stored for reuse at their facilities is maintained in such a way that it remains intact and non-leaking and therefore does not present a risk to health or the environment. There is no supporting evidence as to how often equipment is tested after being placed into storage or how it is maintained. As to

PCB Transformers and voltage regulators containing PCBs $\geq$500 ppm, inspection and maintenance data should be readily available. The PCB rules have required since 1982 that this equipment, when stored for reuse, be inspected periodically for leaks (40 CFR 761.30(a)(1)(ix) and (xiii)) (47 FR 37342, August 25, 1982). If the equipment is found to have a leak, the equipment must be repaired or replaced to eliminate the source of the leak, and released PCBs must be cleaned up and properly disposed of. Until appropriate action is completed, any active leak of PCBs must be contained to prevent exposure of humans or the environment and inspected daily to verify containment of the leak (40 CFR 761.30(a)(1)(x)). The owner of the equipment must keep records of these inspection and maintenance activities for a least three years after disposing of the equipment. The records must include the location of the equipment; the date of each visual inspection and, if a leak was discovered, the date that it was discovered (if different from the inspection date); the estimated amount of fluid that leaked; the date of any cleanup, containment, repair or replacement; a description of any cleanup, containment, repair, or replacement; and the results of any containment and daily inspection required for uncorrected active leaks (40 CFR 761.30(a)(1)(xii)). In establishing the inspection and maintenance requirements, EPA stated (47 FR 37342, August 25, 1982, p. 37345):

> EPA is concerned about releases of PCBs from all transformers because of the potential to expose humans and the environment to PCBs. In general, PCB Transformers pose greater exposure risks due to the use of higher concentration and larger quantities of PCBs than mineral oil-filled transformers. A release of PCBs into the environment has the potential to reach aquatic systems, build up in the food chain and ultimately expose humans through ingestion of PCBs. . . . [The inspection and maintenance program] will reduce the actual amount of PCBs released from PCB Transformers by correcting otherwise undetected leaks of dielectric fluid and reducing the number of transformer failures due to improper maintenance. Additional benefits of this program include containment of active leaks which are discovered and cleanup and disposal of leaked material. All of these benefits will result in reduced exposure to PCBs.

The commenters did not submit records of these inspection and maintenance activities to

support their position that EPA's concerns about leaks from this equipment are unfounded.

Commenters also stated that, because of the value of the equipment, it is stored in a restricted area to which only authorized personnel have access. Equipment is typically stored on concrete pads in proximity to the energized equipment that it would replace or in storage yards where the utility maintains an inventory to replace failed units. The term "restricted access area" generally refers to an electrical substation or other area to which access is restricted by man-made barriers such as fences or by natural barriers such as mountains, cliffs, or rough terrain. These areas generally include industrial facilities and extremely remote rural locations (see 40 CFR 761.123). A "restricted access area" is not necessarily designed with environmental protection in mind. Spills of regulated levels of PCBs in a restricted access area can pose a risk to those outside the area by escaping from the area or by leaching to groundwater. In contrast, facilities designed for the long-term storage of PCBs and hazardous waste are designed primarily to contain and control releases from the equipment to prevent PCBs from being released to the environment outside the storage area. The final rule therefore allows storage of PCB Articles for reuse in such an area indefinitely.

In short, commenters arguing that current storage for reuse practices are environmentally protective did not support their position with data, only general statements, impressions, or beliefs. This is illustrated by the following comments *(emphasis added)*. The CMA/USWAG/NEMA comments state, "*To the best of our knowledge*, there have been *few, if any*, incidents of leaks or releases from the electrical equipment being stored for reuse and therefore no risk of injury to human health or the environment" (C1-161). The Department of Energy "*does not believe* that storage for reuse presents a threat to human health or the environment in as much as electrical equipment is designed to be installed and used in extreme weather conditions, under load, outside and unprotected from the elements" (C1-147). Connecticut Department of Environmental Protection proposed a less restrictive regulatory alternative for electric utilities, noting, "The risk associated with this change *seems low*, since electric utilities are *generally more aware and knowledgeable* about maintenance of such items than others" (C1-249). Pacific Gas & Electric "*believes* that existing storage flexibility provided

by 40 CFR Part 761 is sufficient and protective of the environment given utilities' mandate to provide safe and efficient service" (C1-210). Montana-Dakota Utilities Co. opined that "*most* utilities *have made efforts* to reclassify or dispose of surplus PCB articles, since the liabilities attached are so great" (C1-038). Commonwealth Edison confessed that it, "like all large electric utilities, has been very much impacted by TSCA regulations and are already well aware of the importance of proper storage methods, disposal requirements, etc. hence *abuses are not likely and certainly not intentional*" (C1-114). Northeast Utilities System "*knows of few* incidents of leaks or releases from electrical equipment stored for reuse. . . . Based on their larger storage quantities, [brokers, junk yards, and service shops] *may* present a greater environmental risk" (C1-217). Iowa-Illinois Gas and Electric Co. argues that "the continued and indefinite storage of this equipment for use poses no particular environmental threat since it must be intact and non-leaking," but acknowledged that "*any damaged equipment that is discovered* [i.e., after the intact and non-leaking stored equipment has started to leak] is either repaired or decommissioned in accordance with U.S. EPA's requirements for disposal" (C1-257).

EPA concludes that comments do not demonstrate that storage for reuse practices in the electric utility industry are so environmentally protective that the industry should receive a waiver from the requirements of §761.35. Electric utilities provided only their subjective belief that conditions at their sites are sufficiently protective against unreasonable risks to health and the environment. The commenters did not support their belief with data adequate to support a finding that current practices across the industry do not present an unreasonable risk.

Comment 2: *Stored equipment is vital to maintaining a reliable power system*. Many commenters believed the storage for reuse requirements would restrict their ability to maintain back-up equipment or spare parts necessary to keep their power systems operating, or to repair equipment that was otherwise usable. Other commenters stated that capacity in §761.65(b) storage facilities is insufficient, and utilities would have to incur the costs of building new storage areas. Others stated that utilities would have to reclassify their equipment to avoid the new requirements, generating unnecessary waste and unnecessary disposal costs, without additional protection to health or the environment. One commenter noted that some equipment

known or assumed to be ≥50 ppm cannot be reclassified because it is sealed.

Source: (C1-029, C1-046, C1-081, C1-122, C1-136, C1-144, C1-147, C1-161, C1-179, C1-199, C1-210, C1-217, C1-249, C1-257)

Response 2: EPA recognizes the importance of spare equipment and parts to a utility's ability to provide uninterrupted electrical service, and acknowledges that in many cases extended storage for reuse of spares is warranted (see the preamble to the proposed PCB Disposal Amendments, 59 FR 62821-22). Nonetheless, this equipment must be stored in a manner that does not pose an unreasonable risk. The final rule addressed these comments by allowing storage for reuse outside a §761.65(b) storage area for five years, as opposed to the proposed limit of three years. In addition, based on comments, the final rule allows PCB Articles to be stored in excess of five years outside a §761.65(b) storage area if the owner or operator has received the approval of the EPA Regional Administrator. Finally, the rule allows indefinite storage for reuse of PCB Articles placed in a storage area permitted under RCRA section 3004 or 3006. These modifications allow utilities to maximize their use of existing storage arrangements and reduce the need for constructing new storage areas.

EPA disagrees with the comment that reclassifying PCB equipment generates unnecessary waste and creates unnecessary disposal costs, without additional protection to health or the environment. Reclassification does produce environmental benefits. The process of retrofilling electrical equipment during reclassification removes substantially all the original fluid, and because this fluid is subject to the disposal requirements of 40 CFR part 761, subpart D, it is not released to the environment. The reclassified equipment remains in use, but the lower-concentration fluid poses a reduced risk to health and the environment from spills or other exposures. In addition, disposal of the equipment at the end of its useful life and the fluid it contains are regulated to protect health and the environment. The commenter is correct that there are costs to reclassification, just as there are costs associated with many aspects of managing PCBs to protect health and the environment. However, reclassification is a voluntary process. The owner or operator of equipment stored for reuse should weigh the costs of

continued storage of the equipment as a PCB Article under §761.35 against the costs of reclassifying the equipment to an unregulated, non-PCB status.

EPA concludes that these comments do not demonstrate that the electric utility industry needs an exemption from §761.35 to allow it to store the equipment necessary to make sure their systems can operate and their customers can be served. The modifications to §761.35 made in response to comments allow the use of storage areas that would not have been allowed under the proposal, and increase the time equipment can be kept in storage for reuse to allow efficient operation of electric utility systems.

Comment 3: *Recordkeeping requirements would be costly and difficult to implement*. Some commenters asserted that, in general, additional requirements for record-keeping and approvals would be time-consuming and would add to administrative costs, without additional protection to health or the environment. Another commenter stated that it already maintains all the information required by the proposed rule (date of removal from use, projected location and future use, date the article will be repaired or serviced) in a computer database. A commenter objected to the requirement to maintain records of the projected location and future use of a PCB Article that is stored for reuse (see §761.35(a)(2)(ii)). The commenter stated that it would be difficult to determine in all cases where this equipment would be used on the power system. Another commenter thought this requirement would not be overly burdensome, as long as general answers were allowed. Commenters also stated that the proposed requirement to label equipment stored for reuse was burdensome and unnecessary because information EPA proposed to require on the label was already maintained in the annual document log (see the preamble to the final PCB Disposal Amendments, 63 FR 35399).

Source: (C1-046, C1-081, C1-122, C1-147, C1-199, C1-217)

Response 3: As was explained in the preamble to the final rule, EPA concluded that the requirement to maintain records of the projected location and future use of a PCB Article that is stored for reuse is necessary to distinguish an article in storage for reuse from one in storage for

disposal (63 FR 35400). A generic statement saying that a piece of equipment is of a size and voltage that could be used in numerous locations throughout a distribution system would fulfill this requirement; it would not be necessary to identify a specific piece of equipment that the article could replace. EPA also agreed with the commenters that the proposed labeling requirement should not be finalized, noting that PCB Articles stored for disposal are required to be labeled, and that adding a labeling requirement for PCB Articles stored for reuse could therefore be confusing (63 FR 35399).

EPA retained the other proposed recordkeeping requirements for PCB Articles being stored for reuse, since much of this information is normally maintained in the facility's annual document log. The Agency believes that owners or operators with PCB Articles being kept for reuse already maintain records indicating when articles are removed for servicing or repair for scheduling and budgeting purposes (see the preamble to the final PCB Disposal Amendments, 63 FR 35400). The Office of Management and Budget approved the recordkeeping requirements in §761.35 under the Paperwork Reduction Act as part of EPA Information Collection Request 1729.02 (63 FR 57123, October 26, 1998, p. 57124).

These comments from the electric utility industry do not demonstrate that compliance with the recordkeeping requirements of §761.35 would be so costly and burdensome as to justify a waiver for that industry, or that the requirements are unnecessary to protect against risk and to ensure compliance with the storage for reuse requirements in that industry.

Comment 4: *Revise the rule to exempt individual electric utilities with comprehensive PCB programs.* A commenter suggested EPA revise §761.35 to say, "The three-year time limit on storage for re-use . . . shall be disregarded if the storer of PCB contaminated or PCB electrical equipment has tested the entire storage facility for PCB content by gas chromatograph testing, the stored electrical equipment is repaired and is available for immediate use and is intact and non-leaking." Other commenters suggested EPA waive the requirements for utilities storing intact and sealed electrical equipment for replacement.

Source: (C1-122, C1-136, C1-144)

Response 4: These comments envision an alternative regulatory approach, whereby EPA would determine on a case-by-case basis which utilities have a comprehensive program that adequately protects against the potential risks of long-term storage of electrical equipment. However, the commenters' suggestions did not include details such as how a utility would ensure that its equipment was intact and non-leaking, how frequently equipment would be inspected for leaks, and what records would have to be kept. EPA therefore did not see these suggestions as viable regulatory alternatives to the proposed rule. It is worth noting, however, that §761.35(b) provides a mechanism for the Regional Administrator to approve storage for reuse outside an approved storage area for a period in excess of five years. Utilities that believe their practices adequately protect against the potential risks of long-term storage could request an extension of the storage period based on that justification.

LIST OF COMMENTERS

C1-027	The Association of Texas Electric Cooperatives, Inc.
C1-029	American Electric Power Service Corp.
C1-038	Montana-Dakota Utilities Company
C1-046	Public Utility District #1 of Clallam County
C1-081	Nebraska Public Power District
C1-114	Commonwealth Edison
C1-122	Northwest Public Power Association
C1-136	Northern States Power Company
C1-144	Cooperative Power Association
C1-147	U.S. Department of Energy
C1-161	Chemical Manufacturers Association (CMA)
C1-179	Consumers Power Company
C1-199	City of Los Angeles, Department of Water & Power
C1-210	Pacific Gas & Electric Company
C1-217	Northeast Utilities System
C1-226	Brazos Electric Cooperative
C1-249	State of Connecticut Department of Environmental Protection
C1-257	Iowa- Illinois Gas & Electric Company