ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 761

[OPPTS–66015B; FRL–5790–7]

RIN 2070–AC39

Reclassification of PCB and PCB-Contaminated Electrical Equipment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is amending the requirements for reclassifying transformers, electromagnets, switches, and voltage regulators that contain polychlorinated biphenyls (PCBs) from PCB status (≥500 parts per million (ppm)) to PCB-Contaminated (≥50 but <500 ppm) or non-PCB (<50 ppm) status; or from PCB-Contaminated to non-PCB status. This rule brings the reclassification requirements into conformance with data and Agency experience gained since EPA last revised this regulation in 1982. The rule reduces the regulatory and economic burden of reclassification, and reduces the risk from PCBs to health and the environment by encouraging the phase-out and removal of PCBs from electrical equipment.

DATES: This rule is effective May 2, 2001. This rule is promulgated for purposes of judicial review at 1 p.m April May 2, 2001 under 40 CFR 23.5.

FOR FURTHER INFORMATION CONTACT: *For general information contact*: Barbara Cunningham, Acting Director, Environmental Assistance Division, Office of Pollution Prevention and Toxics (7408), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 554–1404; e-mail address: TSCA-Hotline@epa.gov.

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SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be potentially affected by this action if you process, distribute in commerce, use, or dispose of PCBs contained in transformers, electromagnets, switches, voltage regulators, circuit breakers, reclosers, or cable. Potentially affected categories and entities include, but are not limited to:

TABLE 1.—POTENTIALLY AFFECTED ENTITIES

Categories	NAICS codes	Examples of potentially affected entities
Crude Petroleum and Natural Gas Extraction	211111	Facilities that own electrical equipment containing PCBs.
Electric Power Generation, Transmission, and Distribution.	2211	Facilities that own electrical equipment containing PCBs.
Food Manufacturing	311	Facilities that own electrical equipment containing PCBs.
Paper Manufacturing	322	Facilities that own electrical equipment containing PCBs.
Paper Mills	322121	Facilities that own electrical equipment containing PCBs.
Newsprint Mills	322122	Facilities that own electrical equipment containing PCBs.
Petroleum and Coal Products Manufacturing	324	Facilities that own electrical equipment containing PCBs.
Petroleum Refining	32411	Facilities that own electrical equipment containing PCBs.
All Other Petroleum and Coal Products Manufacturing	324199	Facilities that own electrical equipment containing PCBs.
Chemical Manufacturing	325	Facilities that own electrical equipment containing PCBs.
Primary Metal Manufacturing	331	Facilities that own electrical equipment containing PCBs.
Iron and Steel Mills	331111	Facilities that own electrical equipment containing PCBs.
Rolled Steel Shape Manufacturing	331221	Facilities that own electrical equipment containing PCBs.
Primary Aluminum Production	331312	Facilities that own electrical equipment containing PCBs.
Line Haul Railroads	482111	Facilities that own electrical equipment containing PCBs.
Lessors of Real Estate	5311	Owners of commercial buildings with electrical equipment containing PCBs
Waste Treatment and Disposal	5622	Facilities that own electrical equipment containing PCBs.
Materials Recovery Facilities	56292	Facilities that own electrical equipment containing PCBs.
Public Administration	92	Agencies that own electrical equipment containing PCBs.

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether or not this action applies to certain entities. To determine whether you or your business is affected by this action, you should carefully examine the applicability provisions in 40 CFR part 761. If you have any questions regarding the applicability of this action to a particular entity, consult a technical person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of this Document or Other Related Documents?

1. *Electronically*. You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at http://www.epa.gov/. To access this document, on the Home Page select ''Laws and Regulations,'' ''Regulations and Proposed Rules,'' and then look up the entry for this document under ''**Federal Register**—Environmental Documents.'' You can also go directly to the **Federal Register** listings at http://www.epa.gov/fedrgstr/.

To access information about PCBs, go directly to the PCB Home Page for the Office of Pollution Prevention and Toxics at http://www.epa.gov/pcb.

2. *In person*. The Agency has established an official record for this action under docket control number OPPTS–66015B. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable

comment period, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the TSCA Nonconfidential Information Center, North East Mall Rm. B–607, Waterside Mall, 401 M St., SW., Washington, DC. The Center is open from noon to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Center is (202) 260–7099.

II. Background

A. What Action is the Agency Taking?

This final rule amends the requirements for reclassifying transformers, electromagnets, switches, and voltage regulators (40 CFR 761.30(a)(2)(v) and 761.30(h)(2)(v)). Reclassification is a voluntary process you can use to lower the PCB concentration in electrical equipment. This rule:

• Eliminates the requirement to raise the temperature of a transformer's dielectric fluid to at least 50°Centigrade (C) .

• Eliminates the 90-day in-service use requirement for all transformers, electromagnets, switches, and voltage regulators with a pre-retrofill PCB concentration <1,000 ppm.

• Allows you to reclassify PCB-Contaminated transformers, electromagnets, switches, and voltage regulators to non-PCB status by retrofilling with fluid <2 ppm PCBs. The rule does not require you to test the equipment after 90 days.

• Requires you to keep records showing that you followed the required reclassification procedures, and to make these records available to EPA or to any party holding or possessing the equipment.

1. *What are the advantages of reclassifying electrical equipment*? Electrical equipment containing PCBs is regulated for use based on the PCB concentration of its dielectric fluid. The most stringent and costly use conditions apply to electrical equipment containing dielectric fluid at PCB concentrations ≥500 ppm. Less stringent and less costly use conditions apply to PCB-Contaminated electrical equipment (containing ≥50 but <500 ppm PCBs in the dielectric fluid), and non-PCB electrical equipment (containing <50 ppm PCBs in the dielectric fluid). Reclassification allows you to take advantage of the less stringent and less costly use conditions that apply to electrical equipment at lower PCB concentrations, helps you avoid or reduce liability and insurance costs, and benefits health and the environment.

a. *Use conditions*—i. *Transformers*. EPA originally issued the reclassification rules to allow the owner of a PCB Transformer (a transformer containing dielectric fluid at ≥500 ppm PCBs) to rebuild the transformer rather than dispose of it. Rebuilding involves draining and opening the transformer to service the coil and other internal parts, and presents the risk of PCB exposure to workers and to the environment. Because of this risk, since 1979 EPA has banned rebuilding PCB Transformers unless they were first reclassified to at least PCB-Contaminated status (that is, the PCB concentration of the dielectric fluid was reduced to <500 ppm) (Ref. 1, p. 31532).

There are many advantages to reclassifying a PCB Transformer besides allowing you to rebuild it. PCB Transformers are subject to the following stringent use conditions, and associated costs, that do not apply to either PCB-Contaminated or non-PCB transformers. You can avoid these use conditions and costs by reclassifying the equipment.

• *Marking*. If you own a PCB Transformer, you must make sure it is marked with a 'M_L' (40 CFR 761.40(a)(2) and 40 CFR 761.40(c)(1)). For example, you must mark an unlabeled PCB Transformer that you sell to another entity; an unmarked PCB Transformer that you dispose of; a transformer that you assumed was PCB-Contaminated, but that you test and find is contaminated at ≥500 ppm; or a PCB Transformer whose mark is missing, damaged, or incorrect. Additionally, you must mark the location of a PCB Transformer, including vault doors, machinery room doors, fences, hallways or other means of access (other than grates and manhole covers) (40 CFR 761.40(j)(1)). There are no marking requirements for PCB-Contaminated or non-PCB transformers. EPA estimates that you save $32.09 each time you avoid having to mark a PCB Transformer or its location (Ref. 2, p. 8).

• *Inspections*. If you own a PCB Transformer, you must inspect it periodically to look for leaks and other potential problems (40 CFR 761.30(a)(ix), (x), and (xiii)) while the unit is in use and in storage for reuse. There are no inspection requirements for PCB-Contaminated or non-PCB transformers. EPA estimates that you incur $43.80 in annual inspection costs for each PCB Transformer you own (Ref. 2, pp. 8–9).

• *Recordkeeping*. If you own a facility that uses or stores a PCB Transformer, you must keep an annual document log (40 CFR 761.180(a)). You must include in the annual document log information on the location and disposal status of PCBs and PCB Items at your facility. EPA estimates that if your facility is large, your cost to keep an annual document log is $1,226. Large facilities are likely to have several PCB Items, including PCB Transformers. You do not have to include a reclassified in-service transformer in the annual document log. EPA expects that not having to include a reclassified transformer in the annual document log would result in cost savings, but is unable to quantify those savings for an individual transformer (Ref. 2, p. 9).

In addition, the regulations restrict the use of PCB Transformers near food or feed and in commercial buildings (40 CFR 761.30(a)(1)(i) through (v), 40 CFR 761.30(a)(1)(vii), 40 CFR 761.30(a)(1)(xiv)). PCB Transformers are subject to registration with EPA (40 CFR 761.30(a)(1)(vi)). You may not store combustible materials in a PCB Transformer enclosure or within 5 meters of an unenclosed PCB Transformer (40 CFR 761.30(a)(1)(viii)). If a PCB Transformer is involved in a fire-related incident, the owner of the transformer must immediately report the incident to the National Response Center (40 CFR 761.30(a)(1)(xi)). If a PCB Transformer leaks, you must initiate clean-up within 48 hours (40 CFR 761.30(x)). Finally, the owner of a PCB Transformer must keep records of inspection and maintenance for at least 3 years after disposing of a PCB Transformer (40 CFR 761.30(a)(1)(xii)). The PCB Transformer owner may avoid these restrictions and requirements by reclassifying the transformer to PCB-Contaminated or non-PCB status.

ii. *Electromagnets*. You may not use or store for reuse electromagnets containing ≥500 ppm PCBs that pose a risk to food or feed (40 CFR 761.30(h)(1)(i)). This prohibition does not apply to electromagnets that contain <500 ppm PCBs.

iii. *Voltage regulators*. Voltage regulators containing 1.36 kilograms (3 lb.) or more of dielectric fluid ≥500 ppm PCBs are subject to essentially the same marking, inspection, recordkeeping, and fire-reporting requirements as PCB Transformers (40 CFR 761.30(h)(1)(ii)). These requirements do not apply to

voltage regulators that contain <500 ppm PCBs.

b. *Liability and insurance costs*. Reclassification can help you avoid or reduce liability and insurance costs. Liability may result from catastrophic events such as explosions or fires, leaks or spills, or from improper handling or disposal of PCB waste. In addition, the risk of such events may increase your insurance costs. Dielectric fluid released from electrical equipment under any of these scenarios is unregulated for disposal if its concentration is <50 ppm PCBs, which it is likely to be if you have reclassified the equipment to non-PCB status. Therefore, cleanup of spills or releases from electrical equipment reclassified to non-PCB status is likely to be less costly and subject to less liability than if you had not reclassified the equipment.

c. *Environmental benefits*. Finally, reclassification of electrical equipment benefits health and the environment. Lower PCB concentrations in reclassified equipment reduce the risk to workers who may be exposed while using or servicing the equipment. Spills from reclassified equipment release less PCBs to the environment and present less of a risk during cleanup and disposal. PCBs removed from the equipment during reclassification are disposed of under existing requirements at 40 CFR part 761, subpart D, and thus are not released to the environment.

2. *What do the current reclassification regulations require*? Under the current rules for reclassifying electrical equipment containing PCBs:

• You may reclassify a transformer, electromagnet, switch, or voltage regulator with a PCB concentration ≥500 ppm to PCB-Contaminated status by reducing the PCB concentration in the equipment's dielectric fluid to <500 ppm.

• You may reclassify a transformer, electromagnet, switch, or voltage regulator with a PCB concentration ≥500 ppm, or a transformer, electromagnet, switch, or voltage regulator classified as PCB-Contaminated Electrical Equipment, to non-PCB status by reducing the PCB concentration in the equipment's dielectric fluid to <50 ppm.

• You must operate the equipment under loaded conditions (i.e., place it in in-service use) for 90 days after the last servicing conducted to reduce the PCB concentration in the equipment. The equipment's dielectric fluid must contain the specified PCB concentration at the end of this period.

• For electromagnets, switches, or voltage regulators, ''in-service use'' means the equipment is used electrically under loaded conditions. For transformers, ''in-service use'' means the transformer is used electrically under loaded conditions that raise the temperature of the dielectric fluid to at least 50°C.

Table 2 summarizes the current requirements for reclassifying electrical equipment.

TABLE 2.—CURRENT REQUIREMENTS FOR RECLASSIFYING ELECTRICAL EQUIPMENT

If the PCB concentration (ppm) in the equipment prior to retrofill is . . .	and you . . .	and, if your equipment is a transformer . . .	and test results show the PCB concentration (ppm) after retrofill is . . .	then the equipment's reclassified status is . . .
≥500	operate the equipment under loaded conditions for at least 90 days after retrofill	operation under loaded conditions raises the temperature of the dielectric fluid to at least 50°C	≥50 but <500	PCB-Contaminated
≥50 but <500			<50	non-PCB

Current rules governing reclassification of transformers are at 40 CFR 761.30(a)(2)(v); rules governing reclassification of electromagnets, switches, and voltage regulators are at 40 CFR 761.30(h)(2)(v). The rules governing reclassification of electromagnets, switches, and voltage regulators also apply to circuit breakers, reclosers, and cable (40 CFR 761.30(m)(1)(ii)).

The current rules also allow EPA to approve the use of alternate methods that simulate loaded conditions of in-service use. Requests for reclassifying transformers using an alternate method had typically involved simulating in-service use or requesting that the temperature requirement of 50°C for 90 days be waived. It has been EPA's experience that these requests were typically necessary when a transformer had failed, is not on line because it is being serviced or is in storage for reuse as a back-up unit, or for some other reason could not be operated under normal loaded conditions.

3. *Why did EPA propose to change the requirements*? After EPA promulgated the original reclassification rule in 1982, the Agency received information that raised questions about whether the 50°C requirement, the in-service use requirement, and the 90-day period for testing after retrofill were necessary for an effective reclassification. This unit discusses the new information and EPA's assessment of whether it warrants a change in the current reclassification requirements at § § 761.30(a)(2)(v) and 761.30(h)(2)(v).

a. *New information*—i. *The 1986 study*. An industry-sponsored study of 18 retrofilled PCB-Contaminated transformers was conducted in 1986 to determine what effect, if any, electrical loading had on removing PCBs from the core and coil of a drained, flushed, and refilled distribution transformer (Ref. 3). The study concluded that electrical loading had no significant effect on PCB levels. The refilled fluid in all the sampled transformers remained <50 ppm.

EPA's independent analyses also concluded that the study showed no discernable relationship between transformer temperature, transformer loading, and the rate of leaching (''leaching'' refers to the migration of PCBs from the transformer core and coils into the dielectric fluid) (Refs. 4 and 5). EPA also noted that the most important factor in the post-retrofill concentration of the transformer was the pre-retrofill concentration of the dielectric fluid. Another important factor was the length of time between retrofill and sampling—the results of the study generally confirmed EPA's belief that near asymptotic (eventual) PCB concentrations are achieved by 90 days after retrofill (Ref. 4). EPA also found that the study showed that within 7 days after retrofill the PCB concentration in the dielectric fluid had already achieved a relatively high

proportion of the level attained at 90 days. Increases in PCB concentrations after the first 7 days were gradual and fairly consistent from transformer to transformer (Refs. 4 and 5).

ii. *The 1989 study*. A larger industry-sponsored report analyzed data on 387 retrofilled transformers with concentrations <1,000 ppm collected from several dozen utility companies (Ref. 6). The report concluded that the percent of PCB reduction in a retrofilled transformer was not significantly related to its size (KVA rating), whether the transformer was energized, whether it was loaded, or whether the internal temperature reached 50°C. The report found that whether the transformer was flushed was a significant factor, but only for transformers with pre-retrofill concentrations ≤100 ppm PCBs.

EPA's analysis of the report focused on 263 transformers for which the data were complete (Ref. 4). Of these 263 transformers, 175 had pre-retrofill PCB concentrations of ≥50 but <500 ppm; the remaining 88 retrofilled transformers had pre-retrofill PCB concentrations ≥500 but <1,000 ppm. All the transformers were retrofilled with fluid containing <2 ppm PCBs, and were tested for PCB concentration shortly after retrofill. After 90 days of in-service use, during which the temperature of the dielectric fluid reached 50°C in some, but not all, of the transformers, the PCB concentrations were tested again. All but one of the 175 PCB-Contaminated transformers contained <50 ppm PCBs, and the concentration of that one was 53 ppm. Of the 88 PCB Transformers, all but eight (9.0%) had post-retrofill concentrations <50 ppm after 90 days, and the mean post-retrofill concentration for these eight transformers was 64.4 ppm. The results of EPA's analysis were generally consistent with those of the report's author. The only variable which EPA found to be related to post-retrofill PCB level was the number of days between pre-retrofill and post-retrofill testing. EPA's analysis concluded that these data showed that a properly conducted retrofill was very likely to reduce PCB dielectric oil concentrations to <50 ppm in transformers that had pre-retrofill levels <500 ppm; and that over 90% of transformers with pre-retrofill levels ≥500 but <1,000 ppm had 90-day test concentrations <50 ppm.

iii. *Other information*. EPA evaluated two additional sets of data on transformers that had been retrofilled and tested more than 90 days after retrofill (Ref. 4). The data did not specify how the retrofill was conducted or the conditions under which the transformers were operated after retrofill, so their usefulness for establishing regulatory requirements is limited.

In addition, information submitted to EPA orally and in writing indicated that many transformers, even under normal operating conditions, might never reach 50°C because of the design limitations of the equipment, equipment failure, low ambient temperatures, or transformer loading restrictions. In addition, this information suggested that there are drawbacks associated with attempting to comply with the 50°C temperature requirement by simulating in-service use of the transformers. These include safety risks to maintenance personnel, fire hazards associated with energizing or insulating equipment which is not designed to withstand heavy loads or increased temperatures, and the economic and resource commitment that must be borne by the transformer owners (Refs. 7, 8, 9, and 10).

b. *EPA's assessment of the new information*. Review of this new information led EPA to believe that changes to the reclassification requirements might be warranted (Refs. 4 and 5).

i. *The 50°C requirement*. EPA originally based the 50°C requirement on a 1981 study showing that this temperature was associated with light electrical loading and that it caused the release of PCBs from the internal components of transformers into the dielectric fluid (Refs. 8 and 11). EPA's independent analyses of the 1986 and 1989 studies concluded that they showed no discernable relationship between transformer temperature and leachback rate. Other information discussed in Unit II.A.3.a.iii. raised questions about the practicability, safety, and necessity of this requirement. EPA believed that the data showed that the rate of migration of PCBs into the dielectric fluid appeared not to be greatly affected by the transformer's temperature, and that the difficulties and dangers associated with meeting this criterion supported eliminating the 50°C requirement.

ii. *The in-service use requirement*. EPA's independent analyses of the 1986 and 1989 studies concluded that whether a transformer <1,000 ppm PCBs was loaded or energized did not significantly affect its post-retrofill concentration. The data showed that PCB levels in these transformers measured shortly after retrofill, but before being placed in service, had nearly reached their asymptotic PCB level. These studies therefore supported eliminating the in-service use requirement for transformers <1,000 ppm.

iii. *Properly conducted retrofill*. The studies showed that, in PCB-Contaminated transformers, a properly conducted retrofill substantially reduced the PCB concentration in the dielectric fluid. This is particularly well-demonstrated in the case of PCB-Contaminated transformers. During a properly conducted retrofill, the transformer was drained, flushed, and refilled with dielectric fluid <2 ppm PCBs. The studies supported requiring a properly conducted retrofill as part of the reclassification process.

iv. *Testing after 21 days*. The 1986 study data showed that a high proportion of the asymptotic PCB concentration was attained very soon after retrofill. After the first week, continued increases in PCB concentrations occurred gradually and predictably. The increase in PCB concentration was generally consistent from transformer to transformer, and from one make or model to another. In general, the longer the period after retrofill when sampling was conducted, the more reliable the estimate of the eventual PCB level. Sampling at 3 weeks provided a more reliable estimate than at 1 week. These data supported allowing testing shortly after retrofill for transformers <1,000 ppm PCBs.

4. *What changes to the reclassification requirements did EPA propose*? In the **Federal Register** of November 18, 1993 (Ref. 12), EPA proposed to amend the PCB rules governing the reclassification of transformers to:

- Eliminate the requirement to raise the temperature of a transformer's dielectric fluid to at least 50°C.
- Eliminate the 90-day in-service use requirement for all transformers with a pre-retrofill PCB concentration <1,000 ppm.
- Require you to test a transformer to determine its PCB concentration prior to retrofill.
- Require a ''properly conducted retrofill''—draining the PCB dielectric fluid, flushing with dielectric fluid <2 ppm PCBs or with a solvent in which PCBs were at least 5% soluble by weight using no less than 10% of the volume of the transformer, and retrofilling with <2 ppm dielectric fluid.
- Allow you to initially test a transformer with a pre-retrofill PCB concentration <1,000 ppm after 21 days, rather than 90 days, after a properly conducted retrofill. If post-retrofill test results showed a PCB concentration ≥25 to <500 ppm, you could reclassify the transformer to PCB-Contaminated status. If the results were <25 ppm, you could reclassify the transformer to non-PCB status.

• Allow you to immediately reclassify, with no 90-day post-retrofill test, a PCB-Contaminated transformer to non-PCB status, after a properly conducted retrofill.

Table 3 summarizes the proposed changes to the requirements for reclassifying transformers.

TABLE 3.—PROPOSED CHANGES TO THE REQUIREMENTS FOR RECLASSIFYING TRANSFORMERS

If test results show the PCB concentration (ppm) in the transformer prior to retrofill is . . .	and you . . .	and you . . .	and test results show the PCB concentration (ppm) after retrofill is . . .	then the transformer's reclassified status is . . .
≥1,000	drain the PCB dielectric fluid from the transformer; flush the transformer with dielectric fluid <2 ppm PCBs or with a solvent in which PCBs are at least 5% soluble by weight using no less than 10% of the volume of the transformer; and refill the transformer with <2 ppm dielectric fluid.	operate the transformer under loaded conditions for at least 90 days after retrofill	≥50 but <500	PCB-Contaminated
			<50	non-PCB
≥500 but <1,000		operate the transformer under loaded conditions for at least 21 days after retrofill	≥25 but <500	PCB-Contaminated
			<25	non-PCB
≥50 but <500		(not applicable)	(no need to test)	

EPA also proposed to:

• Regulate a reclassified transformer based on its actual concentration if testing showed that the actual concentration had increased after reclassification, but allow the owner to repeat the reclassification process.

• Require you to keep records of the transformer's pre-retrofill PCB concentration, the retrofill and reclassification schedule and procedure, and the transformer's post-retrofill PCB concentration.

• Require the PCB dielectric fluid drained from the equipment to be stored, manifested, and disposed of according to existing requirements for PCB waste.

EPA did not propose to change the requirements for reclassifying electromagnets, switches, and voltage regulators, but solicited comments on whether to treat this equipment like transformers for purposes of reclassification (Ref. 12, p. 60973). The current regulations at § 761.30(h)(2)(v) allow you to reclassify voltage regulators, switches and electromagnets that are ≥500 ppm PCBs to non-PCB or PCB-Contaminated status.

EPA also requested comment on whether to consider a transformer's Kilovolt-ampere (KVA) rating in determining what kind of reclassification process would be required (Ref. 12, p. 60972). EPA had received information that distribution transformers with a KVA rating of 500 or less are not required to have sampling valves and are therefore difficult to sample after retrofill (Ref. 13).

5. *What comments did EPA receive on the proposed rule*? EPA accepted written comments on the proposed rule for 45 days after its publication. On March 9, 1994, EPA held a public hearing on the proposed rule in Washington, DC, where the agency took oral comments (Ref. 20). An additional period for written reply comments followed the hearing. Copies of all written comments and a transcript of the hearing are in the official record for this rulemaking. These documents are available to you as part of the public version of the official record for this final rule. To learn how to get copies of these documents, see Unit I.B. The following discussion addresses significant issues raised by the commenters, EPA's reaction to those comments, and how these comments affected the outcome of this final rule. Comments raising each issue are identified in parentheses by the designation assigned each comment by the TSCA Nonconfidential Information Center staff.

a. *Drop the 50°C requirement*. The current reclassification rule requires you to operate a retrofilled transformer under conditions that would raise the temperature of the dielectric fluid to at least 50°C. Many commenters favored EPA's proposal to eliminate this requirement. Commenters agreed that the data discussed in Unit II.A.3. show that temperature has a minimal, if any, effect on the amount of PCBs recovered when a transformer is drained and refilled with non-PCB fluid. They also noted the practical difficulties and safety risks associated with attempting to comply with this requirement (C1-007, C1-008, C1-009, C1-011, C1-012, C1-014, C1-024, C1-033, C1-034, C1-035, C1-036, C1-037, C1-038, C1-039, C1-041, C1-043, C1-045, C1-046, C1-048, C1-050, C1-052, and C1-054) (Ref. 20, pp. 44–60). The final rule follows the proposal in eliminating the 50°C requirement.

b. *Drop the in-service use requirement for equipment <1,000 ppm PCBs*. Most commenters did not object to EPA's proposal to drop the in-service use requirement for transformers <1,000 ppm PCBs. However, one commenter supported maintaining the in-service use requirement for all transformers (C1-047) (Ref. 20, pp. 29–43). The commenter also asked EPA to define ''in-service use'' and ''under loaded conditions.'' The commenter was concerned that retrofilled transformers might be put back into in-service use

under conditions where there was significant voltage in the equipment, but no measurable electric current to ensure the movement of fluid through the internal components of the equipment; and that, without this movement, the levels of PCBs in the fluid might rise after retrofilling due to the retention of PCBs in the fluid remaining in the coil.

The commenter submitted results of experiments conducted to determine the effectiveness of triple rinsing in reducing the PCB concentration of fluids retained within the core and coils of mineral oil-filled electrical equipment. In one experiment, two transformers containing fluid at 128 and 282 ppm PCBs respectively were triple rinsed with <2 ppm PCB fluid. Then the transformers were disassembled and the fluid and core were tested. In one transformer, the PCB concentration of the fluid was 13 ppm and the concentration of the core was 58 ppm. In the other transformer, the concentration of the fluid was 6 ppm and the concentration of the core was 75 ppm. The second experiment used a hot oil flush a varied number of times in 3 transformers with PCB concentrations >400 ppm. The concentrations of the rinse oil after the last flush ranged from 9 to 22 ppm PCBs, and the residual concentrations in the core and coil assemblies ranged from 105 to 204 ppm PCBs. The commenter asserted that these experiments supported their concern that lack of loading could cause PCB concentrations to rise after retrofilling due to the retention of PCBs in the oil remaining in the coil. The commenter urged EPA to ensure that the PCB concentration of the oil in the coils was not still above regulated levels prior to reclassification of the equipment (C2-005).

EPA has never formally defined the terms ''in-service use'' or ''under loaded conditions,'' nor did it propose to. Placing equipment back into in-service use or operating it under loaded conditions means simply that, after retrofill, you must operate the equipment under its normal operating conditions, whatever they may be. As the commenter correctly pointed out, the purpose of putting the equipment back into in-service use was to circulate the oil in the equipment to remove PCBs from the inner workings of the equipment. Based on the data discussed in Unit II.A.3., this final rule does not require you to operate equipment containing <1,000 ppm PCBs under loaded conditions. At the same time, this rule does not allow you to reclassify equipment containing PCBs ≥50 ppm simply by rinsing, flushing, or retrofilling it (except for PCB-Contaminated equipment retrofilled with fluid <2 ppm). You must allow 90 days after retrofill for leaching to occur and then test the equipment to determine its post-retrofill concentration. The commenter's study, which tested only the effectiveness of flushing a transformer, does not demonstrate that the reclassification process required by the final rule for equipment <1,000 ppm PCBs (removing the free-flowing liquid from the equipment, refilling the equipment, and testing the fluid after 90 days) will not result in an effective reclassification.

Another commenter believed the in-service use requirement was necessary so that PCBs would leach adequately from the transformer's porous insulation into the newly retrofilled liquid (C1-001) (Ref. 20, pp. 8–29). The commenter correctly noted that the studies referenced in EPA's proposed rule did not measure the PCB level in the porous inner parts of a reclassified transformer. The commenter was concerned that workers dismantling a ''non-PCB'' reclassified transformer could be exposed to PCBs ≥500 ppm. EPA has not adopted this suggestion because the data discussed in Unit II.A.3. support allowing reclassification without in-service use for equipment <1,000 ppm PCBs while the equipment is in use. The reclassification procedure is a form of servicing to reduce the risks from PCBs during continued use. It does not determine equipment's concentration at the time of disposal. You should verify the equipment's PCB concentration at the time of disposal to ensure that you manage and dispose of it properly. An added safeguard to proper disposal is the disposal industry's practice of testing waste at the disposal facility.

Several commenters took issue with the statement in the preamble to the proposed rule that most substation transformers contain ≥1,000 ppm PCBs (Ref. 12, p. 60972). The commenters asked EPA to correct this statement in the final rule (C1-007, C1-011, C1-020, C1-024, C1-035, C1-036, and C1-045). EPA made the statement based on data available at the time of the proposed rule, as part of its rationale for dropping the in-service use requirement for transformers <1,000 ppm PCBs, but not for transformers ≥1,000 ppm. EPA believed that small distribution transformers, which are difficult and dangerous to sample after having been reconnected, are likely to contain <1,000 ppm PCBs, while large substation transformers, which can be sampled more conveniently and safely, generally contain ≥1,000 ppm PCBs. EPA is retaining the in-service use requirement for all equipment ≥1,000 ppm, but, in light of these comments, is not basing the requirement on assumptions about the concentration of substation transformers. EPA is relying on the data discussed in Unit II.A.3. in retaining the in-service use requirement for equipment ≥1,000 ppm, whether or not the equipment is a substation transformer. These data do not support dropping the requirement for this equipment, and commenters did not supply additional data to support such a change.

A commenter asked EPA to clarify that the rule covers Askarel transformers as well as mineral oil-filled transformers (C1-040). You may reclassify equipment regardless of the type of dielectric fluid it contains. Virtually all Askarel transformers will have PCB concentrations ≥1,000 ppm prior to reclassification. For equipment ≥1,000 ppm PCBs, you must operate the equipment for at least 90 days after retrofill, under loaded conditions, and retest the dielectric fluid. The equipment is regulated based on this post-reclassification PCB concentration.

Finally, a commenter suggested eliminating the 90-day in-service use requirement for all oil-filled electrical equipment, regardless of concentration, that does not contain a core (C1-038). The commenter did not support this suggestion with data showing that it would be effective for equipment ≥1,000 ppm, so EPA is not adopting it.

i. *Allow immediate reclassification of PCB-Contaminated equipment to non-PCB status.* Under the proposed rule, if you removed all free-flowing PCB dielectric fluid from a piece of PCB-Contaminated equipment and refilled the equipment with dielectric fluid containing <2 ppm PCBs, the equipment would be immediately reclassified to non-PCB status without being placed in in-service use (that is, operated under loaded conditions). The final rule retains this provision, which most comments on this issue supported (C1-009, C1-037, C1-045, C1-048, and C1-052) (Ref. 20, pp. 8–29). (See Unit II.A.5.b. for a discussion of a comment that supported maintaining the in-service use requirement for all transformers.)

ii. *Modify the 90-day in-service use requirement for equipment ≥1,000 ppm PCBs.* One commenter stated that they do not continuously use their ≥1,000 ppm PCB Transformers, and therefore would not be able to meet the continuous 90-day in-service use requirement included in the proposed rule. The commenter requested that EPA allow for cumulative time in service in the final rule (C1-008). Another commenter stated that it had one-of-a-

kind transformers that are in storage for reuse as backups to the equipment on line. These backups might never get on line and, therefore, might never be able to meet the 90-day in-service use requirement for equipment ≥1,000 ppm (C1-030). The commenter suggested that EPA allow equipment that has been properly retrofilled to be tested at an interval to be determined by EPA.

EPA is not adopting these suggestions. The effectiveness of these alternate reclassification methods could depend on factors such as the equipment's pre-retrofill PCB concentration, the amount of fluid replaced, and the length of the intervals the equipment was in service and out of service. EPA would need to look at each case individually. If you wish to use a method of reclassification that differs from the method in the final rule, you may request an approval from the Director of the National Program Chemicals Division under § 761.30(a)(2)(v)(C) or § 761.30(h)(2)(v)(C).

iii. *Do not require all retrofilled transformers to be installed.* A commenter asked EPA to clarify § 761.30(a)(1)(iii)(B) (formerly § 761.30(a)(1)(iii)(C)(*2*)(*iii*)). That provision refers to transformers that are ''installed'' for reclassification. The commenter noted that under the proposal, not all transformers would have to be installed as part of reclassification, only those ≥1,000 ppm PCBs (C1-017).

The purpose of § 761.30(a)(1)(iii)(B) is to authorize the installation of retrofilled transformers where installation is required for reclassification. Without this authorization, installation would be prohibited under § 761.30(a)(1)(iii). You need not install a transformer as part of reclassification unless required to do so under § 761.30(a)(2)(v), notwithstanding § 761.30(a)(1)(iii)(B).

The proposed rule would have deleted all but the first sentence of § 761.30(a)(1)(iii)(B). The purpose of this change was to remove language that would have conflicted with EPA's proposal to allow reclassification after 21 days for transformers ≥500 but <1,000 ppm PCBs. Since EPA is not finalizing this provision of the proposal (see Unit II.A.5.c.iii.), the final rule leaves the current language of § 761.30(a)(1)(iii)(B) intact.

c. *Drop the post-retrofill 90 day testing requirement*—i. *Allow immediate reclassification of equipment < 500 ppm PCBs.* Under the proposed rule, if you removed all free-flowing PCB dielectric fluid from a piece of PCB-Contaminated equipment and refilled the equipment with dielectric fluid containing <2 ppm PCBs, the equipment would be immediately reclassified to non-PCB status without further testing. The final rule retains this provision, which most comments on this issue supported (C1-007, C1-008, C1-014, C1-015, C1-036, C1-037, C1-039, C1-041, C1-043, C1-045, C1-046, C1-048, C1-050, and C1-052) (Ref. 20, pp. 8–29, 44–60). (See Unit II.A.5.c.v. for a comment recommending retesting until there is no increase in PCB concentration in at least two consecutive tests.)

ii. *Allow retrofill with fluid <50 ppm PCBs.* Commenters also wanted the option of retrofilling equipment with fluid <50 ppm PCBs (C1-037 and C1-054). Allowing retrofilling with fluid at this slightly higher PCB concentration would save costs and would not add to reclassification risks where testing was required after retrofill. Therefore, the final rule allows you to reclassify equipment using retrofill fluid <50 ppm PCBs, however testing is also required to ensure that the PCB concentration has been sufficiently reduced and the reclassification has been successful. If it has not, you may either repeat the reclassification process or treat the equipment as regulated at its actual concentration as reflected in the test.

iii. *Do not allow reclassification based on 25 ppm after 21 days for equipment ≥500 but <1,000 ppm.* Under the proposed rule, you could have tested transformers with a PCB concentration ≥500 but <1,000 ppm after 21 days rather than after 90 days following a properly conducted retrofill. Then, if the results of the post-retrofill test were <25 ppm PCBs, you could have reclassified the transformer to non-PCB status. If the results were ≥25 but <500 ppm PCBs, you could have reclassified it to PCB-Contaminated status.

Commenters were generally opposed to this provision. Most saw it as creating a new category of PCB-Contaminated transformer (≥25 but <500 ppm), and pointed out that this new category would create confusion, particularly in the application of the Spill Cleanup Policy (where a spill of ≥25 but <50 ppm would have to be categorized for purposes of cleanup as ≥50 but <500 ppm) (C1-002, C1-006, C1-011, C1-027, C1-032, C1-036, C1-038, and C1-041). Another commenter stated that this provision would allow high concentrations of PCBs to remain in the porous inner parts of the transformer (C1-001). Others believed the 25 ppm level was arbitrary, or might be unreasonably low based on the available data (C1-024, C1-039, and C1-048). A commenter asked EPA to clarify how these transformers should be labeled and stored during the 21-day period (C1-017). Other commenters favored the provision, but thought the 25 ppm threshold was overly conservative (C1-023, C1-024, and C1-051).

After re-examining the data discussed in Unit II.A.3. and these comments, EPA has not included this provision in the final rule. In the 1989 study, PCB concentrations in a significant percentage (9%) of transformers with pre-retrofill concentrations ≥500 but <1,000 ppm tested <50 ppm at 21 days, but continued to rise, and when retested after 90 days showed PCB concentrations ≥50 ppm. Therefore, in this final rule, EPA is requiring that transformers with a pre-retrofill concentration of ≥500 but <1,000 ppm PCBs be tested to determine PCB concentration 90 days after retrofill.

iv. *Allow reclassification based on testing after 21 days for transformers with PCB concentrations ≥1,000 ppm.* Commenters suggested that the reclassification procedures proposed for equipment ≥500 but <1,000 ppm be applied to at least some equipment at concentrations ≥1,000 ppm. This would allow equipment at higher concentrations to be tested after 21 days of in-service use as opposed to 90 days (C1-023 and C1-030). One commenter suggested that these classification procedures apply to equipment containing up to 5,000 ppm PCBs. The commenter theorized that since the data EPA relied on in the proposed rule indicated that most equipment retains less than 8% of the original PCB concentration after retrofill, EPA could raise the upper limit as high as 6,200 ppm (6,200 ppm x 0.08 = 496 ppm). For the reasons discussed in Unit II.A.5.c.iii., EPA is not including the 21-day provision in the final rule. EPA therefore is not adopting this suggestion.

Likewise, EPA is not adopting commenters' suggestion to eliminate the 90-day test after retrofill for transformers ≥1,000 ppm PCBs, especially for mineral oil transformers less than 500 KVA (C1-035 and C1-036). The data discussed in Unit II.A.3. support amending the reclassification requirements for electrical equipment <1,000 ppm PCBs, not for equipment at higher concentrations. The commenter did not support this suggestion with data, so EPA is not adopting it.

v. *Require testing to be repeated until there is no increase in concentration.* One commenter stated that, since leachback occurs, retesting should be conducted at regular intervals until there is no increase in PCB concentration in at least two consecutive tests. The commenter also argued that reliance on a single test taken at 21 days, or even at 90 days, can

lead to improper disposal based on the assumption that the equipment has maintained that concentration over time (C1-047) (Ref. 20, pp. 29–43).

EPA recognizes that even after a properly conducted reclassification procedure, the concentration of reclassified equipment may rise. The final rule at § 761.30(a)(2)(v)(B) and § 761.30(h)(2)(v)(B) clarifies that if the PCB concentration in the fluid of reclassified equipment changes, causing the equipment's reclassified status to change, the equipment is regulated based on the actual concentration of the fluid. The final rule allows you time to come into compliance with requirements for a transformer or voltage regulator you discover contains ≥500 ppm PCBs. The rule also allows you to repeat the reclassification procedure.

Finally, the reclassification procedure is a form of servicing to reduce the risks of continued use. It does not determine equipment's concentration for disposal. You should verify the equipment's PCB concentration at the time of disposal to ensure that you dispose of it properly. An added safeguard to proper disposal is the disposal industry's practice of testing waste at the disposal facility. EPA does not believe that continuous testing of reclassified equipment while in use is necessary to ensure proper disposal.

d. *Define ''properly conducted retrofill.''* A commenter requested that EPA define the term ''properly conducted retrofill'' or provide further clarification on the process (C1-036). EPA is not using this term in the final rule. Instead, the reclassification process described at § 761.30(a)(2)(v) and § 761.30(h)(2)(v) includes all the required steps for reclassifying electrical equipment, including the requirements for retrofilling.

i. *Clarify how to drain equipment prior to retrofill.* A comment suggested that EPA prescribe what draining means procedurally, i.e., whether there is a certain amount of time that should elapse when draining the free-flowing liquid from a piece of equipment, and whether there are other methods one could use to remove the fluid (C1-014).

The purpose of draining is to remove as much as possible of the original dielectric fluid from the equipment prior to retrofill. Removing this free-flowing liquid increases the likelihood of a successful reclassification. EPA is not requiring that a specific amount of time elapse or that a specific method be used to remove the fluid from the equipment. You may use any method that removes the fluid, such as draining or pumping. An extended or second draining or pumping may be prudent to remove as much of the free-flowing fluid as possible. To reduce confusion, the final rule requires you to ''remove'' rather than ''drain'' the fluid from the equipment prior to retrofill.

You must either test the fluid prior to initiating a reclassification procedure or assume that it is ≥1,000 ppm PCBs. You may not use the ''assumption rule'' at § 761.2 to classify mineral oil filled equipment as PCB-Contaminated (≥50 but <500 ppm PCBs) for purposes of reclassification under this rule. Nor may you batch test the fluid from several pieces of equipment and use those test results to classify all of the equipment.

ii. *Do not require flushing as part of a ''properly conducted retrofill.''* Several commenters were strongly opposed to including flushing as part of the reclassification procedure. They stated that flushing provided no significant benefit because it only removed superficial surface residues, and that flushing generated additional waste, which is counter to the Agency's waste minimization efforts (C1-007, C1-008, C1-045, C1-046, and C2-001) (Ref. 20, pp. 44–60).

Other commenters recommended that if the provision were maintained, the process should be revised. Some suggested reducing the flush volume from 10% to 5% of the volume of the transformer, or limiting the flush volume to a maximum of 500 gallons (C1-007, C1-036, and C1-046). Some commenters pointed out that the proposal to estimate flush volume based on the transformer's height, width, and depth would not account for volume displaced by the core and coils. They recommended estimating 10% of the volume of the equipment based on the volume of fluid removed or 80% of total volume (C1-007, C1-020, and C1-050).

Other comments suggested that EPA allow the use of flush material at PCB concentrations up to 50 ppm, rather than <2 ppm. One commenter wanted to know whether the flush material could be disposed of based on its ''as is'' PCB concentration as opposed to the original concentration of the equipment it was used to flush. Lastly, commenters felt that flushing should be optional for PCB Transformers ≥1,000 ppm where post-retrofill testing is required (C1-007 and C1-008).

Based on the data discussed in Unit II.A.3. and the comments, this final rule does not require flushing as part of the reclassification procedure. The data show that flushing provided only about a 7% difference in PCB reduction compared to equipment that was not flushed (Refs. 4 and 6). In addition, as commenters pointed out, flushing creates additional waste, which is counter to the Agency's waste minimization efforts. Nonetheless, you may flush equipment prior to retrofill, and the final rule prescribes neither the concentration nor the volume of flush material you must use. You may dispose of the flush material ''as is'', i.e., based on its concentration after the flushing procedure has been completed, not based on the concentration of the equipment prior to the flush. (See 40 CFR 761.79(g).)

e. *Do not make KVA a factor in the reclassification procedure.* In the preamble to the proposed rule, EPA asked for comment on whether KVA rating, in addition to or separately from pre-retrofill concentration, should be taken into account in determining transformer reclassification requirements. EPA had requested comment on this issue based on information provided by a utility that distribution transformers with a KVA rating of 500 or less are not required to have sampling valves, and that sampling these units outside of the shop environment is precarious. The utility therefore suggested that EPA not require post-retrofill testing of distribution transformers 500 KVA and below (Ref. 12, p. 60972, and Ref. 13).

There was little consensus among the commenters on this question. Some commenters noted that there were no data indicating a relationship between PCB concentration and KVA rating, or demonstrating a relationship between KVA rating and the effectiveness of a retrofill (C1-007, C1-008, C1-014, C1-024, C1-041, and C1-045) (Ref. 20, pp. 44–60). One commenter stated that the current post-retrofill testing requirements have not placed an undue burden on industry (C1-040). Other commenters favored taking KVA into consideration, stating that transformers larger than 500 KVA are generally designed to allow in-service sampling of their oil, while transformers 500 KVA and smaller are not. Sampling the latter transformers would be unfeasible and potentially dangerous to service personnel (C1-017, C1-035, and C1-036). One commenter suggested that, if KVA were taken into account, a 100 KVA rating level would be more favorable to the environment (C1-040). Another suggested that distribution transformers be defined as less than 69 KV, 500 KVA equipment (C1-020). Since most of the comments did not support the utility's suggestion, EPA has not added a KVA criterion to the final rule.

f. *Allow reclassification of all oil-filled equipment as well as transformers.* In the proposed rule, EPA invited comments on allowing the proposed

reclassification rules to be used for electromagnets, switches, and voltage regulators (Ref. 12, p. 60973). Commenters addressing the issue unanimously agreed that EPA should include these types of electrical equipment, but some also wanted EPA to expand the rules to include all oil-filled electrical equipment ≥50 ppm (C1-014, C1-036, C1-038, C1-041, C1-045, and C1-052). Information supplied by commenters supported amending § 761.30(h)(2)(v) so that the new reclassification procedures apply to electromagnets, switches, and voltage regulators. Under § 761.30(m)(1)(ii), these reclassification provisions also apply to circuit breakers and reclosers. The information shows that, compared to a transformer, this equipment contains the same amount or less porous inner materials that could absorb PCBs. Therefore, the reclassification requirements that apply to transformers would be as effective or more effective for this equipment.

• *Electromagnets*. A commenter stated that electromagnets do not contain significant core and coil components that can trap PCBs (C1-011).

• *Switches (including sectionalizers)*. Commenters stated that switches and sectionalizers are used throughout all utility systems. Switches and sectionalizers contain dielectric fluid, but, unlike transformers, do not contain an iron core or paper insulated coils of wire. Therefore, there is very little material into which oil (and thus PCBs) could be absorbed (C1-007, C1-011, C1-012, C1-023, and C1-037) (Ref. 20, pp. 44–60).

• *Voltage regulators*. Voltage regulators control voltage as it moves through the electric utility system from generation to ultimate consumption. Commenters stated that voltage regulators are like transformers in that they require the same type of insulating oil to retain dielectric integrity, and they contain an iron core or paper insulated coils of wire. Therefore, the anatomy of a voltage regulator and a transformer can be considered the same and the procedures to reclassify the two forms of equipment should be the same. Thus, enough oil and PCBs would be removed by a drain and refill process to reclassify a contaminated voltage regulator without placing it in service (C1-007, C1-011, C1-012, C1-017, C1-020, C1-037, and C1-039) (Ref. 20, pp. 44–60). One commenter provided data on retrofilled voltage regulators, but the data did not specify how the retrofill was conducted or the conditions under which the voltage regulators were operated after retrofill, so the data's usefulness for establishing regulatory requirements is limited (C1-007).

• *Circuit breakers*. Circuit breakers may be used throughout a utility system, but are especially common in transmission substations where they are used to protect transformers. According to commenters, circuit breakers require the same type of insulating oil as transformers for dielectric integrity. However, unlike transformers, they do not contain an iron core or paper insulated coils of wire into which oil (and thus PCBs) could be absorbed (C1-007, C1-023, and C1-041) (Ref. 20, pp. 44–60).

• *Reclosers*. Reclosers are relatively small pieces of equipment that are often mounted on utility poles to protect distribution system equipment. Reclosers contain dielectric fluid, but have no inner iron core or paper insulate coils of wire into which oil (and thus PCBs) could be absorbed (C1-007) (Ref. 20, pp. 44–60).

Under § 761.30(m)(1)(ii), you may also reclassify oil-filled cable. It is EPA's experience that oil-filled cable rarely contains PCBs ≥50 ppm (Ref. 14, p. 37352). Therefore, most oil-filled cable is considered non-PCB, and would not be reclassified. In the unlikely event that you discover oil-filled cable containing PCBs at ≥50 ppm, you may reclassify it by following the procedures at 40 CFR 761.30(h)(2)(v).

One commenter asked that the reclassification procedures also apply to bushings (C1-038). EPA has not adopted this suggestion because bushings are not regulated separately from the equipment on which they are installed, that is, there is no separate use authorization for bushings and therefore no reclassification provision for bushings in § 761.30. The PCB regulations assume that intact electrical equipment contains the component parts necessary for the equipment to operate. A bushing that is in service on authorized electrical equipment is treated as having the same PCB concentration as the equipment of which it is a part. Therefore, if you reclassify equipment under § 761.30(a)(2)(v), § 761.30(h)(2)(v), or § 761.30(m)(1), you need not reclassify the bushing separately for the equipment as a whole to be considered reclassified.

If, however, you wish to reduce the concentration of the bushing while it is installed on the equipment, you may do so by draining the existing fluid and disposing of it as PCB waste, flushing the bushing with fluid containing <2 ppm PCBs, and refilling it with fluid containing <2 ppm PCBs. Once you remove a bushing from the equipment, it is regulated as a separate PCB Article and you may not reclassify it under the provisions of this rule. At the time of disposal, you must dispose of a bushing containing fluid ≥50 ppm PCBs as a separate PCB Article under 40 CFR 761.60(b)(5) (Refs. 15, 16, and 17).

Commenters pointed out that many voltage regulators contain an internal small capacitor that has the potential to rupture or leak. They felt that it was important to remove this small capacitor during reclassification to prevent it from leaking and contaminating the replacement fluid in the voltage regulator (C1-017 and C1-024). Intact and non-leaking small capacitors containing PCBs are authorized for use without restriction (see 40 CFR 761.3 and 761.30(l)), and are subject to existing disposal requirements (see 40 CFR 761.60(b)(2)). If your voltage regulator's fluid were contaminated by a leak from an internal small capacitor, you could reclassify the voltage regulator if necessary, or you could manage it at its post-leak PCB concentration. EPA recognizes this potential problem and suggests that if you find a small capacitor in a voltage regulator, you remove it after draining and replace it with one that contains no PCBs.

g. *Do not regulate disposal as part of reclassification*. The proposed rule would have required you to properly store and dispose of PCB-containing waste materials as part of a properly conducted retrofill. Commenters felt that the ultimate disposal of these materials (such as drained fluid, rags, and personal protective equipment) was not necessary to complete a properly conducted retrofill (C1-007, C1-008, and C1-024) (Ref. 20, pp. 44–60). EPA agrees that the reclassification process can be regulated separately from the disposal of waste from reclassification. This final rule does not specifically refer to disposal of PCB-containing waste materials as part of the reclassification procedure, although you must dispose of these materials based on their PCB concentration at the time of disposal by following existing rules at 40 CFR part 761, subpart D.

h. *Allow time to come into compliance when equipment's concentration changes after reclassification*. Commenters were concerned that they would be subject to enforcement action if, after properly reclassifying a piece of equipment, the concentration of the equipment rose above the concentration limit for its class. Commenters strongly urged that the rules allow the opportunity to come into compliance if equipment originally reclassified as non-PCB were later discovered to be ≥50 ppm, or if

equipment originally reclassified as PCB- Contaminated were later discovered to be ≥500 ppm. Commenters suggested using a schedule similar to that at § 761.30(a)(1)(xv) for assumed mineral-oil transformers that are later discovered to be ≥500 ppm. Commenters also wanted to have the opportunity to repeat the reclassification process if the transformer's concentration increased (C1-007, C1-012, C1-016, C1-035, C1-050, C1-051, C1-052, and C2-001).

Under the final rule, a piece of equipment is regulated for use based on its reclassified concentration until the equipment is retested. If the retest shows that the equipment is above the upper concentration limit for its reclassified status, the equipment is regulated based on the actual concentration of the fluid. EPA agrees with the commenters that if you discover that the concentration of equipment reclassified to PCB-Contaminated status has risen to ≥500 ppm PCBs, you should have time to come into compliance with requirements that apply to equipment containing ≥500 ppm PCBs. The final rule directs you to follow the schedules in § 761.30(a)(1)(xv)(A) through (J) for transformers and § 761.30(h)(1)(iii) for voltage regulators. If you documented that you conducted the original reclassification procedure properly (see the recordkeeping requirement at § 761.180(g)) and you complied with these schedules, you would not be in violation of the reclassification requirements.

If you discover that the concentration of equipment reclassified to non-PCB status has risen to ≥50 but <500 ppm, the only regulatory concern (other than cleanup of spills during use) is the eventual disposition of the equipment and its fluid. During use, you do not need to mark, inspect, or keep records on the equipment.

The final rule also allows you to repeat the reclassification process to reduce the concentration in any reclassified equipment to the desired level.

i. *Allow reclassification based on the procedures in the proposed rule*. Several commenters requested that EPA allow owners to consider their equipment to be reclassified if they followed the procedures in the proposed rule before the effective date of this final rule. These commenters asked to be ''grandfathered in'' to the requirements of the final rule, rather than having to request a formal approval of an alternate method of reclassification from EPA or having to repeat the procedure after the effective date of this final rule (C1-007, C1-008, C1-023, C1-050, C1-052, and C1-053).

EPA is not adopting this suggestion. Prior to promulgation of this final rule, owners who wanted to reclassify their equipment based on the provisions of the proposed rule could do so based on a written approval from EPA. Those who have requested and received an approval need not follow the reclassification process in the final rule for the equipment that was subject to the approval. Those who have followed the requirements of the proposed rule without requesting and receiving an approval have not complied with the reclassification rules and must either request an approval or comply with the provisions of this final rule. Equipment reclassified under the rules currently in effect does not need to be reclassified again once this final rule goes into effect.

j. *Allow alternate reclassification methods*. A commenter suggested that EPA amend the rule to allow on-line processing (C1-021). The commenter stated that on-line processing is conducted while the transformer is energized and under load, thereby achieving sustained elevated temperatures which should promote effective PCB extraction from the transformer. The commenter did not submit enough data to allow EPA to include this process in the final rule. If you wish to use on-line processing for reclassification, you may request an approval under § 761.30(a)(2)(v)(C) or § 761.30(h)(2)(v)(C).

k. *Do not require recordkeeping*. The proposed rule would have required you to maintain the following records on your reclassified equipment for at least three years after you disposed of the equipment:

- The pre-retrofill concentration of the equipment.
- The retrofill and reclassification schedule and procedure.
- A copy of the analysis indicating the equipment's reclassified status (i.e., final PCB concentration).

Commenters questioned the need for this requirement (C1-022, C1-039, and C1-041). First, as discussed in Unit II.A.5.l., if reclassified equipment is sold or transferred to another company for use, service, or salvage, those records will provide useful information to the buyer, servicer or disposer. In addition, for equipment that has been reclassified from ≥500 to <500 ppm PCBs, the records of reclassification will provide documentation of why the equipment is no longer being recorded on the annual report or the annual document log and why the equipment is no longer being marked or inspected. Finally, the records will allow EPA inspectors to determine whether the equipment was reclassified according to the regulatory requirements. EPA is generally retaining the proposed recordkeeping provisions in this final rule for equipment reclassified on or after the effective date of this rule. This final rule requires you to maintain records of the pre-reclassification concentration of the equipment, the reclassification procedure conducted, and the final PCB concentration after the completion of the reclassification procedure (see § 761.180(g)).

In the preamble to the proposed rule (Ref. 12, p. 60971), EPA erroneously cited ASTM methods D923-86 and D923-89 as recognized methods for determining the concentration and nature of PCBs in dielectric fluid. These are sampling methods, not testing methods. You may analyze for PCBs using any method of gas chromatography that is appropriate for the material being analyzed (see 40 CFR 761.60(g)(iii)). Methods include ASTM Method D4059–96, ''Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography'' (Ref.18) and ''The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils,'' issued by EPA's Office of Research and Development (Ref.19). Other methods are listed in 40 CFR 761.60(g)(iii).

l. *Require that reclassified equipment be labeled to protect workers from higher PCB concentrations in porous inner parts*. A commenter submitted data to show that 21 days after a PCB-Contaminated transformer has been properly reclassified, the fluid in the equipment may test at <50 ppm, but the porous inner parts may be ≥50 ppm. The commenter expressed concern that workers who dismantle these transformers for servicing or disposal could unknowingly be exposed to PCBs at ≥50 ppm when they remove the internal components of the equipment. The commenter asked EPA to require notification and labeling to show that the equipment had been reclassified (C1-001 and B1-001) (Ref. 20, pp. 8–29, 62–67). Another commenter opposed such a requirement as misleading (Ref. 20, pp. 44–60).

EPA has not adopted this suggestion. Such a change would not by itself guarantee that workers dismantling transformers were protected from PCBs that might remain in the internal workings of reclassified equipment. The PCB regulations at 40 CFR 761.30(a)(2)(v) and (h)(2)(v) have allowed the reclassification of electrical equipment since 1982 and have never

required labeling of units <500 ppm. If EPA required labeling of all equipment reclassified after the effective date of this rule, disposal facilities would still receive equipment that had been reclassified before the effective date of this rule, but that was not labeled. If the facility needed to make sure of the PCB concentration of the internal components of this unlabeled equipment, it would still have to test these components—it could not rely on the fact that the equipment was not labeled to assume that the equipment had not been reclassified. EPA believes that imposing a labeling requirement for equipment reclassified after the effective date of this rule could therefore give disposers of electrical equipment a false sense of security in handling equipment that was not labeled. A labeling requirement would create costs and burdens for owners of reclassified equipment, but would be of limited usefulness to servicing and disposal facilities.

This final rule requires anyone conducting a reclassification after the effective date of this rule to keep records of the reclassification (see 40 CFR 761.180(g)). These records must contain the pre-reclassification concentration of the equipment, the reclassification procedure conducted, and the final PCB concentration after the completion of the reclassification procedure. Any potential buyer, servicer, or disposer may request these records. Obtaining these records would serve as notification of the potential for the inner workings of the equipment to contain higher PCB concentrations than the fluid itself, and would allow servicers and disposers to take proper precautions if the equipment were to be dismantled. In addition, the existing rules at § 761.60(b)(8) protect workers by requiring that persons disposing of PCB Articles wear or use protective clothing or equipment to protect against dermal contact with or inhalation of PCBs or materials containing PCBs.

Finally, nothing in this final rule limits the servicer's or disposer's flexibility to include provisions in its contracts with its suppliers requiring additional information on the servicing history of the equipment it receives.

m. *Do not encourage dilution of PCBs during reclassification*. One commenter objected to the proposal on the basis that it encouraged the deliberate dilution of PCBs as an acceptable means of avoiding more stringent disposal requirements. The commenter stated that reclassification in general, and the proposed amendments to an even greater extent, allow transformer owners to decrease the PCB concentration in the residual oils in the internal components of the transformer through dilution with the retrofill liquid. The commenter believed the proposal would cause huge volumes of PCBs to be diluted to unregulated levels rather than permanently destroyed. The commenter suggested that EPA instead create incentives for the use of methods which actually remove the PCBs from the transformer and decrease the risk of release of PCBs into the environment (C1-047 and C2-005) (Ref. 20, pp. 29–44).

As discussed in Unit II.A.1.a., EPA originally developed the reclassification process to allow the owner of a PCB Transformer to rebuild the transformer rather than dispose of it. Rebuilding involves draining and opening the transformer to service the coil and other internal parts, and presents the risk of PCB exposure to workers and to the environment. Because of this risk, in 1979 EPA banned the rebuilding of PCB Transformers unless they were reclassified to PCB-Contaminated status. Since 1979, EPA has regulated rebuilding and reclassification as a form of servicing, and has allowed dilution of PCBs during these activities. While EPA generally prohibits dilution of PCBs to avoid disposal requirements, the agency recognized that for certain activities, including servicing, dilution is essential to the intended performance of the activities and is not performed with the intent of evading the disposal requirements for PCBs. Therefore, reclassification is an exception to the general ban on dilution to avoid regulation at § 761.1(b)(5).

The process of retrofilling equipment during reclassification removes substantially all the original fluid (90% according to this commenter, 95% according to another commenter who testified at the informal hearing (Ref. 20, p. 51)), and since this fluid is subject to the disposal requirements, the PCBs it contains are 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. For all these reasons, EPA believes the benefits of allowing reclassification outweigh the risks to health and the environment of allowing a relatively small amount of the fluid in the equipment to be diluted.

6. *What does this final rule require*? Based on comments and data submitted in response to the proposed rule, and further review of the data the Agency had at the time of the proposed rule, EPA is modifying the current rule to:

- Eliminate the requirement to raise the temperature of a transformer's dielectric fluid to at least 50°C.
- Eliminate the requirement to operate the equipment under loaded conditions for all transformers, electromagnets, switches, and voltage regulators with a pre-retrofill PCB concentration <1,000 ppm.
- Allow you to reclassify equipment using retrofill fluid <50 ppm, as long as you test the equipment 90 days after retrofill to ensure that reclassification has been successful.
- Allow you to reclassify PCB-Contaminated transformers, electromagnets, switches, and voltage regulators to non-PCB status by retrofilling with fluid <2 ppm PCBs. You are not required to test the equipment after 90 days.
- Allow you time to come into compliance if you determine that the concentration of equipment reclassified to PCB-Contaminated status has risen to ≥500 ppm PCBs.
- Allow you to repeat the reclassification process to further reduce the PCB concentration in your equipment, for example, if your prior attempt at reclassification fails. If your attempt to reclassify your equipment does not lower its PCB concentration sufficiently, the equipment is not considered reclassified under the PCB regulations. This would be the case if your equipment had a PCB concentration ≥1,000 ppm prior to reclassification, and after following the reclassification procedures the concentration was not reduced to <500 ppm; if your equipment had a PCB concentration ≥500 ppm prior to reclassification, and after following the reclassification rocedures the PCB concentration was not reduced to <500 ppm; and if your equipment had a PCB concentration ≥50 but <500 ppm prior to reclassification, and after following the reclassification procedures the PCB concentration was not reduced to <50 ppm.
- Require you to keep records showing that you followed the required reclassification procedures. The records must include copies of pre- and post-reclassification PCB concentration measurements from a laboratory using quality control and quality assurance procedures. You must make these records available to EPA or to another party holding or possessing the equipment (for example, through sale, loan, lease, or for servicing). You must retain the records for at least 3 years

after you sell, transfer, or dispose of the equipment.

• Change the EPA official authorized to approve alternate methods for reclassifying equipment from the Assistant Administrator to the Director of the National Program Chemicals Division.

Table 4 summarizes the reclassification requirements for transformers from which you have removed free-flowing liquids (see § 761.30(a)(2)(v)); and for electromagnets, switches, and voltage regulators from which you have removed free-flowing liquids (see § 761.30(h)(2)(v))). Under § 761.30(m)(1)(ii), these reclassification provisions also apply to circuit breakers, reclosers, and cable.

TABLE 4.—CLASSIFICATION REQUIREMENTS OF THIS FINAL RULE

If test results show the PCB concentration (ppm) in the equipment prior to retrofill is . . .	and you retrofill the equipment with dielectric fluid containing . . .	and you . . .	and test results show the PCB concentration (ppm) after retrofill is . . .	then the equipment's reclassified status is . . .
≥1,000 (or untested)	<50 ppm PCBs	operate the equipment electrically under loaded conditions for at least 90 continuous days after retrofill, then test the fluid for PCBs	≥50 but <500	PCB-Contaminated
			<50	non-PCB
≥500 but <1,000		test the fluid for PCBs at least 90 days after retrofill	≥50 but <500	PCB-Contaminated
			<50	non-PCB
≥50 but <500	≥2 but <50 ppm PCBs			
	<2 ppm PCBs	(no need to test)	(not applicable)	

B. What is the Agency's Authority for Taking this Action?

This final rule is issued pursuant to TSCA section 6(e)(2)(B). Section 6(e)(2)(B) of TSCA gives EPA the authority to authorize the use of PCBs in other than a totally enclosed manner based on a finding of no unreasonable risk of injury to health or the environment (15 U.S.C. 2605(e)(2)(B)).

EPA finds that this rule's amendments to the reclassification requirements will not present an unreasonable risk of injury to health or the environment. PCBs have significant ecological and human health effects, including cancer, neurotoxicity, reproductive and developmental toxicity, immune system suppression, liver damage, skin irritation, and endocrine disruption (Ref. 21). EPA has found that any exposure of humans or the environment to PCBs may be significant, depending on such factors as the quantity of PCBs involved in the exposure, the likelihood of exposure to humans and the environment, and the effect of exposure (see 40 CFR 761.20). Nonetheless, EPA has recognized the economic benefits of continued use of PCBs in electrical equipment, and has authorized those uses under conditions designed to minimize the risk of exposure to PCBs during use and servicing, or through leaks or other releases (Ref. 14).

EPA finds that the amendments in this final rule will reduce the risk to health and the environment from exposure to PCBs. The process of retrofilling electrical equipment during reclassification removes substantially all the original fluid (90% to 95%), and because this fluid is subject to the disposal requirements of 40 CFR part 761, subpart D, the PCBs it contains are 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.

Because the final rule will relax a number of the requirements for reclassifying PCB-containing electrical equipment (while adding one new requirement), the rule will result in a net cost savings for owners who choose to reclassify their equipment. EPA estimates that the owner of a PCB Transformer, or the owner of a PCB-Contaminated transformer who reclassifies the transformer using fluid ≥2 but <50 ppm PCBs, will save $35.15 compared to the costs of the current requirements. EPA estimates that the owner of a PCB-Contaminated transformer who reclassifies the transformer using fluid <2 ppm PCBs (and who need not test the concentration of the transformer after retrofill) will save $80.15 compared to the costs of the current requirements. In addition to reducing the costs of reclassifying electrical equipment, the rule will allow owners of reclassified equipment to experience incremental savings from the less stringent regulatory requirements that apply to reclassified equipment. EPA estimates that the owner of a reclassified transformer will save $32.09 each time the owner avoids the requirement to mark a PCB Transformer and $43.80 annually for not having to inspect PCB Transformers that are reclassified (Ref. 2, p. 21). Reclassification can also help avoid or reduce recordkeeping, liability, and insurance costs.

Therefore, having considered the effects on health and the environment of PCBs, the economic benefits of continued use of PCBs in electrical equipment, and the expected cost savings of these amendments, EPA finds that this rule's amendments to the reclassification requirements will not present an unreasonable risk of injury to health or the environment.

III. References

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15. USEPA, Office of Prevention, Pesticides, and Toxic Substances (OPPTS). Letter from Tony Baney, Chief, Operations Branch, to Jim Ridder, PCB Coordinator, Elkhorn Rural Public Power District, June 8, 1994.

16. USEPA, OPPTS. Letter from Tony Baney, Chief, Operations Branch, to Ron D. Johnson, Sr. Environmental Scientist, Public Service Co. of New Mexico, August 29, 1995.

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18. American Society for Testing and Materials. Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography (D 4059–96), 1996.

19. USEPA, Office of Research and Development (ORD), Environmental Monitoring & Support Laboratory. Test Method: The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils (EPA–600/4–81–045), September 1982.

20. USEPA. Transcript of Proceedings: PCB Transformer Reclassification Proposed Rule, March 9, 1994.

21. USEPA, ORD, National Center for Environmental Assessment. PCBs: Cancer Dose-Response Assessment and Application to Environmental Mixtures (EPA/600/P–96/001F), September 1996.

22. USEPA, OPPT. Consolidated ICR Supporting Statement for the PCB Regulations at 40 CFR part 761, September 28, 1999.

IV. Regulatory Assessment Requirements

A. Regulatory Planning and Review

Under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' subject to review by the Office of Management and Budget (OMB), because this action is not likely to result in a rule that meets any of the criteria for a ''significant regulatory action'' provided in section 3(f) of the Executive Order.

EPA's analysis of the potential impact of this action is contained in a document entitled ''Reclassification of PCB and PCB-Contaminated Electrical Equipment Rule: Supporting Analysis for Small Entity, Environmental Justice, and Unfunded Mandates Certifications'' (Supporting Analysis) (Ref. 2). This document is available to you as a part of the public version of the official record for this final rule. To learn how to get a copy of this document, see Unit I.B.

This final rule will affect owners of electrical transformers, voltage regulators, electromagnets, switches, circuit breakers, reclosers and cable that contain PCBs. Because of data limitations and the assumed small numbers of units of electrical equipment other than transformers, the analysis addresses only transformers. This analysis concludes that, because the final rule will relax a number of the requirements for reclassifying PCB-containing transformers, the rule will result in a net cost savings for transformer owners who choose to reclassify their equipment (Ref. 2, p. 4). The effect of including data on other electrical equipment affected by the rule, were these data available, would be only to further increase the overall cost savings attributable to the rule (Ref. 2, p. 1).

EPA estimates that the owner of a PCB Transformer, or the owner of a PCB-Contaminated transformer who reclassifies the transformer using fluid ≥2 but <50 ppm PCBs, will save $35.15 compared to the costs of the current requirements. EPA estimates that the owner of a PCB-Contaminated transformer who reclassifies the transformer using fluid <2 ppm PCBs (and who need not test the concentration of the transformer after retrofill) will save $80.15 compared to the costs of the current requirements (Ref. 2, pp. 3–5). In addition to reducing the costs of reclassifying electrical equipment, the rule will allow owners of reclassified equipment to experience incremental savings from the less stringent regulatory requirements that apply to reclassified equipment. EPA estimates that the owner of a reclassified transformer will save $32.09 each time the owner avoids the requirement to mark a PCB Transformer and $43.80 annually for not having to inspect PCB Transformers that are reclassified (Ref. 2, p. 8–9).

Moreover, neither the current reclassification requirements nor the amendments in this final rule require you to reclassify your electrical equipment. Whether to reclassify is a private business decision. Any firm, large or small, will reclassify their equipment only if the savings to the firm exceed the firm's costs of performing the reclassification. The changes to the reclassification rules

impose no positive net costs on small entities because firms that choose to reclassify their equipment are basing their decision on a comparison of private costs and benefits.

B. Regulatory Flexibility Act

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 601 *et seq.*, the Agency hereby certifies that this final rule will not have a significant economic impact on a substantial number of small entities. The factual basis for the Agency's determination is presented in the Supporting Analysis (Ref. 2), and is briefly summarized here.

For the purpose of analyzing potential impacts on small entities, EPA used the definition for small entities in section 601 of the RFA. Under section 601, ''small entity'' is defined as:

• A small business that meets Small Business Administration size standards codified at 13 CFR 121.201.

• A small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000.

• A small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

This rule will result in a net cost savings for transformer owners who reclassify their equipment. Information on transformer ownership and reclassification decisions among small entities is needed to accurately assess the small entity impacts. Following a review of available data sources, EPA concluded that complete data are not available for any of the affected sectors. Nevertheless, several observations can be drawn (Ref. 2, pp. 20–22).

• The rule is expected to generate cost savings for reclassifying PCB and PCB-Contaminated transformers. On a per reclassification basis, the estimated cost savings are $35.15 for PCB Transformers and for PCB-Contaminated transformers retrofilled with fluid ≥2 but <50 ppm, and $80.15 for PCB-Contaminated transformers retrofilled with fluid <2 ppm (EPA has eliminated the requirement to test the concentration of these transformers after retrofill). Thus, the rule will benefit both small and large entities by making reclassifications more affordable, and will increase the number of reclassifications that occur.

• These ''induced'' reclassifications will be able to capture cost savings associated with complying with reduced regulatory requirements. PCB Transformer owners who reclassify will save $32.09 each time they avoid having to mark a PCB Transformer and $43.80 annually for not having to inspect each reclassified transformer. Small entities that are induced to reclassify a PCB Transformer will benefit from these cost savings.

• Because reclassification is voluntary, it is a private business decision on the part of transformer owners in which the private benefits are compared to the private costs of reclassifying. Thus, each reclassification project should be assumed to generate net private benefits for transformer owners, both prior to and after implementation of the rule.

• Smaller entities are less likely to own transformers, and therefore less likely to need to perform reclassification. Thus, larger businesses may be more likely to take advantage of the reduced requirements of reclassification. However, even if smaller entities did own a disproportionate number of transformers (which is unlikely), this should not create an adverse impact because reclassification is performed only when it is in the interest of the transformer owner to do so, and the final rule is expected to only reduce the costs of reclassification.

Having reviewed all of the available relevant data and after taking the data limitations into account, EPA believes that this rule will not impose any adverse impact on small entities, and should actually provide a potential source of cost savings to many transformer owners who choose to reclassify their equipment. The final rule will make reclassification more affordable for both small and large entities, and should result in an increased rate of reclassification and an accelerated rate of removal of PCBs from use. Furthermore, reclassification is a business decision made by transformer owners based on a comparison of private benefits and costs. Assuming that transformers owners pursue their own best interest, no reclassification will take place that does not have a positive net benefit for transformer owners.

C. Paperwork Reduction Act

The information collection requirements contained in this rule are reflected in the *Consolidated Information Collection Request (ICR) Supporting Statement for the PCB Regulations at 40 CFR part 761, September 28, 1999* (Consolidated ICR) (Ref. 22). The Consolidated ICR was prepared in response to a request from OMB to combine the various PCB information collections into a single ICR. These information collection requirements (including minor amendments to address the requirements of this final rule) have been submitted to OMB for review and approval under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, and in accordance with the procedures at 5 CFR 1320.11. The burden and costs related to the information collection requirements contained in this rule are described in an ICR identified as EPA ICR No. 1446.07, which has been included in the public version of the official record described in Unit I.B.2., and is available electronically as described in Unit I.B.1., at http://www.epa.gov/opperid1/icr.htm, or by e-mailing a request to farmer.sandy@epa.gov. You may also request a copy by mail from Sandy Farmer, Collection Strategies Division, Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington DC 20460, or by calling (202) 260–2740.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information that is subject to approval under the PRA, unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations, after appearing in the preamble of the **Federal Register**, are listed in 40 CFR part 9, and included on any related collection instrument.

As defined by the PRA and 5 CFR 1320.3(b), ''burden'' means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The information collection for this rule is a recordkeeping requirement placed on owners of electrical equipment containing PCBs who choose to reclassify that equipment to lower its PCB concentration. The recordkeeping requirement is being implemented so that if reclassified equipment is sold or transferred to another company for use, service or salvage, the buyer, servicer or disposer will be able to learn the servicing history of the equipment. In

addition, for equipment that has been reclassified from ≥500 ppm to <500 ppm PCBs, the records of reclassification will provide documentation of why the equipment is no longer being recorded on the annual report or the annual document log and why the equipment is no longer being marked or inspected. Finally, the records will allow EPA inspectors to determine whether the equipment was reclassified according to the regulatory requirements. The burden to respondents for complying with this information collection is estimated to total 15,050 hours per year, with an annual cost of $573,322. The totals are based on an average burden of 15 minutes per response for an estimated 60,200 respondents to maintain required records.

D. Unfunded Mandates Reform Act

Pursuant to Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104–4), EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. Rather than impose net costs of $100 million or more in any 1 year, this final PCB Reclassification rule will result in a net cost savings to transformer owners who decide to reclassify their equipment (Ref. 2, p. 23).

E. Executive Order 13132

Executive Order 13132, entitled *Federalism* (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local government officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

Under section 6 of the Executive order, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local government officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local government officials early in the process of developing the proposed regulation.

Section 4 of the Executive order contains additional requirements for rules that preempt State or local law, even if those rules do not have federalism implications (i.e., the rules will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government). Those requirements include providing State and local government officials notice and an opportunity for appropriate participation in the development of the regulation. If the preemption is not based on express or implied statutory authority, EPA also must consult, to the extent practicable, with appropriate State and local government officials regarding the conflict between State law and federally protected interests within the agency's area of regulatory responsibility.

The Agency has determined that this rule does not have federalism implications. It amends a voluntary process by which owners of transformers and other electrical equipment can reclassify that equipment to a less stringent regulatory status. The changes are not expected to result in a significant intergovernmental mandate under the UMRA, and thus, EPA concludes that the rule will not impose substantial direct compliance costs. Nor would the rule substantially affect the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Those relationships have already been established under the existing PCB regulations, and these amendments would not alter them. Thus, the requirements of section 6 of the Executive Order do not apply to this final rule.

This final rule would preempt State and local law in accordance with TSCA section 18(a)(2)(B). By publishing and inviting comment on the proposed rule (Ref. 12), EPA provided State and local government officials notice and an opportunity for appropriate participation. Thus, EPA has complied with the requirements of section 4 of the Executive Order.

F. Executive Orders 13084 and 13175

Under Executive Order 13084, entitled *Consultation and Coordination with Indian Tribal Governments* (63 FR 27655, May 19, 1998) EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If the mandate is unfunded, EPA must provide to OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

This rule does not significantly or uniquely affect the communities of Indian tribal governments, nor does it impose substantial direct compliance costs on such communities. It amends a voluntary process by which owners of transformers and other electrical equipment can reclassify that equipment to a less stringent regulatory status. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

On November 6, 2000, the President issued Executive Order 13175, entitled *Consultation and Coordination with Indian Tribal Governments* (65 FR 67249). Executive Order 13175 took effect on January 6, 2001, and revokes Executive Order 13084 as of that date. EPA developed this rule, however, during the period when Executive Order 13084 was in effect; thus, EPA addressed tribal considerations under Executive Order 13084.

G. Executive Order 12898

Pursuant to Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994), the Agency has considered environmental justice related issues with regard to the potential impacts of this action on the environmental and health conditions in low-income and minority communities. EPA finds that the amendments in this final rule will reduce the risk to health and the environment from exposure to PCBs. The process of retrofilling electrical

equipment during reclassification removes substantially all the original PCB-containing fluid, and since this fluid is subject to the disposal requirements of 40 CFR part 761, subpart D, the PCBs it contains are not released to the environment. The reclassified equipment remains in use, but the lower PCB concentration in the fluid poses a reduced risk to health and the environment from spills or other exposures. In addition, at the end of its useful life, the equipment and the fluid it contains must be disposed of based on existing requirements to protect health and the environment. EPA's research did not reveal any data to suggest that the effects of this rule, even beneficial effects, would disproportionately affect minority or low-income populations (Ref. 2, pp. 22–23).

H. Executive Order 13045

Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997) applies to any rule that is both determined to be ''economically significant'' as defined under Executive Order 12966, and concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health and safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. However, it has been EPA's policy since November 1, 1995, to consistently and explicitly consider risks to infants and children in all risk assessments generated during its decision-making process, including the setting of standards to protect public health and the environment.

This regulation is not subject to Executive Order 13045 because it is not economically significant as defined by Executive Order 12966 (i.e., it does not generate annual costs of $100 million), and the Agency does not have reason to believe that the environmental health or safety risks addressed by the regulation present a disproportionate risk to children (Ref. 2, pp. 23–24). This regulation changes the requirements for reclassifying PCB Transformers, voltage regulators and other PCB-containing electrical equipment to a lower PCB status. The activities addressed by the regulation include draining PCB liquids from the equipment, refilling it with a non-PCB mixture, and then in some cases, testing the equipment after a period of use. Most transformers and voltage regulators are located in facilities such as electric utilities, manufacturing facilities, and prisons where children are not present. In facilities such as schools and hospitals that have equipment containing PCBs and where children are present, the equipment is located in areas that are strictly off-limits to children, and for that matter, any unauthorized personnel. Therefore, the reclassification will occur where children are either not present or not permitted, and the process will pose no special risks to children.

I. National Technology Transfer and Advancement Act

This regulatory action does not involve any technical standards that would require Agency consideration of voluntary consensus standards pursuant to section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113 (15 U.S.C. 272 note). Section 12(d) of NTTAA directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standards bodies. The NTTAA requires EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rule requires you to test dielectric fluids from electrical equipment for PCB concentration. Existing regulations at § 761.60(g)(iii) set out requirements for testing the fluids, and allow you to use any method of gas chromatography that is appropriate for the material being analyzed, including voluntary consensus methods established by organizations such as the American Society for Testing and Materials.

J. Executive Order 12630

EPA has complied with Executive Order 12630, entitled *Governmental Actions and Interference with Constitutionally Protected Property Rights* (53 FR 8859, March 15, 1988), by examining the takings implications of this rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the Executive Order.

K. Executive Order 12988

In issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988, entitled *Civil Justice Reform* (61 FR 4729, February 7, 1996).

V. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the Agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 761

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

Dated: January 16, 2001.

Carol M. Browner,

Administrator.

Therefore, 40 CFR chapter I is 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. Section 761.30 is amended by revising paragraphs (a)(2)(v) and (h)(2)(v) to read as follows:

§ 761.30 Authorizations.

* * * * *

(a)***

(2)***

(v) You may reclassify a PCB Transformer that has been tested and determined to have a concentration of ≥500 ppm PCBs to a PCB-Contaminated transformer (≥50 but <500 ppm) or to a non-PCB transformer (<50 ppm), and you may reclassify a PCB-Contaminated transformer that has been tested and determined to have a concentration of ≥50 ppm but <500 ppm to a non-PCB transformer, as follows:

(A) Remove the free-flowing PCB dielectric fluid from the transformer. Flushing is not required. Either test the fluid or assume it contains ≥1,000 ppm PCBs. Retrofill the transformer with fluid containing known PCB levels according to the following table. Determine the transformer's reclassified status according to the following table (if following this process does not result in the reclassified status you desire, you may repeat the process):

If test results show the PCB concentration (ppm) in the transformer prior to retrofill is . . .	and you retrofill the transformer with dielectric fluid containing . . .	and you . . .	and test results show the PCB concentration (ppm) after retrofill is . . .	then the transformer's reclassified status is. . .
≥1,000 (or untested)	<50 ppm PCBs	operate the transformer electrically under loaded conditions for at least 90-continuous days after retrofill, then test the fluid for PCBs	≥50 but <500	PCB-contaminated
	<50 ppm PCBs	operate the transformer electrically under loaded conditions for at least 90-continuous days after retrofill, then test the fluid for PCBs	<50	non-PCB
≥500 but <1,000	<50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	≥50 but <500	PCB-contaminated
	<50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	<50	non-PCB
≥50 but <500	≥2 but <50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	<50	non-PCB
	<2 ppm PCBs	(no need to test)	(not applicable)	non-PCB

(B) If you discover that the PCB concentration of the fluid in a reclassified transformer has changed, causing the reclassified status to change, the transformer is regulated based on the actual concentration of the fluid. For example, a transformer that was reclassified to non-PCB status is regulated as a PCB-Contaminated transformer if you discover that the concentration of the fluid has increased to ≥50 but <500 ppm PCBs. If you discover that the PCB concentration of the fluid has risen to ≥500 ppm, the transformer is regulated as a PCB Transformer. Follow paragraphs (a)(1)(xv)(A) through (J) of this section to come into compliance with the regulations applicable to PCB Transformers. You also have the option of repeating the reclassification process.

(C) The Director, National Program Chemicals Division, may, without further rulemaking, grant approval on a case-by-case basis for the use of alternative methods to reclassify transformers. You may request an approval by writing to the Director, National Program Chemicals Division (7404), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington DC 20460. Describe the equipment you plan to reclassify, the alternative reclassification method you plan to use, and test data or other evidence on the effectiveness of the method.

(D) You must keep records of the reclassification required by § 761.180(g).

* * * * *

(h)***

(2)***

(v) You may reclassify an electromagnet, switch, or voltage regulator that has been tested and determined to have a concentration of ≥500 ppm PCBs to PCB-Contaminated status (≥50 but <500 ppm) or to non-PCB status (<50 ppm), and you may reclassify a PCB-Contaminated electromagnet, switch, or voltage regulator that has been tested and determined to have a concentration of ≥50 ppm but <500 ppm to a non-PCB status, as follows:

(A) Remove the free-flowing PCB dielectric fluid from the electromagnet, switch, or voltage regulator. Flushing is not required. Either test the fluid or assume it contains ≥1,000 ppm PCBs. Retrofill the electromagnet, switch, or voltage regulator with fluid containing known PCB levels according to the following table. Determine the electromagnet, switch, or voltage regulator's reclassified status according to the following table (if following this process does not result in the reclassified status you desire, you may repeat the process):

If test results show the PCB concentration (ppm) in the equipment prior to retrofill is . . .	and you retrofill the equipment with dielectric fluid containing . . .	and you . . .	and test results show the PCB concentration (ppm) after retrofill is . . .	then the electromagnet, switch, or voltage regulator's reclassified status is . . .
≥1,000 (or untested)	<50 ppm PCBs	operate the equipment electrically under loaded conditions for at least 90-continuous days after retrofill, then test the fluid for PCBs	≥50 but <500	PCB-contaminated
	<50 ppm PCBs	operate the equipment electrically under loaded conditions for at least 90-continuous days after retrofill, then test the fluid for PCBs	<50	non-PCB
≥500 but <1,000	<50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	≥50 but <500	PCB-contaminated
	<50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	<50	non-PCB
≥50 but <500	≥2 but <50 ppm PCBs	test the fluid for PCBs at least 90 days after retrofill	<50	non-PCB
	<2 ppm PCBs	(no need to test)	(not applicable)	non-PCB

(B) If you discover that the PCB concentration of the fluid in a reclassified electromagnet, switch, or voltage regulator has changed, causing the reclassified status to change, the electromagnet, switch, or voltage regulator is regulated based on the actual concentration of the fluid. For example, an electromagnet, switch, or voltage regulator that was reclassified to non-PCB status is regulated as a PCB-Contaminated electromagnet, switch, or voltage regulator if you discover that the concentration of the fluid has increased to ≥50 but <500 ppm PCBs. If you discover that the PCB concentration of the fluid in a voltage regulator has risen to ≥500 ppm, follow paragraph (h)(1)(iii) of this section to come into compliance with the regulations applicable to voltage regulators containing ≥500 ppm PCBs. You also have the option of repeating the reclassification process.

(C) The Director, National Program Chemicals Division may, without further rulemaking, grant approval on a case-by-case basis for the use of alternative methods to reclassify electromagnets, switches or voltage regulators. You may request an approval by writing to the Director, National Program Chemicals Division (7404), Environmental Protection Agency,1200 Pennsylvania Ave., NW., Washington DC 20460. Describe the equipment you plan to reclassify, the alternative reclassification method you plan to use, and test data or other evidence on the effectiveness of the method.

(D) You must keep records of the reclassification required by § 761.180(g).

* * * * *

3. In § 761.180 by adding a new paragraph (g) to read as follows:

§ 761.180 Records and monitoring.

* * * * *

(g) *Reclassification records.* If you reclassify electrical equipment using the procedures in § 761.30(a)(2)(v) or § 761.30(h)(2)(v), you must keep records showing that you followed the required reclassification procedures. Where these procedures require testing, the records must include copies of pre- and post-reclassification PCB concentration measurements from a laboratory using quality control and quality assurance procedures. You must make these records available promptly to EPA or to any party possessing the equipment through sale, loan, lease, or for servicing. You must retain the records for at least 3 years after you sell or dispose of the equipment.

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