UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 18 1998

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Mr. Keith R. Reed
President & CEO
Environmental Protection Services
4 Industrial Park Drive
P.O. Box 710
Wheeling, West Virginia 26003-0091

Dear Mr. Reed:

This is in response to your company's letters and faxes, dated September 3, 1998, September 11, 1998, and September 16, 1998. In your letters and faxes, you expressed concerns regarding individual PCB testing of all mineral oil filled distribution transformers and manifesting under the new PCB Disposal Amendments. Following are our responses to your questions.

Is individual testing required to establish if mineral oil filled distribution transformers are below 500 ppm?

In your September 3, 1998 letter you contend that all mineral oil filled distribution transformers for disposal purposes are assumed to be 50 to 499 ppm PCBs and that individual testing is only required to establish that a unit contains less than 50 ppm PCBs. You further state that it is the option of the company to do batch testing, individual testing, or not test at all for disposal purposes.

The PCB concentration assumption rules at 40 CFR 761.2 apply while the equipment in question is in use, not to determine how the equipment is to be disposed of. The assumptions were developed by EPA to address use situations where it is not practical or cost-effective to take the equipment out of use for testing purposes to determine its PCB concentration. At the time of disposal, however, the owner or operator of the PCB equipment must know the PCB concentration in order to use the proper disposal method specified in the Part 761 regulations (see 63 FR 35389, June 29, 1998). The PCB disposal regulations, however, do not explicitly require testing. Thus, some companies may decide to not test the PCB equipment or fluids and to apply knowledge based on factors such as permanent nameplates; mark or other documentation from the manufacturer of the equipment indicating the PCB concentration; and other documentation or service records indicating the PCB concentration of all fluids used in servicing the equipment since it was manufactured. EPA does believe, however, that testing is the best way to assure that the proper and most cost-effective disposal options are chosen.

In your fax and letter dated September 11, 1998, you asked that EPA address the following:

Please note in EPA's Response to Comments Document, dated May 1998, response number 18 regarding disposal of PCB electrical equipment at §761.60(b)(4). This process does not include wipe sampling as part of the disposal process for PCB - Contaminated transformers. Please note that this section does not require individual oil sampling either and §761.60(g)(1)(i) has not been modified.

In EPA's response to comment number 18 regarding disposal options under §761.60(b)(4) for PCB-Contaminated electrical equipment (except capacitors), wipe sampling is not addressed because EPA determined that drained PCB-Contaminated electrical equipment (except capacitors) did not pose an unreasonable risk under TSCA when disposed of under any of the options prescribed in §761.60(b)(4)(i). However, it is still the responsibility of the person making the disposal decision to know whether the transformers are indeed PCB-Contaminated (i.e., 50- 499 ppm PCBs) before the disposal options at §761.60(b)(4)(i) can be used. As discussed above, the person making the disposal decision must decide whether or not to test. For the liquids drained from PCB-Contaminated electrical equipment covered in §761.60(b)(4), one must comply with the disposal requirements in §761.60(a) based on knowing the PCB concentration. The testing procedures you refer to in §761.60(g)(1)(i) for determining the PCB concentration of mineral oil dielectric fluids for the purpose of disposal have not changed with the publication of the PCB Disposal Amendments on June 29, 1998.

In Ms. Reed's fax of September 16th, she posed the following question concerning manifest discrepancies:

If a generator sends PCB waste under the assumption rule, 50-499 pm, and a piece on the manifest is discovered by analysis to be higher than 500 ppm, does a manifest discrepancy have to be reported to the generator?

According to 40 CFR 761.210(a)(2), significant manifest discrepancies include substitution of high concentration PCBs (above 500 ppm) with lower concentration materials. Therefore, if an entire shipment of mineral-oil filled transformers, for example, is shipped based on the assumption that they are all between 50-499 ppm PCBs and it is later determined that any one of those transformers is $\geq$ 500 ppm, then the commercial storer or disposer shall attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receipt of the waste, the owner/operator of the commercial storage or disposal facility shall immediately send to the EPA Regional Administrator a letter describing the discrepancy and attempts to reconcile it along with a copy of the manifest at issue.

We hope this has cleared up any uncertainty you may have had concerning the PCB Disposal Amendments. If you have any other questions, please call Tom Simons of my staff at (202) 260-3991.

Sincerely,

John W. Melone, Director
National Program Chemicals Division

ENVIRONMENTAL PROTECTION SERVICES

September 3, 1998

USEPA
Tony Baney
401 M St. Southwest
Washington DC 20460

Dear Mr. Baney:

At a USWAG meeting on August 27 and 28, 1998 concerns were raised by utility personnel regarding individual PCB testing of all mineral oil filled distribution transformers under the new regulations implemented August 28, 1998.

I spoke with John Smith last week who stated there were no changes in testing procedures from the original regulations issued in 1979. I am also unable to locate any changes.

Our opinion is that all mineral oil filled distribution transformers for disposal purposes are assumed to be 50 to 499 PPM. Individual testing is only required to establish the fact that a unit is less than 50 PPM. It is the option of the company to do batch testing, individual testing or not test at all for disposal purposes. Environmental Protection Services interpretation is based on the following attached documentation.

We need to have an answer from you regarding whether individual testing is required to establish if mineral oil filled distribution transformers are **below 500 PPM.**

This confusion seems to have resulted from the above meeting. Thank you.

Sincerely,

Keith R. Reed

Keith R. Reed
President & CEO

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

JUL 22 1993

Mr. Scott Reed
Environmental Protection Services
4 Industrial Park Drive
P.O. Box 710
Wheeling, WV 26003-0091

Dear Mr. Reed:

This letter is in response to Mr. Keith Reed's and your inquiries dated October 27, 1992 and June 30, 1993 regarding the appropriate technique for testing procedures of potential PCB Items.

As stated in Mr. Keith Reed's September 15, 1992 letter to Mr. Paul Rader of the West Virginia Department of Commerce, the various scenarios delineated for using batch testing procedures appear to be in accordance with 40 C.F.R. § 761.60(g). However, please be advised that the residual oil samples from the potential PCB Items must be of equal volume for accuracy and consistency. Also, May 31, 1979 (44 FR 31521) states that:

> "The prohibition against dilution, however, has not changed. The new testing option does <u>not</u> permit the deliberate dilution of the collected oil (assumed to contain PCBs above 50 ppm) with PCB-free or low-PCB fluids to reduce the concentration of PCBs in the resultant mixture below 50 ppm. Further, the option does not permit the deliberate addition of PCB wastes with concentrations greater than 500 ppm to the tank [or container] in order to avoid the more stringent disposal requirements for high-concentration wastes. If such high-concentration wastes are added to the tank, then the entire tank contents must be disposed of in compliance with requirements for wastes containing 500 ppm PCBs or greater, even if a sample of the aggregate tank contents reveals a concentration below 500 ppm. In this circumstance, the tank contents <u>cannot</u> be used as dielectric fluid; the tank contents <u>must</u> be disposed of in a high temperature incinerator."

The disposal of items which may contain greater than 500 ppm PCBs should be closely monitored, and those particular items must be disposed of properly in accordance with 40 C.F.R. § 761.60. Items which contain greater than 500 ppm PCBs can not be disposed of by smelting and must be disposed of in an approved incinerator in accordance with 40 C.F.R. § 761.70. PCB Transformer carcasses, greater than 500 ppm PCBs, may be disposed of in an approved landfill which complies with 40 C.F.R. § 761.75, only

after the fluid in the transformer has been drained, filled with solvent, allowed to stand for at least 18 hours, and then drained thoroughly.

Should you have any questions regarding this issue, please contact Ms. Charlene Creamer, of my staff, at 215/597-4651.

Sincerely,

Kurt J. Elsner, Acting Chief
TSCA Enforcement and TRI Section

cc: B. Cohan (3RC11)

ENVIRONMENTAL PROTECTION SERVICES

FILE COPY

USEPA
Ms. Charlene C. Creamer
Toxics and Pesticides Branch (3AT31)
Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107

Oct 27, 1992

ATTN: Ms. Charlene C. Creamer
Toxics and Pesticides Branch

REF: Batch Testing and Assumption Rule
Your discussion with Scott Reed on October 27, 1992

Dear Ms. Creamer,

Recently, we have been asked by the WV Division of Environmental Protection - Air Quality whether our practice of Batch testing transformers that have been certified by the original and sole owner as being filled with mineral oil dielectric fluid is in Violation of Federal Standards in regards to classifying the transformers as Non Regulated after removal of the Oil. We have been operating two Metal Recovery Salvage furnaces with 2200 degree F. after burners under West Virginia Air permits since 1989. This request from the WV Air Quality department came as a result of one of our competitors discussing the validity of Batch testing with Dale Farley (Chief-Office of Air Quality).

In reviewing the regulations, we have looked at the Federal Register Vol. 44. No. 106 dated Thursday, May 31, 1979 which forms the basis of the three classes of transformers, batch testing and the assumption rule. Paragraph E. of Page 31520 states "Testing of Mineral Oil dielectric fluid and waste oil from sources that are otherwise assumed to contain PCBs at a concentration between 50 PPM and 500 PPM can be performed on samples taken from collection tanks ("Batch Testing"). This is permitted so that oils from multiple sources can be collected and tested without requiring a separate test of <u>each transformer</u> each time a disposer wants to evaluate his disposal options." This process highlights the main disposal procedure employed by utilities, co-ops, etc; whereby they drain several units at the same time and then dispose of the oil and transformers concurrently after batch testing. The concept of batch testing and the assumption rule is further stated on page 31531 para 3. "Available information indicates that virtually no

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mineral oil (non-askarel) dielectric fluid will be contaminated with PCBs above 500 PPM. Even if a small percentage of such fluid might contain somewhat more than 500 PPM PCB, EPA does not believe that the cost of testing needed to identify fluids with these slightly greater amounts is justified. Specifically, there are some 35 million transformers that would be subject to such a testing requirement. With each test costing between $50 and $100 the total cost of such testing would be as great as $3.5 billion. The additional health or environmental benefits that may result from requiring such testing and applying more stringent requirements in those few cases with more than 500 PPM would be extremely small compared to these testing costs."Also on page 31518 Para b. Significance of Transformer categories, "PCB - Contaminated transformers are subject to no restrictions on servicing (including rebuilding) or coil and casing disposal,"_____). Page 31517, discusses the Assumption Rule and the creation of the three transformer categories, various paragraphs on this page explicitly state if the owner has purchased a mineral oil filled unit, that unless he desires to verify that it is a Non PCB Transformer, there is no testing requirement to verify the transformer as a PCB-contaminated transformer.

In conclusion we ask for the following reply:

Enclosed is a letter we submitted to WVDEP describing our test procedures prior to incineration of the drained transformers at our facility. We ask that you review the letter and state whether or not we are in violation of current CRF761 Rules and Regulations, so that we may submit a copy of the response to the West Virginia Division of Environmental Protection.

Sincerely Yours,

Keith R. Reed
CEO

enclosures

FILE COPY

ENVIRONMENTAL PROTECTION SERVICES

September 15, 1992

West Virginia Department of Commerce
Labor & Environmental Resources
Division of Environmental Protection
Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311-2599

ATTN: Paul Rader
REF: Follow-up letter to phone conversation of September 15, 1992

Dear Mr. Rader:

As per our discussion today, I am writing this letter to clarify our testing procedures. EPS receives transformers and electrical equipment from its' customers that basically is comprised of two types of categories; Substation Equipment (large equipment) and Distribution Equipment (small size, high quantity). The equipment may be received with or without oil and in general all substation equipment is shipped without oil. Shipments made to the EPS facility vary from customer to customer but fall into the following five categories:

1. Distribution equipment (average 70-100) units that the customer has drained all oil into a single container and has tested and certified the units are less than 500 PPM PCB's. Batch testing per CFR 761 regulations.
2. Same as Number 1, except customer has individually tested each unit per CFR 761.
3. Customer ships untested oil filled distribution units under the assumption rule of CFR 761 and states the units to have a PCB level of between 50-500 PPM PCBs.
4. Customer ships oil filled units that have been individually tested and certifies the units to be either less than 500 PPM or 50 PPM per CFR 761.
5. Customer ships drained substation equipment that has been individually tested per CFR 761 and certifies the equipment to be less than 500 PPM PCBs.

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Upon arrival at the EPS facility, the following tests are conducted:

Category #1 - A sample is pulled from the residual oil left in each item. These samples are collected in a common jar to form a composite of the oil samples. A dexsil screening test is performed to verify the total chlorine content is less than 500 PPM. The remaining composite oil is then sent to an independent lab for GC analysis. Please note that prior to the start-up of the EPS operation, EPS officials met with TSCA officials in Washington and discussed the issue of verification testing with them. Their recommendation to us was rather than randomly testing a few units, that we should do a batch test on the full lot. Their basis was that if a PCB transformer existed (400,000-800,000 PPM), a batch test would exceed the 500 PPM level.

Category #2 - Perform same tests as Category #1

Category #3 - Upon arrival at the EPS facility, a small hole is drilled in the cover and an oil sample is taken from each individual unit. These samples are put in a common jar to form a composite sample. The sample is then sent to an outside lab for a GC Analysis. If the test results are less than 50 PPM PCB's, the oil is pumped into storage tanks were upon the storage tank will be retested after being filled (prior to incineration). If the oil is greater than 50 PPM, the oil is sent to ENSR in Canton, Ohio for detoxification.

Category #4 - Same as Category #3

Category #5 - Same as Category #1

If you need any additional information or clarification, please give me a call. Also as noted each year, the average PCB level decreases. The past 40 shipments have an average of level of 41 PPM.

Sincerely Yours,

Keith R. Reed
CEO/President

ENVIRONMENTAL PROTECTION SERVICES

September 11, 1998

US Environmental Protection Agency
Tony Baney
401 M St. Southwest
Washington, DC 20460

Ref: Our letter to you dated September 3, 1998

Dear Mr. Baney:

In regard to our above letter, please include this additional information in your reply:

Response to Comments Document
Proposal Rule - Disposal of Polychlorinated Biphenyls
GPPTS Docket # 66009A
Date: May 1998

Page 58 of 207 of this report has the following:

Comment 18: EPA should state that sampling of the transformer's interior is not required prior to disposal.

Response 18: At 761.60 (b) (4) EPA provides the process for disposing of PCB - contaminated transformer. This process does not include wipe sampling as part of the disposal process for PCB - Contaminated transformers.

Please note that this section does not require individual oil sampling either and 761.60 (g) (I) has not been modified.

Sincerely,

Keith R. Reed
President & CEO

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ENVIRONMENTAL PROTECTION SERVICES

September 16, 1998

US Environmental Protection Agency
Tom Simons
401 M St. Southwest/7404
Washington DC 20460

Dear Mr. Simons,

Per our conversation, I am requesting in writing an interpretation of CFR 761.210 (a) (2).

Specifically if a generator sends PCB waste under the assumption rule, 50-499 PPM, and a piece of the manifest is discovered by analysis to be higher than 500 PPM, does a manifest discrepancy have to be reported to the generator?

If possible, could you fax your response to me at 1-304-232-1599. Thank you.

Sincerely,

Roxanne A. Reed
Environmental & Safety Manager

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