



U.S. Department  
of Transportation

Pipeline and Hazardous Materials  
Safety Administration

1200 New Jersey Ave., SE  
Washington, DC 20590

DEC 03 2008

Mr. Bob Hayden  
Environmental Management  
Entergy Corporation  
2121 38<sup>th</sup> Street  
Kenner, Louisiana 70065

Ref. No. 08-0259

Dear Mr. Hayden:

This responds to your request for clarification of the procedures to be used when determining whether a mixture or solution meets the definition of a hazardous substance under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask if an item of oil filled electrical equipment (OFEE) that contains approximately 100 gallons of a non-hazardous mineral oil and may be contaminated with up to 500 ppm of polychlorinated biphenyl liquid (PCB) is regulated as a hazard substance under the HMR. The contaminated oil weighs approximately 7 pounds per gallon.

The answer is no. For the purposes of the HMR, a hazardous substance is a material, including its mixtures or solutions that: (1) is listed in Appendix A to the Hazardous Materials Table (HMT) in § 172.101; (2) is in a quantity in one package that meets or exceeds the reportable quantity (RQ) list in Appendix A; and (3) when in a mixture or solution, is in a concentration by weight that equals or exceeds the concentration corresponding to the RQ of the material shown in the table in § 171.8. As indicated in Appendix A to the HMT, the reportable quantity for PCB material is one pound. It would take 270 gallons of a solution weighing 7 pounds per gallon containing 500 ppm of PCB material to meet or exceed the RQ of one pound ( $7 \times 270 = 1890$ ;  $1890 \times .05 \% = 0.945$ ). The maximum amount of contaminated oil in the OFEE you offer for transportation is 100 gallons.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials Standards



Stevens  
§ 171.8  
§ 172.101  
Definitions  
08-0259

Environmental Management  
2121 38th Street  
Kenner, LA 70065

October 15, 2008

U. S. Department of Transportation  
Hazardous Material Information Center

Re: DOT hazmat - shipping name for Oil Filled Electrical Equipment

Sir:

Entergy Services, Inc. (Entergy) requests the Department's regulatory guidance regarding the DOT hazardous materials proper shipping description relevant to untested miscellaneous oil filled electrical equipment (OFEE). These devices such as electrical transformers, are filled with naphthenic-based mineral oil that may be contaminated with varying levels of Polychlorinated Biphenyls (PCBs). As noted, these OFEE units are not tested for PCBs by laboratory analysis, prior to shipment. The OFEE units are transported per USEPA's Toxic Substances Control Act (TSCA) regulations at 40 CFR Part 761, under a Uniform Hazardous Waste Manifest, and per those regulations, each device is assumed to contain greater than 500 parts per million PCB for TSCA purposes, unless the device is known by laboratory analytical data or manufacture data plate to contain less than 50 part per million PCB, or to have been manufactured after July 1979. The receiving facility for the OFEE is an USEPA/TSCA-permitted transformer metals reclamation facility which determines PCB classification status by laboratory analysis for each "PCB" content unknown" device upon receipt. The Uniform Hazardous Waste Manifest is later corrected to reflect the true PCB values for the OFEE as is allowed in the 40 CFR Part 761 manifest discrepancy resolution process.

Entergy's past practice regarding the transportation of OFEE has been to act under the DOT regulations, in accord with the same presumption of PCB content for non-tested OFEE. Out of an abundance of caution, and in order to provide maximum warning and protection to spill or accident responders, Entergy has treated the OFEE as if the oil contained in the OFEE (for which PCB status is unknown), is a "hazardous substance", under 49 CFR 171.8\* However, even assuming a concentration of 500 ppm PCB, it is physically impossible for most of the OFEE transported in this manner to contain an RQ of PCBs (the OFEE would have to contain approximately 270 gallons of oil, whereas the largest shipped in this manner by Entergy normally contains approximately 100 gallons of oil). Under this scenario, Entergy has used the DOT shipping name "RQ, UN2315, PolyChlorinated Biphenyls, 9, PGIII". Based on Entergy's operational knowledge of the size of the transformers and PCB content of the oil, would it be more appropriate and accurate to ship the OFEE units described as "Miscellaneous Oil-Filled Electrical Equipment, non-DOT regulated"? According to the attached MSDS (Section 14), the naphthenic-based oil in the OFEE is not regulated by DOT.

I would appreciate your regulatory compliance guidance on this matter.

**I request that you provide me with a hard-copy response of clarification/interpretation on DOT letterhead regarding this issue to be forwarded to me at the below address.**

Thank you.

A handwritten signature in black ink that reads "Bob Hayden". The signature is written in a cursive, flowing style.

Bob Hayden  
Entergy Corporation  
Environmental Management  
2121 38<sup>th</sup> Street  
Kenner, Louisiana 70065  
504-463-2497  
[rhayden@entergy.com](mailto:rhayden@entergy.com)

\* Although PCBs in liquid are listed on the Hazardous Materials List Special Provision 140 of 49 CFR 172.102 is applicable to that listing and provides that PCBs in liquid are not a "hazardous material" unless the liquid meets the definition of "hazardous substance" or "marine pollutant" in 49 CFR 171.8. Thus the concentration of PCBs in the liquid and the applicable one pound reportable quantity of PCBs becomes a limiting factor on whether the liquid is treated as a "hazardous material".