



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Ave, S.E.
Washington, D.C. 20590

AUG 27 2009

Mr. Michael D. Alston
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

Ref. No. 09-0146

Dear Mr. Alston:

This responds to your June 16, 2009 letter requesting clarification of the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to "Zirconium powder, wetted, UN1358." Specifically, it is your position that when wetted with 25 percent water or more, the material may be transported as a non-regulated material.

Your understanding is incorrect. Wetted zirconium powder with not less than 25 percent water may not be transported as a non-regulated material. Wetted zirconium powder with not less than 25 percent water is classed as a Division 4.1 material and assigned Packing Group II as specified in the § 172.101 Hazardous Materials Table (HMT) and as required by § 173.125(a). Determination of the packing group on the basis of test results following test methods provided in the UN Manual of Tests and Criteria and using the criteria provided in § 173.125(b) does not apply. You should be aware that the limitation to be wetted with not less than 25 percent water is a condition to suppress the pyrophoric properties of dry zirconium powder, UN2008 (i.e., zirconium powder wetted with less than 25 percent water), which is a Division 4.2 spontaneously combustible material. By designation in the HMT, wetting dry zirconium powder (with not less than 25 percent water) requires the material to be reclassified from Division 4.2 to Division 4.1.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards



Westinghouse Electric Company
Legal & Contracts, Environment, Health & Safety
P.O. Box 355
Pittsburgh, PA
15230-0355
U.S.A.

Der Kinderen

§ 172-101

§ 173.125

Proper Shipping Name

09-0146

June 16, 2009

U.S. Department of Transportation
PHMSA Office of Hazardous Materials Standards
Attn: PHH-10
East Building
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Dear Sir or Madame,

Westinghouse is requesting a letter of interpretation regarding the use and application of the proper shipping name: **Zirconium Powder, wetted with not less than 25 percent water, 4.1, UN1358, II**. It is Westinghouse's position that Zirconium Powder when wetted and shipped with a minimum of 25% water will not burn as described in 49 CFR §§173.125 (b)(1), §§173.125 (2)(i) and when following the UN Manual of Tests and Criteria. When performing the V-notched burn rate test, the Zirconium Powder is wet, but does not have a minimum of 25% water present and; therefore; it could possibly exhibit a flammable characteristic. However, Westinghouse's position is that the material when wetted with 25% water or more may be shipped as non regulated and Westinghouse does not envision a scenario when this proper shipping name would be used.

Sincerely,

Michael D. Alston, CHMM
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