



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

NOV 30 2005

400 Seventh Street, S.W.  
Washington, D.C. 20590

Mr. Rick Foote  
Sr. Environmental Compliance Advisor  
Triumvirate Environmental  
61 Inner Belt Road  
Somerville, MA 02143

Ref. No. 05-0240

Dear Mr. Foote:

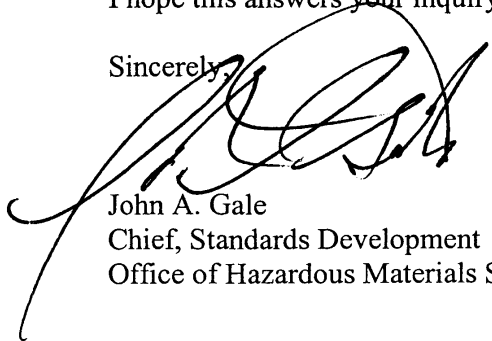
This responds to your September 19, 2005 letter requesting clarification on the classification of rubidium (Rb-87) as a radioactive material under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask for confirmation that your material, rubidium (Rb-87), is not a hazardous material based on the definition and on activity limits in §§ 173.433 and 173.436.

According to your letter, your material (Rb-87) is contained within an article, specifically within a small envelope that is part of a measuring device used in GPS system. The activity of the Rb-87 is less than  $1.7 \times 10$  (negative) <sup>4</sup>th micro curies (approximately 6.29 becquerels).

Your understanding is correct. The item will not be a Class 7 hazardous material if the total activity of Rb-87 in a consignment is less than 10 million becquerels. In almost all cases, this item will not be a Class 7 hazardous material. It could become a Class 7 hazardous material only if a single consignment were to contain over 1,590,000 of these items, and the activity concentration exceeds 10,000 becquerels per gram.

I hope this answers your inquiry.

Sincerely,



John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards



050240

173.433  
173.436

Booth  
§ 173.433  
§ 173.436  
RAM Exceptions  
05-024C  
March 1, 2005

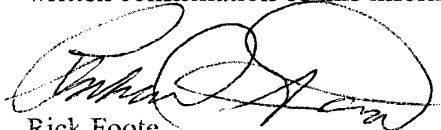
Mr. Edward T. Mazzullo  
Director, Office of Hazardous Materials Standards  
U.S. DOT/PHMSA (DHM-10)  
400 7th Street S.W.  
Washington, D.C. 20590-0001

**RE: Hazardous Materials Regulation Clarification**

**Dear Sir:**

My client ships a small amount of Rb-87 contained within an article. The rubidium is contained within a small "envelope" that is part of a measuring device used in GPS systems. The activity level from the RB-87 has an activity level of less than  $1.7 \times 10^{-4}$  (negative) 4th micro curies. In order for a material to be considered radioactive first it must meet the definition of a radioactive material. The regulations define a radioactive as the following: "Radioactive material means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in § 173.436 or values derived according to the instructions in § 173.433."

We feel that this amount and activity level for the Rb-87 is exempt from the regulations because the material has an activity rating of equal to or less than  $1.0 \times 10^{-4}$  as per the table found in 49 CFR 173.436. Therefore, we feel that this material is not considered a hazardous material per DOT Hazardous Materials regulations. We are looking for a written confirmation of this information. Thank you



Rick Foote  
Sr. Environmental Compliance Advisor