



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

JAN 23 2014

Mr. James K. Elrod  
Radiation Safety Officer  
Baker Hughes Houston Technology Center  
2001 Rankin Road  
Houston, TX 77073

Ref. No. 13-0210

Dear Mr. Elrod:

This responds to your November 6, 2013 letter regarding the classification of radioactive material under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You request clarification whether the radionuclide you would like to transport can be shipped as non-hazardous if the activity concentration and total activity of the material is below the value specified in § 173.436 or value derived according to instructions in § 173.433.

A "Hazardous material" is defined under § 171.8 of the HMR. The term includes materials that meet the defining criteria for hazard classes and divisions in Part 173 of the HMR such as Class 7 (radioactive) material. A "Radioactive material" is defined in § 173.403 as 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 instructions in § 173.433. Therefore, if your radionuclide and the consignment of the material do not exceed the activity concentration and total activity, respectively, then the material is not considered radioactive material for purposes of the HMR. You must determine whether the material can be defined as hazmat by other criteria before you ship as non-hazardous. If the material is not considered radioactive material and does not meet any other part of the definition of hazardous material as defined under § 171.8, then the material may be transported as non-hazardous.

I hope this information is helpful. If you have further questions, please contact this office.

Sincerely,

Robert Benedict  
Chief, Standards Development Branch  
Standards and Rulemaking Division

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§ 173.403  
§ 173.433  
RAM  
13-0210



**Baker Hughes**  
**Houston Technology Center**  
2001 Rankin Road  
Houston, Texas 77073

November 6, 2013

Director of Standards Development Branch  
US DOT  
PHMSA Office of Hazardous Materials Standards  
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Subject: Request for Interpretation, 49CFR 173.403 Definition of Radioactive Material.

Dear Director,

This letter is an official request for an interpretation of 49 CFR 173.403.

The definition of Radioactive Material according to 49 CFR 173.403 states: *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.*

My question is: If the radionuclide I would like to transport is below and does not meet the definition of "Radioactive Material" as stated in 173.403 can it be transported as non-hazardous?

I appreciate your consideration of this question and the time and effort your organization takes to provide guidance on questions such as mine. I look forward to your formal clarification and official response.

Feel free to contact me if there are any questions or concerns. My contact information is at the top of this letter.

Regards,

A handwritten signature in black ink that reads "James K. Elrod".

James K Elrod  
Radiation Safety Officer  
Baker Hughes Houston Technology Center.