



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

August 27, 2020

DJ Allen
Y-12 National Security Complex
P.O. Box 2009
765 Perimeter Road, K-1065D
Oak Ridge, TN 37831

Reference No. 20-0037

Dear Mr. Allen:

This letter is in response to your April 21 and July 22, 2020, emails requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the shipment of radioactive materials.

We have paraphrased and answered your questions as follows:

- Q1. You ask whether radioactive materials excepted under § 173.453 are regulated in accordance with § 173.419.
- A1. Section 173.419 outlines the requirements for authorized packages for oxidizing Class 7 (radioactive) materials. The term “not fissile” in § 173.419(a)(1) does not include fissile material that meets the exceptions of § 173.453. Therefore, fissile material excepted by § 173.453 would not be allowed to be transported in accordance with § 173.419.
- Q2. You state that you are shipping fissile excepted Uranyl Nitrate Hexahydrate in solid form, with a 5.1 oxidizer subsidiary hazard. You indicate that your intention is to describe the material as “UN2915, Radioactive material, Type A package *non-special form, non fissile or fissile-excepted, 7.*” You note that this proper shipping description specifies § 173.419 for non-bulk packages and ask whether applying § 173.419 is acceptable when shipping non-bulk quantities of “UN2915, Radioactive material, Type A package *non-special form, non fissile or fissile-excepted, 7.*”
- A2. The answer is yes. Section 173.419 does not directly apply to “UN2915, Radioactive material, Type A package *non-special form, non fissile or fissile-excepted, 7.*” Section 173.419 applies to an oxidizing Class 7 material, “as referenced in § 172.101 table of this subchapter.” There is currently no proper shipping name in the Hazardous Materials

Table (HMT) for a Class 7, subsidiary 5.1 material. Moreover, § 173.419 states that material must be non-fissile, and the material that you described is fissile-excepted. A suitable Type A package could be used in the transportation of the material described in your letter provided that the subsidiary hazard is properly accounted for in the design. However, provided you have an oxidizing Class 7 (radioactive) material, it could be shipped consistent with the packaging requirements specified in § 173.419.

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

Sincerely,

A handwritten signature in blue ink that reads "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

From: [INFOCNTR \(PHMSA\)](#)
To: [Hazmat Interps](#)
Subject: FW: Letter of Interpretation - 49 CFR 173.419(a)(1)(i)
Date: Monday, April 27, 2020 10:20:06 AM
Attachments: [20_4_Allen.docx](#)

Hello Alice and Ikeya,

Please see below for letter of interpretation request.

Thank you,
Kathryn (HMIC)

From: Allen, David J <david.allen@cns.doe.gov>
Sent: Tuesday, April 21, 2020 10:41 AM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Cc: Hawk, Curtis <Todd.Hawk@cns.doe.gov>; Allen, David J <david.allen@cns.doe.gov>
Subject: Letter of Interpretation - 49 CFR 173.419(a)(1)(i)

Letter of interpretation
173.419(a)(1)(i)

1. This request for interpretation is to get clarity on 49 CFR 173.419(a)(1)(i). The regulation states 'Not fissile'. Does this mean that the material must not be fissile unless excepted by 173.453, or does it mean excepted fissile material is also not allowed?

Our understanding is that it should read similar to 49 CFR 173.418(a) which states – *In solid form and must not be fissile unless excepted by 173.453*. Is this a correct interpretation?

2. Do the requirements of 49 CFR 173.419 apply if the radioactive material meets the definition of a limited quantity of Class 7 material? Could we instead go to the requirements in 49 CFR 173.423 for multiple hazard limited quantity Class 7 materials?

Thank you,

DJ Allen
Work: (865) 241-9327
Mobile: (865) 770-2569

Y-12 National Security Complex

Attn: DJ Allen (JCC S3.342)
P.O. Box 2009
765 Perimeter Road, K-1065D
Oak Ridge, TN 37831