

## Special Edition

### New Interpretation on Placarding



DOT recently published a letter of interpretation (see page 3) that will change the way the majority of our industry applies placards for radioactive shipping. Before this letter, placarding only the vehicle was an accepted practice. This belief mainly came from the wording in 49 CFR 173.427, when shipping low specific activity (LSA) or surface contaminated objects (SCO). When transporting LSA/SCO as exclusive-use, 173.427(a)(6)(v) requires the transport “vehicle” to be placarded in accordance with (IAW) part 172. Two interpretations can be made by this wording: Placard the “vehicle” or placard IAW the requirements in part 172. Most shippers took the literal wording to mean that placards were applied to the actual trailer (vehicle). Others chose to placard IAW part 172, which could require placarding the actual package vice the trailer. The letter of interpretation chose to require the latter. Because of this new decision, we felt it necessary to cover the placarding requirements for any size packaging.

Non-bulk sized packagings will continue to have the placards displayed on the outer most part of the conveyance (trailer, freight container, unit load device, rail car, etc.). Another side to this story is the DOT letter of interpretation for the DOE that *any* radioactive packaging with an “immediate form of containment” is classified as a non-bulk packaging regardless of its capacity. Do not get used to this letter, because DOT published a proposed rule on September 1, 2006 to revise the definition of bulk packaging that will remove the “immediate form of containment” clause and will be based on volumetric capacity only.



Freight Containers (172.512) that are greater than 640 cubic feet in capacity require that the placards be applied directly on each side and each end of the freight container. This includes all 20' & 40' SeaLand and intermodal containers. Bulk Packagings (172.514) of the same capacity will also require placards physically on each side and each end of the package. Freight containers that are less than 640 cubic feet in capacity have an exception for radioactive materials. If you apply labels to this smaller sized freight container, then only one (1) placard is required to be applied to the package. Keep in mind that four (4) placards are still required to be visible in each direction from the conveyance during transport.



Bulk Packagings (172.514) that are less than 640 cubic feet in capacity have a few options. This includes B-25 boxes and your garden variety of casks. One option is to apply 4 placards on the actual package. That can be a lot of placards for a B-25 box shipment. Placards applied to those nicely painted surfaces on a cask? Someone is not going to like that! The second option is to apply 2 placards on the package with 4 placards visible on each side and each end from the road. You will have to be creative on this one to make it work on all 4 sides. The last option is to label each package and include 4 placards on the trailer. This last option for an excepted package of LSA/SCO will seem very strange when considering the fact that you are “excepted” from specification labeling on the package.

The table below summarizes placarding freight containers and bulk packagings that have a capacity between 119 gallons (15.9 ft<sup>3</sup>) and 4,788 gallons (640 ft<sup>3</sup>):

Packaging Type	Package	Trailer
Freight Container	2 Labels & 1 Placard	4 Placards
Freight Container	4 Placards	N/A (if visible)
Bulk	2 Labels	4 Placards
Bulk	2 Placards	4 Placards, unless visible on all sides
Bulk	4 Placards	N/A (if visible)

Confused or frustrated yet!?! I hope neither for you. It was my intention to clarify the placarding requirements for any sized packaging. Just as a reminder, Class 7 placards are only required when a package is required to have Radioactive Yellow-III labels or when shipping LSA/SCO as exclusive use. It is also permissible to chose to placard for Class 7 if radioactive material is present in the shipment.



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NOV 24 2009

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Ref. No.: 09-0231

Dear Mr. Johnson:

This is in response to your letter dated October 8, 2009 requesting clarification of the Hazardous Material Regulations (HMR; 49 CFR Parts 171-180) applicable to the hazard communication requirements for Class 7 (radioactive) material. In your letter you describe the material as "UN2913, Radioactive material, surface contaminated object (SCO-II), 7" transported as "exclusive use" in accordance with § 173.427(a)(6). The material is offered for transportation and transported in a bulk container that has a volumetric capacity of 96 cubic feet (2.7 cubic meters). Your questions are summarized and answered as follows:

Q1) Must the container be placarded on all 4 sides?

A1) No. A package with a volumetric capacity of less than 18 cubic meters (640 cubic feet) may be placarded on two opposing sides or, alternatively, may be labeled instead of placarded in accordance with Part 172, Subpart E. See § 172.514(c).

Q2) Can the container be labeled: Class 7, Radioactive White-I, Yellow-II or Yellow-III as appropriate, instead of placarded in accordance with § 172.514(c).

A2) Yes. See A1.

Q3) Can this package be marked "RADIOACTIVE-SCO" without being placarded or labeled?

A3) No. Packaged or unpackaged LSA or SCO containing less than an A<sub>2</sub> quantity of Class 7 (radioactive) material is excepted from marking and labeling requirements of the HMR provided the surface of each package or unpackaged Class 7 (radioactive) material is stenciled or otherwise marked "RADIOACTIVE-LSA" or "RADIOACTIVE-SCO" as appropriate. See § 173.427(a)(6)(vi). However, this exception does not provide relief from the placarding requirements in Subpart F of Part 172. While labels may be displayed instead of placards in accordance with § 172.514(c), this is only an alternative method of satisfying the placarding requirements of Subpart F of Part 172. Thus, the package or unpackaged Class 7 (radioactive) material must display either the Class 7 (radioactive) placards or the appropriate labels to comply with the placarding requirements of Subpart F of Part 172.

I trust this satisfies your inquiry. If we can be of further assistance, please contact us.

Sincerely,

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