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June 26, 2000

Dockets Management System
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590-0001

Regarding: Docket Number RSPA-99-6283

Dear Sirs:

I am submitting the following comments regarding your proposal to amend the Hazardous Materials Regulations (HMR) pertaining to the transport of radioactive materials, as published in the "Federal Register," on December 28, 1999.

This proposal is based on recent changes contained in the International Atomic Energy Agency (IAEA) publication, "IAEA Safety Standards Series: Regulations for the Safe Transport of Radioactive Material, 1996 Edition, Requirements, No. ST-1."

In considering changes to the hazardous materials regulations, it is important to consider that the change process, itself, is time consuming and labor intensive. Any change also increases the probability for errors, and thus tends to impact safety. Thus, changes should only be made if there is a clear net benefit, and any changes to the HMR should be approached with caution.

Keeping this in mind, I see some parts of ST-1 which would be a significant improvement to the HMR, and which should, hence, be adopted:

- The current HMR should be revised to incorporate the scope limitations of ST-1, Section 107. This will remove HMR controls from consumer commodities, such as smoke detectors; and radioactive material that is an integral part of the packaging, such as casks with depleted uranium shielding. Since these items are inherently safe, they should be removed from the scope of the HMR.

- The separation of criticality safety from the current Transport Index, and its incorporation as a separate, "criticality safety index," would eliminate potential confusion regarding the basis for a package's assigned Transport Index, and will help assure that criticality safety is not compromised.

- The proposed changes to the A1 and A2 values seem reasonable, and, in general, provide additional flexibility for the shipper, while assuring adequate packaging.

I also see several changes that should be avoided or modified substantially.

- The substitution of radionuclide-specific concentration and total consignment exemptions from material defined as "radioactive material," in lieu of the general exemption of 0.002 uCi/g, would require substantial additional effort with little if any benefits. I am not aware of any safety concerns that have occurred due to the shipment of materials of less than 0.002 uCi/g outside of HMR controls, and would like to see this limit retained.

- Section 3.1.2 of NUREG-1608 / RAMREG-003, "Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects," a joint publication of the U.S. Nuclear Regulatory Commission and the U.S. Department of Transportation, includes provisions for exempting from HMR controls objects with surface contamination less than current package limits and distributed radioactivity of less than 0.002 uCi/g. This provision is not included in ST-1, but should be incorporated into the HMR.

- The requirements for a "Radiation Protection Programme" raise several concerns regarding practical means for assuring compliance. It is unclear how a shipper can require that radioactive material will be segregated during transport to assure meeting the limits on dose to the public of paragraph 306. Similar provisions were removed from the most recent revision to the HMR, and there is no valid basis for reinstating these requirements. I am not aware of any cases involving excessive radiation exposure to members of the public from radioactive material that had been shipped in accordance with HMR requirements.

· The proposed removable contamination limits on packages would increase the current limits by a factor of 10. I am concerned that this will create contamination control problems for those receiving such packages. These limits would also apply to vehicles released for unrestricted use, creating potential contamination problems for the general public. The current contamination limits, in conjunction with the provision allowing up to ten times the release limits during transport, for exclusive use shipments, are readily achievable, provide adequate protection for members of the public, and should not be changed.

· The proposed changes to the UN Numbers and Proper Shipping Names would be costly to implement, while providing little, if any benefit. The current system provides adequate protection, and should be retained.

· ST-1, paragraph 570 would require the placarding of all rail and road vehicles carrying labeled packages. This is a change from the current regulations, which only require placarding for a package labeled "Yellow-III." This has the potential to create compliance problems for carriers of low hazard packages, and, in some cases, carriers may refuse to accept labeled packages, even though the labeled hazard does not warrant such concerns.

· Since package testing and certification is costly and time consuming, any changes to package testing requirements should include a provision to exempting currently certified packaging from any new testing requirements.

I appreciate the opportunity to comment on these proposed changes, and plan to continue as an active participant in this rulemaking process.

Sincerely,

William V. Lipton ScD, CHP

