

New Class Lineup for 2015: IATA and Load Securing

Based on your feedback and in an effort to continually improve, we will only be offering our IATA Transport of Radioactive Material by Air and our Load Securing for Radioactive Material classes online as computer based training. These courses will no longer be presented in the classroom on Friday during our normally scheduled hotel classes. Taking these courses by computer has many advantages. One advantage is timing. You will not be rushed through the material and you can learn at your own pace. You will also have time to take notes, absorb the information, review and take the exam. Another advantage will be exposure. These online classes can be taken at any time, even before attending our NRC/DOT Radioactive Waste or Mixed Waste Packaging, Transportation and Disposal shipping trainings. This will provide you a good review or introduction to the shipping language and concepts before attending the main comprehensive shipping class. Another advantage is less travel time. Our standard 4-day hotel class will be offered Tuesday thru Friday, allowing Monday for travel. We hope this move to online will be in your best interest and make your experience more positive. As always, let us know how we are doing. We always appreciate your feedback.



Radioactive Shipping Class in Pittsburgh, PA

Please mark your calendar for the week of April 14th in 2015. Pittsburgh, Pennsylvania is our new location for the NRC/DOT Radioactive Waste Packaging, Transportation and Disposal Training. We will cover the complexity of the NRC & DOT regulations to ensure the safe and secure transportation of class 7 radioactive materials with lively discussions and lessons learned across our diverse nuclear industry. We hope to see you there!



NRC 540 Information Updates

The NRC Uniform Low-Level Radioactive Waste Manifests 540/541/542 for our Bear Creek Processing facility in Oak Ridge, Tennessee and our Clive Disposal Facility in Utah both recently received small changes. The reference to "Duratek, Inc. - Commercial Processing" should be replaced with "EnergySolutions Services, Inc." for all Bear Creek waste manifests. And for Clive, the contact information should be updated from "Transportation Compliance (435) 884-0155" to "Security Department, (801) 649-2175" in block 9 of the Clive 540 form. Please ensure your documentation reflects these updates.



Frequently Asked Questions

Our FAQ topic for this quarter looks at a few of the questions and answers in HM-250, July 11, 2014 Final Rule Section-by-Section Review.

- **If I am shipping radioactive material in special form, can I call it normal form?**

Reference: Page 40592

Yes, special form is only an option.

- **What does maximum activity during transport mean for labeling and shipping papers?**

Reference: Page 40592

You must take into account any changes in activity due to decay and/or buildup of daughters.

- **Are there any overpack marking requirements in 49 CFR Part 172?**

Reference: Page 40594

No, the reference in 49 CFR 173.448(g)(2) is unnecessary for overpacks.

- **Can I add shielding inside a Type A package without retesting?**

Reference: Page 40596

No, additional shielding could change how the package performs and thus would need to be re-evaluated.

- **Is return to service the same thing as free release?**

Reference: Page 40601 - 40602

No, the clearance from regulatory control of radioactive materials for further use or disposal, or ownership, is subject to your licensing agencies (NRC, Agreement States, DOE, etc). DOT cannot authorize unrestricted or free release of radioactive material, for which DOT does not have authority. If the items affected have been demonstrated to be no longer subject to the Hazardous Material Regulations (HMR), then exclusive use provisions may be terminated.

To access any federal registers, go to: <http://www.ofr.gov/> Then, click on: "Federal Register" Next, you can search by year, then month, day, and agency. The HM-250 final rule can be found at: <http://www.gpo.gov/fdsys/pkg/FR-2014-07-11/pdf/2014-15514.pdf> and the August 12, 2011 HM-250 proposed rule at: <http://www.gpo.gov/fdsys/pkg/FR-2011-08-12/pdf/2011-19872.pdf>

Recent Industry Issues



Gray duct (or duck) tape is an interesting way to ensure your orange panel will not come off during transportation, but does this orange panel

still comply with all the specifications in 49 CFR 172.332(b) for orange panels? Even if you do not cover the outer border, but only cover the orange on the outer part – is that okay? Or does the outer part of an orange panel still require the orange color to be visible as specified? And the answer is yes, the orange color is required on the outer part too.



What is wrong with this label? Is the trefoil symbol correct? Does it comply with the requirements in 49 CFR 172.407(g) and Appendix B to Part 172? Will you the shipper or the manufacturer be liable for using a noncompliant

label on a Class 7 radioactive material package? Be careful with any communications and ensure they meet all the specifications in the regulations.



How important is securing the material inside a package from shifting and/or causing damage? In this picture, a hole on the side of the package was covered by a label. Will the label help the package meet the general design packaging requirements?

Latest Happenings in the Federal Register

NRC Requests LLD Manifesting Comments

On June 02, 2014 (79 FR 31349), the Nuclear Regulatory Commission (NRC) published a notice requesting comments on its draft regulatory issue summary (RIS), which addresses the reporting of H-3, C-14, Tc-99 and I-129 on the uniform waste manifest. The purpose of this draft RIS is to identify instances where licensees may use indirect methods to determine the activity of these radionuclides reported on the uniform manifest when the radionuclide is present at a concentration less than the lower limit of detection (LLD) using scaling factors, computer codes, and/or material accountability. Comments received after July 2, 2014 will be considered if it is practical to do so.

NRC Requests SNM Transit Comments

On June 18, 2014 (79 FR 34641), the NRC published a notice requesting comments on its draft basis to amend portions of Parts 26 and 73 of Title 10 of the Code of Federal Regulations (10 CFR) relating to physical protection of special nuclear material (SNM) at NRC-licensed facilities and in transit, as well as the fitness for duty programs for security officers at certain fuel cycle facilities. Comments received after August 4, 2014 will be considered if it is practical to do so.

Compressed Gas Cylinder Safety Advisory

On July 07, 2014 (79 FR 38126), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a safety advisory to notify the public that any DOT-Specification or DOT-Special Permit high pressure compressed gas cylinder marked as complying with the Hazardous Materials Regulations (HMR) by Always Safe Fire Extinguisher and Safety, LLC (ASFES) located at 41 Lockwood Avenue, Yonkers, NY 10701 is not authorized for the transportation of hazardous materials in commerce. These cylinders should be considered unsafe and not authorized for the filling of hazardous material unless the cylinder is first properly tested by an individual or company authorized to requalify DOT specification and special permit cylinders.

HMR Harmonization for Class 7

On July 11, 2014 (79 FR 40590), the PHMSA published a final rule in coordination with the NRC, amending

requirements in the HMR governing the transportation of Class 7 (radioactive) materials based on recent changes contained in the International Atomic Energy Agency (IAEA) publication "Regulations for the Safe Transport of Radioactive Material, 2009 Edition, IAEA Safety Standards Series No. TS-R-1." The purposes of this rulemaking are to harmonize requirements of the HMR with international standards for the transportation of Class 7 (radioactive) materials and update, clarify, correct, or provide relief from certain regulatory requirements applicable to the transportation of Class 7 (radioactive) materials. The effective date of this final rule is October 1, 2014. PHMSA is authorizing voluntary compliance beginning July 11, 2014. Unless otherwise specified, compliance with the amendments adopted in this final rule is required beginning July 13, 2015. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of October 1, 2014.

National Hazardous Materials Route Registry

On July 14, 2014 (79 FR 40844), the Federal Motor Carrier Safety Administration (FMCSA) published a notice and request for comment on the updated National Hazardous Materials Route Registry (NHMRR), which is a listing, as reported by State and Tribal Government routing officials, of all designated and restricted road and highway routes for Highway Route Controlled Quantities (HRCQ) of Class 7 (radioactive) materials (RAM) (HRCQ/RAM) and non-radioactive hazardous materials (NRHMs) transportation. This notice also provides the limitations for using these routes. This listing supersedes the NHMRR published on December 4, 2000, and FMCSA requests comment on the new route ordering approach, table structure and content, and other related specific route issues from the States of Alaska, California, Colorado, and Texas, and the District of Columbia. The effective date of this notice is July 14, 2014. Please submit comments on or before September 12, 2014.

Safe Transportation of Bulk Explosives

On July 15, 2014 (79 FR 41185), the PHMSA published a Notice of Proposed Rulemaking (NPRM) to amend the HMR by establishing standards for the safe

Latest Happenings in the Federal Register (cont.)

transportation of bulk explosives. This NPRM would be responsive to two petitions for rulemaking submitted by industry representatives: P-1557 concerning the continued use of renewal applications, and P-1583 concerning the incorporation of an industry standard publication. Please submit comments by September 15, 2014. To the extent possible, PHMSA will consider late filed comments as a final rule is developed.

NRC Medical Events, Training Updates

On July 21, 2014, the NRC published two federal registers concerning updates to 10 CFR Parts 30, 32 & 35 Medical Use of Byproduct Material, Medical Event Definitions, Training and Experience, and Clarifying Amendments. The first was a proposed ruling (79 FR 42410) where the NRC addresses proposed amendments to the reporting and notification requirements for a medical event and to the training and experience (T&E) requirements. The second was a notice (79 FR 42224) where the NRC is requesting public comment the "Draft Guidance for the Proposed Rule 'Medical Use of Byproduct Material - Medical Events Definitions, Training and Experience, and Clarifying Amendments.'" Please submit comments by November 18, 2014. Comments received after this date will be considered if it is practical to do so.

FMCSA Updating SMS Website

On July 24, 2014 (79 FR 43117), the FMCSA published a notice announcing enhancements to the display of information on the public Safety Measurement System (SMS) Web site <http://ai.fmcsa.dot.gov/SMS/> and responds to comments preciously received. The SMS display preview Web site will remain available until the SMS display changes described in this notice become operational. These enhancements are scheduled to be operational on August 2, 2014.

Lithium Battery Revisions

On August 6, 2014 (79 FR 46012), the PHMSA published a final rule in consultation with the Federal Aviation Administration (FAA), modifying the requirements governing the transportation of lithium cells and batteries. This final rule revises hazard communication

and packaging provisions for lithium batteries and harmonizes the HMR with applicable international regulations. The effective date of this final rule was August 6, 2014.

Failing to Pay Civil Penalties

On August 7, 2014 (79 FR 46194), the PHMSA published a final ruling to amend its hazardous materials procedural regulations prohibiting a person who fails to pay a civil penalty as ordered, or fails to abide by a payment agreement, from performing activities regulated by the Hazardous Materials Regulations until payment is made. PHMSA is adding a new section (107.338) to 49 CFR titled "Prohibition of hazardous materials operations" and a new subpart to 49 CFR Part 109 titled "Subpart E - Prohibition on Hazardous Materials Operations After Nonpayment of Penalties" This final rule is effective on September 8, 2014.

New Reverse Logistics Exception

On August 11, 2014 (79 FR 46748), the PHMSA published a NPRM to revise the HMR applicable to return shipments of certain hazardous materials by motor vehicle. This will include hazardous materials intended to be returned to or between a vendor, distributor, manufacturer, or other person for the purpose of returning for credit, recalling product, replacement, or similar reason (for instance, from a retail or wholesale outlet). PHMSA also proposes to expand an existing exception for reverse logistics shipments of used automobile batteries that are being shipped from a retail facility to a recycling center. Please comment by October 10, 2014.

Special Permit and Approval Process

On August 12, 2014 (79 FR 47047), the PHMSA published a NPRM to revise the HMR in 49 CFR Parts 105, 107 & 171 to include the standard operating procedures and criteria used to evaluate applications for special permits and approvals. This rulemaking will provide clarity regarding what conditions need to be satisfied to promote completeness of the applications submitted. An application that contains the required information reduces processing delays that result from

Latest Happenings in the Federal Register (cont.)

rejection, and further facilitates the transportation of hazardous materials in commerce while maintaining an appropriate level of safety. Please submit comments by October 14, 2014.

Proposed HMR Updates

On August 25, 2014 (79 FR 50742), the PHMSA published a NPRM to revise the HMR maintaining

alignment with recent changes to the international standards by incorporating various amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, marine pollutant exceptions, packaging authorizations, air transport quantity limitations, and vessel stowage requirements. Comments must be received by October 24, 2014.



Except for What?

Placard (from the French work plaquier, meaning to plate, or lay flat)

When it comes to placarding, there are several exceptions from the regulations including infectious substances, limited and small quantities, and ORM-D to name a few. When you begin to read the general placarding requirements in 172.504(a), the first word is "Except" which provides more exceptions! This paragraph appears to require placarding for any quantity of a hazardous material whether it's in a bulk packaging or not. However, paragraph (c) of this section is where the exception is found, regarding Table 2 items that don't require placarding until an aggregate gross weight of 454 Kg (1001 pounds) is met for the freight container or transport vehicle. The interesting thing about paragraph (c) is that it also begins with the word "Except", meaning there is an exception to the exception. Huh? It's like a negative and a negative make a positive. Paragraph (c) says that "Except for bulk packagings and hazardous materials subject to

172.505..." meaning that if you have a bulk package (except for Class 9) or if you are required to placard for a subsidiary hazard from 172.505, then you don't get the relief in paragraph (c) and would therefore need to placard for the primary hazard. From section 172.505, we find that the subsidiaries that require placarding are: POISON INHALATION HAZARD; CORROSIVE, but only in the case of Uranium Hexafluoride, where the container has 454 Kg or more of material; and DANGEROUS WHEN WET. So if you must placard for one of these subsidiary hazards, in most cases you would placard for the primary hazard regardless of whether it was found on Table 1 or Table 2. "Most?" Does that mean there are still more exceptions? Yes, and as an example let's look at a Primary Class 7 with a Yellow-II label that does not require placarding, that also has a subsidiary DANGEROUS WHEN WET. This is a situation that requires placards for the subsidiary hazard but does not require placards for the primary hazard. Are you confused yet? Here is another example: I have 10 Kg of Maneb, that has a primary hazard of 4.2 Spontaneously Combustible which is on Table 2. Because I have less than 454 kg of aggregate Table 2 material, paragraph 172.504(c) gives relief from placarding, unless it is a bulk packaging or unless it is required to placard for a subsidiary hazard. Maneb has a subsidiary of 4.3 DANGEROUS WHEN WET, which is one of the subsidiaries that requires placarding, so the exception in paragraph (c) is no longer available, which puts me back into paragraph (a) requiring me to placard for any amount. So placards are required for both 4.2 and 4.3. And you thought placarding was about a plate or laying flat?

September – December 2014 Training Schedule

Course	Date	Location
Advanced Hazardous Waste Shipper Certification Training	Sept 9-11, 2014	Las Vegas, NV
Hazardous Materials Drivers Training	September 15, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	September 16, 2014	Richland, WA
Advanced Hazardous Waste Shipper Certification Training	Sept 16-18, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	September 18, 2014	Richland, WA
Advanced Mixed Waste Shipper Certification Training	Sept 29-Oct 2, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	October 7, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	October 8, 2014	Richland, WA
Load Securement for Drivers and Traffic Personnel	October 9, 2014	Richland, WA
Advanced Radioactive Material Shipper Certification Training	October 14-16, 2014	Las Vegas, NV
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	October 20-23, 2014	Hilton Head, SC
Air Transport of Radioactive Materials (IATA)	October 24, 2014	Hilton Head, SC
Load Securing of Radioactive Materials	October 24, 2014	Hilton Head, SC
*Attend all three NRC/DOT courses consecutively for \$2,795.00 (savings of \$190.00)		
Advanced Radioactive Material Shipper Certification Training	October 21-23, 2014	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	October 21-23, 2014	Richland, WA
Advanced Radioactive Material Shipper Certification Training	October 28-30, 2014	Albuquerque, NM
Hazardous Material General Awareness Transportation Training	October 30, 2014	Richland, WA
DOT/NRC Hazardous Waste/Mixed Waste Packaging, Transportation and Disposal	November 3-6, 2014	Aiken, SC
Air Transport of Radioactive Materials (IATA)	November 7, 2014	Aiken, SC
Load Securing of Radioactive Materials	November 7, 2014	Aiken, SC
*Attend all three NRC/DOT courses consecutively for \$2,895.00 (savings of \$190.00)		
Advanced Mixed Waste Shipper Certification Training	November 3-6, 2014	Las Vegas, NV
Federal Motor Carrier Safety Regulations for Drivers	November 4, 2014	Richland, WA
Hazardous Materials Drivers Training	November 5, 2014	Richland, WA
Advanced Mixed Waste Shipper Certification Training	Nov 10-13, 2014	Richland, WA
Load Securement for Drivers and Traffic Personnel	November 12, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	November 13, 2014	Richland, WA
Advanced Mixed Waste Shipper Certification Training	Nov 17-20, 2014	Albuquerque, NM
Hazardous Material General Awareness Transportation Training	December 3, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	December 4, 2014	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	December 8-11, 2014	Las Vegas, NV
Air Transport of Radioactive Materials (IATA)	December 12, 2014	Las Vegas, NV
Load Securing of Radioactive Materials	December 12, 2014	Las Vegas, NV
*Attend all three NRC/DOT courses consecutively for \$2,795.00 (savings of \$190.00)		
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	December 9-11, 2014	Las Vegas, NV
Load Securement for Drivers and Traffic Personnel	December 17, 2014	Richland, WA