ENERGYSOLUTIONS

the Moderator

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Training Resources and Information for the Nuclear Industry

New Asbestos Marking

The Environmental Protection Agency (EPA) in 40 CFR 61.150(a)(1)(iv) requires each disposal container with friable asbestos or wrapped friable asbestos material for disposal to be legibly marked with the Occupational Safety and Health Administration (OSHA) asbestos warning label specified in 29 CFR 1910.1001(j)(4) or 29 CFR 1926.1101(k)(8). OSHA has revised the asbestos warning label in their hazard communication final ruling (77 FR 17574) published March 26, 2012, which also adopted the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The new asbestos label specification must be used after June 1, 2015.

New OSHA Label

Current Label

Addendums Published for IATA DGR

Users of the 2013 International Air Transport Association's Dangerous Goods Regulations (IATA DGR) 54th edition are asked to download and comply with two (2) addendums available at **http://www.iata.org/whatwedo/cargo/dgr/Pages/download.aspx**. The first addendum includes amendments to State Variations for France and the United States, and Operator Variations for Air Berlin, Finnair, Cathay Pacific, Delta Airlines, Federal Express, Hong Kong Dragon Airlines, Air Hong Kong, Austrian Airlines, Royal Jordanian, Scandinavian Airline System, US Airways, Virgin Australian, and Tyrolean Airways. Internal combustion or fuel cell engines are no longer permitted on one's person as amended in Table 2.3.A "Provisions for Dangerous Goods Carried by Passengers or Crew." Also, restrictions on permeation devices (calibration gas standard tubes for air quality monitoring equipment) have been added to Table 2.3.A. For class 7 radioactive material label location requirements, they added in Section 10.7.4.2.3 that subsidiary hazard labels must be affixed on the same surface of the package. Please see the download for many other miscellaneous updates and changes. The second addendum includes corrections to Jet Airways, Air Canada, Cathay Pacific Airways, Qantas Airways & Singapore Airlines operator variations, and in Section 4 removed Special Provision (SP) A51 from UN3480 Lithium ion batteries. SP A51 still applies to both UN2794 & UN2795 "Batteries, wet…" entries. Both addendums are effective January 1, 2013.

ERG: There is an App for That!

Yes, there is now a free application to download for your smart phone containing the entire 2012 DOT **Emergency Response Guidebook (ERG).** It is available for both Apple and Google operating systems. The Pipeline and Hazardous Materials Safety Administration (PHMSA) and the U.S. Department of Health and Human Services' National Library of Medicine (NLM) joined forces in producing these two free ERG mobile applications. Links to download this software are available from the Apple iTunes website at **ERG 2012 for iPhone** and from the Google Play website at **ERG 2012 for Android.** In addition, a version of the ERG is available in NLM's Wireless Information System for Emergency Responders (WISER) application. For more information on WISER, please visit **NLM's website.** An instructional video for learning how to use the ERG2012 is also available on **PHMSA's website.**

Recent Industry Issues

Can you easily find at least 2 issues with this shipment? Specifically, look at the two drums and the proper shipping name marking for surface contaminated objects. Should it be "Radioactive material, surface contaminated object" or Radioactive Material, SCO"?

The answer is neither according to the entry in column 2 of the hazardous material table in 49 CFR 172.101. The drum in the foreground is missing "(SCO-II)" at the end. The drum in the background has the acronym "SCO" only. There is the possibility that this drum could be utilizing the exception in 49 CFR 173.427(a)(6)(vi) where it is being shipped exclusive use, domestic and contains less than an A_2 quantity. Even so, the marking would need to be "RADIOACTIVE-SCO" and "RQ" if it contained a hazardous substance and would be excepted from the other marking and labeling requirements of 49 CFR Subchapter C.

What about the label placement on the drum in the foreground? Should we obscure our labels or place them on non-contrasting backgrounds?

Cannot find enough flat-surface on your conveyance or package to apply your placard correctly? Are we allowed to wrap the placard around components like this on our rail cars or vehicles? Will anyone notice the hazard class is not in plain sight?

Frequently Asked Questions

Our FAQs topic this quarter is on emergency response information (49 CFR 172.602).

- **Can I reference the DOT ERG's guide number or the International Air Transport Association's ERG-Code on the shipping paper and attach a copy of the appropriate guide number pages from the ERG to the shipping paper to meet the emergency response information requirements?**

Reference # 12-0068, 02-0179, 02-0250 & 09-0215

No. The emergency response information (ERI) must contain the basic description and technical name of the hazardous material as required in 172.202 and 172.203(k) in addition to the information included in the ERG. However, if the entire ERG is present on the transport vehicle, the ERI requirements are satisfied and, though not prohibited, you are not required to enter the guide number on the shipping paper.

- **Can the emergency response information be in electronic format only?**

Reference # 11-0230 & 02-0250

No. It is the opinion of DOT that a printed hard copy of the emergency response information must be present and immediately available for use at all times hazardous materials are present in the transportation stream in the event of an incident.

- **Must I include the evacuation distances if the ERG entry is green highlighted in the yellow and blue pages?**

Reference # 08-0240

Yes. The emergency response information must include information to assist first responders to take the actions necessary to evacuate the scene, including appropriate evacuation distances.

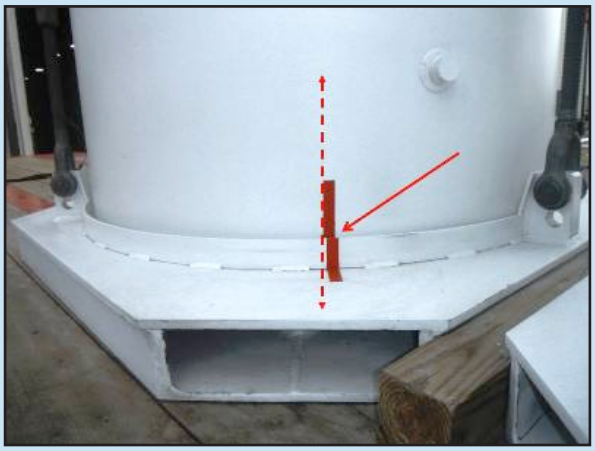
- **May I use a Material Safety Data Sheet (MSDS) containing the required information in 49 CFR 172.602(a)(1) thru (a) (7)?**

Reference # 05-0046 & 02-0250

Yes, but it must be readily recognizable and with the shipping papers.

To access any DOT letters of interpretation, go to: **http://www.phmsa.dot.gov/hazmat**. Then, click on: "Interpretations" Next, you can search by entering the reference number in the search box or search by the applicable regulatory section number, or search by the published date. Do not forget that you have these internet addresses (and many more) in a Word document on our training class CD handout.

Recent Industry Issues (cont.)



Handling and loading packages is a job for a perfectionist. This cask arrived at one of our facilities this way. Should the alignment marks line up? Was it loaded this way or did the cask shift during transportation? Either way, was the shipper at fault?

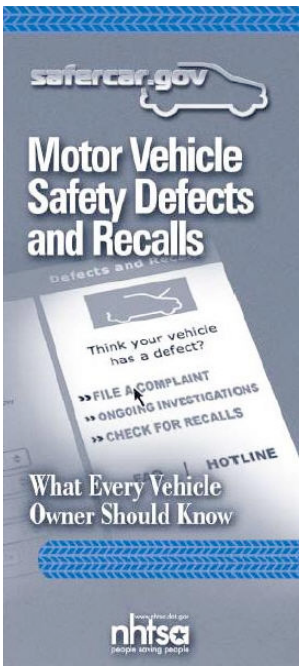
Latest Happenings in the Federal Register

DOT Requests Comments on Incident Data Collection

On November 21, 2012 (77 FR 69925), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a notice to request your comments and feedback to be used for an assessment to improve the collection, analysis, reporting, and use of data rlated to accidents and incidents involving the transportation of hazardous materials (see 49 CFR 171.15 & 171.16). This notice is being conducted in support of the "Moving Ahead for Progress in the 21st Century" (MAP–21) Act.

DOT Counterfeit Vehicle Air Bag Safety Notice

On November 21, 2012 (77 FR 69927), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a safety advisory notice for shippers and carriers of air bags. PHMSA has been alerted by the National Highway Traffic Safety Administration (NHTSA) that counterfeit air bags have been sold as replacement parts to consumers and repair professionals. These counterfeit products may contain unapproved explosives and thus pose additional transportation risks when compared to air bags manufactured through legitimate means. Air bags that deploy using a pyrotechnic device must be approved by PHMSA before the air bag is authorized for transportation in commerce. Consumers or repair professionals who suspect they have a counterfeit air bag should contact a call center established by their auto manufacturer or www.SaferCar.gov.



NRC Requests Comments on 10 CFR 61 Proposed Change

On December 07, 2012 (77 FR 72997), the U.S. Nuclear Regulatory Commission (NRC) published a federal register requesting comments on their second version of proposed amendments to Part 61 in Title 10 of the Code of Federal Regulations (10 CFR Part 61), "Licensing Requirements for Land Disposal of Radioactive Waste." These updated amendments published in a preliminary rule language dated November 2012 will ensure that waste streams that are significantly different in terms of radiological characteristics (e.g., half-life) from those considered in the technical basis for the current regulations can be disposed of safely and meet the performance objectives for land disposal of low level radioactive waste (LLRW). These amendments will also increase the use of site-specific information to ensure that public health and safety would continue to be protected.

Latest Happenings in the Federal Register (cont.)

DOT Harmonization with Recent International Changes

On January 07, 2013 (78 FR 988), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule amending the Hazardous Material Regulations (HMR) to maintain alignment with the International Maritime Dangerous Goods (IMDG) Code, the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions) and the United Nations Recommendations on the Transport of Dangerous Goods-Model Regulations (UN Model Regulations). Notable amendments to the HMR in this final rule include adopting minimum size requirements for the non-bulk packaging identification number (preceded by "UN", "NA", or "ID") marking as specified in 49 CFR 172.301 (delayed compliance until January 1, 2017 for domestic shipments only). The effective date of this final rule is January 1, 2013. Unless otherwise specified, compliance with the amendments adopted in this final rule is required beginning January 1, 2014.

New Size Requirement for Non-Bulk ID # ("UN", "NA", "ID") Package Marking			
Maximum Package Capacity	**Maximum Net Mass**	**Cylinder Water Capacity**	**Minimum Character Height**
> 30 L (> 8 gallons)	> 30 kg (> 66 lbs.)	> 60 L (>16 gallons)	12 mm (0.47 in)
≤ 30 L (≤ 8 gallons)	≤ 30 kg (≤ 66 lbs.)	≤ 60 L (≤16 gallons)	6 mm (0.24 in)
≤ 5 L (≤ 1.32 gallons)	≤ 5 kg (≤ 11 lbs.)	≤ 60 L (≤16 gallons)	Appropriate size

DOT Responds to Appeals and Latest International Changes

On January 07, 2013 (78 FR 1101), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule amending the Hazardous Material Regulations (HMR) as a result of administrative appeals submitted in response to various amendments adopted in a January 19, 2011 final rule concerning the phase out of the ORM-D classification and limited quantity package/overpack markings. They also addressed recent actions taken by the International Civil Aviation Organization's (ICAO) Dangerous Goods Panel (DGP) regarding certain lithium ion battery-powered mobility aids (e.g., wheelchairs, travel scooters) offered by passengers for air transport and passenger notification of hazardous materials restrictions by operators. Further, this final rule adopts amendments to the HMR as a result of two administrative appeals submitted in response to a final rule published February 2, 2010, that revised shipper responsibilities related to packaging design variation, manufacturer notification and recordkeeping requirements for certain packaging types. The effective date of this final rule is January 1, 2013.

DOT Published Corrections to its January 7, 2013 Final Rule

On February 06, 2013 (78 FR 8431), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a correction to the January 07, 2013 (78 FR 988) Hazardous Materials: Harmonization with International Standards (RRR) final rule. Corrections were made to several entries in the Hazardous Material Table (HMT) in 49 CFR 172.101conerning: Chlorosilanes, toxic, corrosive, flammable, n.o.s.; Chlorosilanes, toxic, corrosive, n.o.s; Components, explosive train, n.o.s; Contrivances, water-activated, *with burster, expelling charge or propelling charge; and Copra.*

Latest Happenings in the Federal Register (cont.)

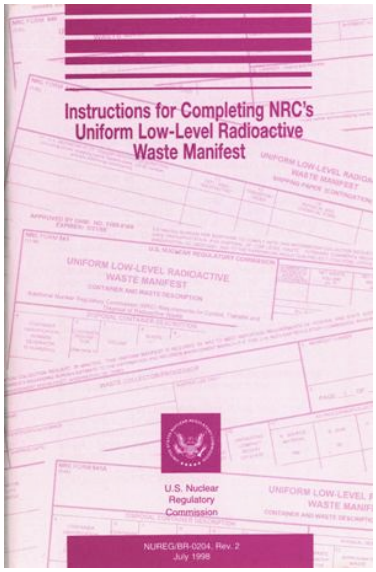
DOT Requests Comments on Lithium Battery Transportation

On January 07, 2013 (78 FR 1119), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a notice of proposed rulemaking (NPRM) to request additional comments on the impact of changes to the requirements for the air transport of lithium cells and batteries that have been adopted into the 2013–

2014 International Civil Aviation Organization Technical Instructions on the Transport of Dangerous Goods by Air (ICAO Technical Instructions), and subsequently incorporated by reference in a final rule also published on January 07, 2013 (78 FR 1101). PHMSA is considering the long-term impacts of permitting shippers and carriers to choose between compliance with the existing HMR, or compliance with the ICAO Technical Instructions 2013–2014 edition, when transporting batteries domestically by air. Based on the comments received, PHMSA may issue a final rule to revise the HMR to reflect the lithium battery provisions specified in the 2013–2014 Edition of the ICAO Technical Instructions.

NRC Requests Comments on Manifesting

On February 20, 2012 (78 FR 11907), the U.S. Nuclear Regulatory Commission (NRC) published a federal register requesting comments on possible revisions to NUREG/BR–0204, Rev. 2 "Instructions for Completing NRC's Uniform Low-Level Radioactive Waste Manifest." The NRC is looking for information on how this NUREG can best be revised. The NRC is also interested in gaining a better understanding of the issues associated with reporting certain difficult-to-measure (DTM) radionuclides on shipping waste manifests as required by 10 CFR 20 Appendix G. Members of the public have asked the NRC to update NUREG/BR–0204 to address the manifesting of Tc–99, C–14, H–3, and I–129 to minimize over-estimation of their activity. These isotopes are key contributors to groundwater dose and can lead to premature closure of low level radioactive waste disposal facilities if over-estimated. Additionally, the NRC staff received comments recommending that the NRC staff consider adding Chlorine-36 (Cl–36) in the update to NUREG/BR–0204.



OSHA Published Corrections to HazCom Final Rule

On February 08, 2013 (78 FR 9311), the Occupational Safety and Health Administration (OSHA) published a correction to the March 26, 2012 (77 FR 17574) Hazard Communication Standard final rule. This notice corrects certain minor errors in the 2012 revisions to OSHA's Hazard Communication Standard. The majority of these corrections change references in other OSHA standards made to material safety data sheet (MSDS) to safety data sheet (SDS) which OSHA inadvertently missed in its original publication of the final rule. Other corrections include correcting values or notations in tables, and updating references to terms defined in the Hazard Communication Standard Final Rule, published on March 26, 2012. The effective date of this final rule is February 08, 2013.

OSHA

2013 March – June Training Schedule

Course	Date	Location
Federal Motor Carrier Safety Regulations for Managers and Supervisors	March 5-6, 2013	Richland, WA
Reasonable Suspicion Training for Supervisors	March 7, 2013	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	March 11-13, 2013	Las Vegas, NV
Federal Motor Carrier Safety Regulations for Drivers	March 12, 2013	Richland, WA
Hazardous Material General Awareness Transportation Training	March 13, 2013	Richland, WA
Load Securement for Drivers and Traffic Personnel	March 14, 2013	Richland, WA
Highway Route Control Quantity (HRCQ)	March 19, 2013	Richland, WA
Advanced Radioactive Material Shipper Certification Training	March 19-21, 2013	Richland, WA
Hazardous Materials Drivers Training	March 20, 2013	Richland, WA
Explosives Training for Shippers	March 21, 2013	Richland, WA
Advanced Hazardous Waste Shipper Certification Training	March 26-28, 2013	Albuquerque, NM
Advanced Radioactive Material Shipper Certification Training	April 2-4, 2013	Las Vegas, NV
Load Securement for Drivers and Traffic Personnel	April 3, 2013	Richland, WA
Hazardous Materials Drivers Training	April 4, 2013	Richland, WA
Advanced Mixed Waste Shipper Certification Training	April 8-11, 2013	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	April 8-11, 2013	Surfside Beach, SC
Air Transport of Radioactive Materials (IATA)	April 12, 2013	Surfside Beach, SC
Load Securing of Radioactive Materials	April 12, 2013	Surfside Beach, SC
*Attend all three NRC/DOT courses consecutively for $2,695.00 (savings of $190.00)		
Advanced Radioactive Material Shipper Certification Training	April 16-18, 2013	Albuquerque, NM
Hazardous Material General Awareness Transportation Training	April 17, 2013	Richland, WA
Federal Motor Carrier Safety Regulations for Managers and Supervisors	April 23-24, 2013	Richland, WA
Advanced Hazardous Waste Shipper Certification Training	April 23-25, 2013	Las Vegas, NV
Reasonable Suspicion Training for Supervisors	April 25, 2013	Richland, WA
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	April 29-May 1, 2013	Richland, WA
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	May 1, 2013	Richland, WA
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	May 2-3, 2013	Richland, WA
*Attend all three modules consecutively for $1,285.00 (savings of $510.00)		
Advanced Mixed Waste Shipper Certification Training	May 6-9, 2013	Albuquerque, NM
Federal Motor Carrier Safety Regulations for Drivers	May 8, 2013	Richland, WA
Load Securement for Drivers and Traffic Personnel	May 9, 2013	Richland, WA
Advanced Hazardous Waste Shipper Certification Training	May 14-16, 2013	Richland, WA
Hazardous Material General Awareness Transportation Training	May 16, 2013	Richland, WA
DOT/NRC Hazardous Waste/Mixed Waste Packaging, Transportation and Disposal	May 20-23, 2013	Aiken, SC
Air Transport of Radioactive Materials (IATA)	May 24, 2013	Aiken, SC

Continued on next page

2013 March – June Training Schedule (cont.)

Course	Date	Location
Load Securing of Radioactive Materials	May 24, 2013	Aiken, SC
*Attend all three NRC/DOT courses consecutively for $2,795.00 (savings of $190.00)		
Load Securement for Drivers and Traffic Personnel	May 29, 2013	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	June 3-6, 2013	Reno, NV
Air Transport of Radioactive Materials (IATA)	June 7, 2013	Reno, NV
Load Securing of Radioactive Materials	June 7, 2013	Reno, NV
*Attend all three NRC/DOT courses consecutively for $2,695.00 (savings of $190.00)		
Advanced Radioactive Material Shipper Certification Training	June 4-6, 2013	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	June 5, 2013	Richland, WA
Hazardous Material General Awareness Transportation Training	June 6, 2013	Richland, WA
Load Securement for Drivers and Traffic Personnel	June 12, 2013	Richland, WA
Highway Route Control Quantity (HRCQ)	June 12, 2013	Richland, WA
Hazardous Materials Drivers Training	June 13, 2013	Richland, WA
Federal Motor Carrier Safety Regulations for Managers and Supervisors	June 18-19, 2013	Richland, WA
Reasonable Suspicion Training for Supervisors	June 20, 2013	Richland, WA
Advanced Mixed Waste Shipper Certification Training	June 24-27, 2013	Las Vegas, NV
Hazardous Materials Drivers Training	July 2, 2013	Richland, WA
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	July 8-10, 2013	Albuquerque, NM
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	July 10, 2013	Albuquerque, NM
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	July 11-12, 2013	Albuquerque, NM
*Attend all three modules consecutively for $1,285.00 (savings of $510.00)		
Advanced Hazardous Waste Shipper Certification Training	July 9-11, 2013	Aiken , SC
Hazardous Material General Awareness Transportation Training	July 11, 2013	Richland, WA
Advanced Mixed Waste Shipper Certification Training	July 15-18, 2013	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	July 15-17, 2013	Las Vegas, NV
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	July 22-25, 2013	Orlando, FL
Air Transport of Radioactive Materials (IATA)	July 26, 2013	Orlando, FL
Load Securing of Radioactive Materials	July 26, 2013	Orlando, FL
*Attend all three NRC/DOT courses consecutively for $2,695.00 (savings of $190.00)		
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	July 22-24, 2013	Richland, WA
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	July 24, 2013	Richland, WA
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	July 25-26, 2013	Richland, WA
*Attend all three modules consecutively for $1,285.00 (savings of $510.00)		
Load Securement for Drivers and Traffic Personnel	July 24, 2013	Richland, WA
Hazardous Materials Drivers Training	July 25, 2013	Richland, WA

2014 Class Schedule

We always look forward to your feedback and input on how we can serve you better. You have the opportunity to influence where and when our open-enrollment hotel classes will be held in 2014. Please let us know what works best for you. We have noticed from your comments during class that your travel budgets are shrinking. In the past, we scheduled training in exciting and hot locations like Key West, FL. We have already received comments to hold more classes in the Northeast. Feel free to call and/or email any of us in the Training Department and let your opinions be heard. We look forward to seeing you soon in our comprehensive hazardous material transportation training classes.