

Vol. 13, No. 4, December, 2014

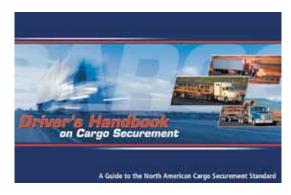
Training Resources and Information for the Nuclear Industry



#### Radioactive Shipping Class in Pittsburgh, PA

We have a new location for 2015. We picked Pittsburgh, Pennsylvania based on your feedback to hold our comprehensive NRC/DOT Radioactive Waste Packaging, Transportation and Disposal Training in a location closer to home. Pittsburgh is rich with history and attractions to explore. Please mark your calendars and spread the word. We hope to see you there April 14th thru the 17th!

#### **Online Load Securing Updated**



In our effort to continually improve; we have revised our load securing online training. If your job function includes loading material inside packages and/ or loading cargo onto a conveyance, this is a great course to meet either your initial or refresher training requirements. You can complete the course anywhere a computer with internet access is available. Give us a call or register online.

### IATA DGR 2015 Changes

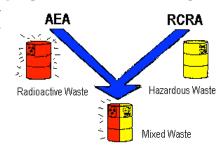
Shippers of dangerous goods (hazardous material) by air should be aware of the upcoming changes in the 2015 International Air Transport Association's Dangerous Goods Regulations (IATA DGR) 56th edition. A handout listing the significant changes is available on the IATA website using



the following link: http://www.iata.org/whatwedo/car-go/dgr/Documents/significant-changes-DGR-56-en. pdf Please take the time to review these changes and purchase the new 56th edition to note all the changes from previous editions. On another note to stay in compliance, please visit your air carrier's website for helpful checklists and guides. For example, if you use FedEx visit their updated list of resources at: http://www.fedex.com/us/service-guide/our-services/dangerous-goods/index.html#tab2

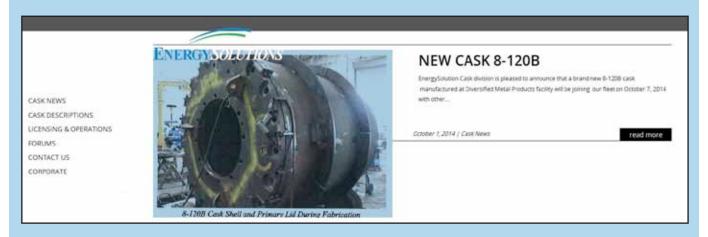
#### **Mixed Waste Shipping Class Schedule Change**

The NRC/DOT Hazardous Waste/ Mixed Waste Packaging, Transportation and Disposal Training in Aiken, South Carolina has been moved to February 3rd- 6th,



2015 from its original January date. This course is designed to help you discover how to apply the Hazardous Material (49 CFR, DOT) and Hazardous Waste (40 CFR, EPA) Regulations for any material or waste you may be asked to ship. We also include how to recognize hidden hazardous material to prevent any undeclared or non-compliant shipments. This is highly recommended for all hazardous and radioactive material shippers. A tour of our Barnwell Disposal and Processing Facilities is also included so you can meet and ask questions with the folks who receive your shipments. Register early to ensure we have a seat available for you.





### New Energy Solutions Website

We have a new look on the Internet. Check out the new pictures and layout. The Cask Division has also included many new features to help you stay up-todate with our cask fleet. You will need to register first to access the Cask News, Descriptions, Cask Manuals, etc.

### **Frequently Asked Questions**

Our FAQ topic for this quarter looks at DOT transportation security plans.

\* Do I have to consider subsidiary hazard classes for security plan applicability?

Reference # 14-0016 & 49 CFR 172.800

No, only the primary hazard class

\* Does security start before the shipment is in transit?

#### Reference # 12-0013 & 49 CFR 171.1

Yes, the Hazardous Material Regulations are applicable to pre-transportation and incidental to movement.

\* If I only receive or third-party broker hazardous materials, must I have a security plan?

Reference # 05-0066, 07-0035, 08-0048, 10-0064, 10-0132 & 49 CFR 172.800

No, only if you offer a hazardous material that requires a security plan by performing or responsible for performing any transportation related functions in 49 CFR 171.1 \* Must a carrier have its own transportation security plan?

Reference # 10-0083 & 49 CFR 172.800

Yes, anyone who offers or transport anything listed in 49 CFR 172.800(b)

\* Do I have to include a risk assessment and must I consider all locations separately?

Reference # 05-0020, 06-0170, 10-0205, 11-0263 & 49 CFR 172.802

Yes, a threat assessment of security risks at all locations must be included in your plan and a helpful evaluation guide is available on the PHMSA website

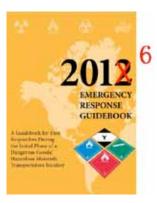
To access any DOT letters of interpretation, go to: http://www.phmsa.dot.gov/hazmat Then, click on: "Interpretations" Next, you can search by entering the reference number in the search box or search by the applicable regulatory section number, or search by the published date. Do not forget that you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



### Latest Happenings in the Federal Register

#### **ERG 2016 Revision**

On September 02, 2014 (79 FR 52016), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a notice in the federal register advising interested persons that the PHMSA is accepting input on ways to improve the Emergency Response Guidebook (ERG)



as it develops the 2016 version (ERG2016), particularly from those who have experience using the ERG. The development of the ERG2016 is a joint effort involving the transportation agencies of the United States, Canada, and Mexico. Please submit your comments.

### **Securing Unattended Trains**

On September 09, 2014 (79 FR 53356), the Federal Railroad Administration (FRA) published a Notice of Proposed Rulemaking (NPRM) in the federal register to amend the brake system safety standards for freight and other non-passenger trains and



equipment to strengthen the requirements relating to the securement of unattended equipment. This is in response to recent accidents like the one last year in Lac-Mégantic, Quebec, Canada where additional requirements may be warranted when such equipment includes certain hazardous materials that can contribute to high-consequence events. Comments received after November 10, 2014 will be considered to the extent possible.

### Firework Approval Clarification

On September 24, 2014, the PHMSA published two clarification notices in the federal register on PHMSA's policy regarding applications for classification



approval of Division 1.3G Display Aerial Shells with Attachments (79 FR 56988) and Display Mines (79 FR 56989), provided they conform to the acceptable criteria described in this federal register notice, and otherwise comply with APA Standard 87–1 requirements (i.e. chemical compositions and shell diameter sizes). The effective date of these notices is after September 24, 2014.

### **Special Permit Update Correction**

On September 12, 2014 (79 FR 54676), the PHMSA published a notice in the federal register correcting the language it issued in a NPRM to clarify that special permit and approval applications



that undergo review by an Operating Administration (OA) will complete this review before they undergo an automated review. This proposed correction also clarifies that an OA review, depending on its completeness, may negate the need for the automated review. The proposed rule published on August 12, 2014 was corrected as of September 12, 2014.

### **Cargo Tank Out-of-Service Order**

On September 16, 2014 (79 FR 55403), the Federal Motor Carrier Safety Administration (FMCSA) published an Emergency Restriction/Prohibition Order



and Out-of-Service Order CA–2014–9002– EMRG in the federal register issued to National Distribution Services, Inc., TankServices, LLC, Carl Johansson, and any other person(s) that use or have in their possession cargo tanks and/or cargo tank motor vehicles used, or that have been used, to transport hazardous materials, and that are owned, leased and/or otherwise operated by or for National Distribution Services, Inc. This Order prohibits the filling, offering, transportation, and welded repair of cargo tank vehicles by National Distribution Services, Inc., TankServices, LLC, and Carl Johansson. This order became effective on August 14, 2014.



### Latest Happenings in the Federal Register (cont.)

### **Coast Guard Updates 46 CFR**



On September 29, 2014 (79 FR 58270), the Coast Guard published a final ruling in the federal register that makes nonsubstantive changes throughout Title 46 of the Code of Federal Regulations (46 CFR Parts 1 – 199). The purpose of this rule is to make

conforming amendments and technical corrections to Coast Guard regulations. This rule will have no substantive effect on the regulated public. These changes are provided to coincide with the annual recodification of Titles 46 and 49 on October 1, 2014. This final rule is effective after September 29, 2014.

### **Federal Motor Carrier Updates 49 CFR**

On October 02, 2014 (79 FR 59450), the FMCSA published a final ruling in the federal register amending their regulations by making technical corrections throughout Title 49 of the Code of Federal Regulations (CFR), Subtitle B, Chapter III (49 CFR Parts 355 – 397). FMCSA is making minor changes to correct errors and omissions, ensure conformity with Office of the Federal Register



style guidelines, update references, and improve clarity and consistency of certain regulatory provisions. This rule does not make any substantive changes to the affected regulations. This final rule is effective after October 2, 2014.

### **Ebola Safety Advisory**



On October 30, 2014 (79 FR 64646), the PHMSA published a safety advisory notice in the federal register to provide guidance on the U.S. Department of Transportation's (DOT) Hazardous Materials Regulations (HMR) in 49 CFR

Parts 171-180 to persons who prepare, offer and

transport materials contaminated or suspected of being contaminated with the Ebola virus. Material contaminated or suspected of being contaminated with Ebola is regulated as a Category A infectious substance under the HMR. This federal register lists many helpful documents available for download from both the PHSMA and the Centers for Disease Control and Prevention (CDC) websites.

### **NRC Updates 10 CFR**



On November 10, 2014 (79 FR 66598), the Nuclear Regulatory Commission (NRC) published a final ruling in the federal register to make miscellaneous corrections in 10 CFR Parts 2 - 76. These changes include updating the address for the NRC's Public Document Room (PDR), updating a footnote, correcting mathematical errors, correcting references, correcting typographical and grammatical errors, and revising language for clarity and consistency. This final rule also makes changes to the time period by which a Federal agency must refer a debt for collection through offset, and makes conforming changes to the regulations to reflect the transfer of Mississippi to NRC Region IV. This final rule is effective after December 10, 2014.

### **Proposed Increase for Financial Responsibility**

On November 28, 2014 (79 FR 70839), the FMCSA published an Advanced Notice of Proposed Rulemaking (ANPRM) considering a rulemaking that would increase the minimum levels of financial responsibility for motor carriers, passenger carrier brokers, brokers and freight forwarders; and revise existing rules concerning self-insur-

ance and trip insurance. Please submit comments on or before February 26, 2015.



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### **Recent Industry Issues**



Did someone forget something in the proper shipping name (PSN) package marking? Should we include the type of surface contaminated object, either (SCO-I) or (SCO-II), at the end of this PSN? Yes, the full PSN as indicated by 'Roman Type' listed in Column 2 of 49 CFR 172.101 – Hazardous Material Table. Now to the label. If any portion of the label is placed on a non-contrasting color background, should the label have an outer border? Yes, either a dotted or solid line outer border per 49 CFR 172.406(d). Should the label be placed near anything that may obscure it? No, per 49 CFR 172.406(f).

What is wrong with this Radioactive Class 7 placard? Or is it a Flammable Class 3 placard? Maybe a Class '37' placard, but what is that? We are allowed to use to use a hinge-type placard holder, but only if



the placard can meet all the placarding requirements in 49 CFR 172 Subpart F per 49 CFR 172.516(e). Should the driver have replaced the Radioactive placard during transportation? Yes, the carrier must maintain the placard per 49 CFR 172.516 (c)(6).



### **Thinking About Training?**

Has your recurrent training cycle come around again? Or are you considering some transportation training for the first time and wonder what it's all about? Whether your goal is to recertify your competence or to expand your horizons for career advancement and growth opportunities, EnergySolutions training will give you the confidence to be successful. With experienced trainers whose goal is for you to achieve positive results, we invite you to register today for an upcoming training session. With classes being held in various locations including Las Vegas, Myrtle Beach, Salt Lake City, Orlando and other cool places, there are opportunities far and wide. To reserve your seat in a class and to ensure that we have a minimum class size, register early. Payment can be made while registering on the website: http://www.energysolutionstraining.com/ with a credit card, check, request for invoice or upon attendance. We will accept registrations up to a week prior to the first day of class, but a minimum 30 day advanced registration will guarantee your place\*. We look forward to seeing you soon!

\*If the minimum number of registrants is not met three weeks prior, the class may be cancelled so that student travel costs are not incurred.



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### **Nailing Load Securement**



During the extensive research conducted between Canada and the United States on cargo securement in the 1990's, blocking loads was one of the methods researched to secure cargo. The blocking research tested forms of blocking that include bulkhead, headerboards, stakes, racks, dunnage, interior and perimeter walls, other cargo, and the use of nailing timber boards to the surface of the cargo floor/deck firmly against the cargo. The use of timber (lumber) to create a "shoring" system is nothing new. Since the first large boat set sail, Navies throughout the world have understood the benefits of using lumber to stop the movement of whatever needs to be stopped (cargo and water in their case). Likewise, similar methods can be very beneficial to motor carriers for cargo securement. Use of lumber for cargo securement usually calls for nailing the lumber to the floor or deck. Nailing is critical to this method so correct use of nails is key when using such a securement system. The research discovered that driving nails perpendicular to the floor and blocking material (90 degrees) provided the best holding power compared to those driven at lessor angles. Such a system can be very beneficial when other methods do not lend themselves to proper securement or, it can serve to be a part of the total aggregate sum of other securement methods (friction mats, tie-downs, and dunnage/bulkheads). Consider this, one, three inch nail driven through a hardwood deck of one and a quarter inch will restrain up to about 700 lbs of force in a straight sideways direction (Practical Cargo Securement Guidelines for Drivers, Carriers and Shippers, August 2006, published by Techni-Com Inc.). The research recommended driving nails at least one and quarter inch in to the deck for best results. Staggering the placement of the nails on the lumber will help to not compromise nor weaken an area of material being nailed. Here is a list of common nails by size and their lateral resistance in pounds when nailed through two inches of thick floor:

#8	(2 ½ inches)	=	344 lbs
#10	(3 inches)	=	733 lbs
#12	(3 1/4 inches)	=	916 lbs
#16	(3 1/2 inches)	=	956 lbs
#20	(4 inches)	=	1043 lbs

Of course, nail and blocking method is not the best method of cargo securement since it does not secure the load in six directions. However, it can serve as an additional means to keep cargo from shifting laterally and horizontally if nailed and blocked correctly.

### **Recent Industry Issues (cont.)**



How important is securing your cargo inside a trailer from shifting and/or causing damage? Hope you answered very important! Will pressure or jacktype shoring bars provide enough resistance to prevent cargo movement? Are they also sufficient to meet the minimum breaking strength and working load limit requirements outlined in 49 CFR 393.102? Since they lack a quality or rated anchor point, the answer should be no.





### **December 2014 - March 2015 Training Schedule**

December 2014 March 2013 Huming Schedule					
Course	Date	Location			
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			
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	January 5-6, 2105	Richland, WA			
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	January 7, 2015	Richland, WA			
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	January 7-8, 2015	Richland, WA			
*Attend all three modules consecutively for \$1,495.00 (savings of \$575.00)					
Highway Route Control Quantity (HRCQ)	January 6, 2015	Richland, WA			
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	January 6-8, 2015	Albuquerque, NM			
Load Securement for Drivers and Traffic Personnel	January 7, 2015	Richland, WA			
Hazardous Material General Awareness Transportation Training	January 8, 2015	Richland, WA			
Basic Level Transportation Training - Module 1 - Basic Hazardous Material	January 12-13, 2105	Las Vegas, NV			
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	January 14, 2015	Las Vegas, NV			
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	January 14-15, 2015	Las Vegas, NV			
*Attend all three modules consecutively for \$1,495.00 (savings of \$575.00)					
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	January 13-15, 2015	Richland, WA			
Hazardous Materials Drivers Training	January 21, 2015	Richland, WA			
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	January 26-27, 2015	Albuquerque, NM			
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	January 28, 2015	Albuquerque, NM			
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	January 28-29, 2015	Albuquerque, NM			
*Attend all three modules consecutively for \$1,4					
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DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation and Disposal	February 3-6, 2015	Aiken, SC			
Advanced Hazardous Material Shipper Certification Training	February 3-4, 2015	Richland, WA			
Hazardous Materials Drivers Training	February 4, 2015	Richland, WA			
Highway Route Control Quantity (HRCQ)	February 5, 2015	Richland, WA			
Hazardous Material General Awareness Transportation Training	February 10, 2015	Richland, WA			
Advanced Hazardous Material Shipper Certification Training	February 10-11, 2015	Las Vegas, NV			
Federal Motor Carrier Safety Regulations for Drivers	February 11, 2015	Richland, WA			
Explosives Training for Shippers	February 12, 2015	Las Vegas, NV			
Advanced Hazardous Waste Shipper Certification Training	February 17-19, 2015	Richland, WA			
General Packaging Requirements for the Transport of Hazmat	February 18, 2015	Richland, WA			
Radioactive Material Packaging Training	February 19, 2015	Richland, WA			
Advanced Hazardous Material Shipper Certification Training	February 24-25, 2015	Albuquerque, NM			
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	February 24-27, 2015	Mt. Pleasant, SC			
Load Securement for Drivers and Traffic Personnel	February 25, 2015	Richland, WA			
Explosives Training for Shippers	February 26, 2015	Albuquerque, NM			
Highway Route Control Quantity (HRCQ)	March 3, 2015	Richland, WA			
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	March 3-5, 2015	Las Vegas, NV			
Federal Motor Carrier Safety Regulations for Drivers	March 5, 2015	Richland, WA			
Federal Motor Carrier Safety Regulations for Managers & Supervisors	March 10-11, 2015	Richland, WA			
Advanced Hazardous Waste Shipper Certification Training	March 10-12, 2015	Richland, WA			
Reasonable Suspicion Training for Supervisors	March 12, 2015	Richland, WA			
Advanced Radioactive Material Shipper Certification Training	March 17-19, 2015	Richland, WA			
Advanced Hazardous Waste Shipper Certification Training	March 17-19, 2015	Las Vegas, NV			
Load Securement for Drivers and Traffic Personnel	March 18, 2015	Richland, WA			
Advanced Hazardous Waste Shipper Certification Training	March 24-26, 2015	Albuquerque, NM			
Hazardous Material General Awareness Transportation Training	March 25, 2015	Richland, WA			
Hazardous Materials Orivers Training	March 26, 2015	Richland, WA			
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