ENERGYSOLUTIONS

the Moderator

Vol. 13, No. 2, June, 2014

Training Resources and Information for the Nuclear Industry

FedEx Continues Use of FX-12 and FX-18's Class 7 Exemption

FedEx Express Dangerous Goods (FedEx DG) Administration/Corporate Safety has decided to discontinue their May 1st, 2014 removal of operator variation FX-12 and revision of FX-18 for US origin shipments of Class 7 Radioactive Material and DG offered on an 023 air waybill (IP1, IXF, ATA service). These will continue to be an exception to FX-18, but must be compliant with FX-12. In other words, FedEx recognized software will not be mandatory for these shipments at this time. The FedEx dangerous goods shipper's declaration must not be handwritten per FX-12, therefore typewritten or computer generated software must be used. The FedEx shipper's declaration templates found on www.fedex.com may continue to be used for these shipments.

SHIPPER'S DECLARATION FOR DANGEROUS GOODS **(Provide at least three copies to the airline.)**

Shipper

Air Waybill No.

Page of Pages

Shipper's Reference Number

Consignee

This shipper's declaration was prepared using a FedEx Express template.
It must be used ONLY for:
* Class 7 radioactive shipments
* Shipments using an 023 air waybill (IP1, IXF or ATA service)
* Shipments originating from a non-US location

New for 2015: Radioactive Shipping Class in Pittsburgh, PA

Please mark your calendar for Pittsburgh, Pennsylvania during June of 2015. We have had a lot of feedback on a Northeast location for our comprehensive NRC/DOT Radioactive Waste Packaging, Transportation and Disposal Training. Pittsburgh was the most recommended and the most centrally located city to many of you. We hope to see you there!

Recent Industry Issues

Where do we start with this picture? How many proper shipping names (PSNs) and/or identification numbers are allowed per package? If this package did contain both hazards (corrosive with a limited quantity of radioactive material), which proper shipping name is appropriate? Based on the primary hazard of class 8, the PSN should be "Hydrochloric Acid" with the ID # of UN1789 per 49 CFR 173.2a and 173.423. Also, should DOT hazard labels be obscured or covered by other package markings? Labels should meet the visibility requirements in 49 CFR 172.406.

A Big Change That's Less Than A ½ Inch

When you open up the 2013 edition of 49 CFR and turn to Subpart D for Marking, it won't take long to notice a change in the regulations. In 172.301, "General marking requirements for non-bulk packagings", the first paragraph requires the proper shipping name and identification number preceded by "UN" or "NA" to be marked on the package. Then you'll see the change, "marked in characters at least 12 mm (0.47 inches) high". Smaller packages can use smaller characters and the details are in 49 CFR 172.301 (a)(1) (included below). The transitional period is until January 1, 2017. There is also an exception for permanently marked packages manufactured before that date to continue in service to the end of their useful life regardless if they meet the minimum size requirement.

So here's a test: Which one of these meets the 12 mm (0.47 inch) requirement?

UN UN UN UN UN

Answer: It's the last one on the right. In Arial font size 46, at least according to my handy EnergySolutions ruler and my weak eyes, the last one is 12 mm (actually 1.2 cm on my ruler)! And remember, that's the minimum! My first thought was how will that size of marking fit on an EPA Hazardous Waste sticker ? The good news is that you've got some time to perfect how you will transition to this new requirement!

Here is the reference background and the citation itself:

From the Federal Register January 2013:

78 FR 1072, Jan. 7, 2013

PHMSA is adopting this minimum size marking for the "UN" or "NA" markings to align with newly adopted requirements in the 17th Revised Edition of the UN Model Regulations. PHMSA recognizes the importance of establishing a minimum size requirement for the internationally recognized "UN" identification number marking system. Without a minimum size requirement for hazard communication, shippers may mark packages in a format that makes it difficult for first responders to identify the commodity associated with a particular package.

49 CFR 172.301 (a)(1)

The identification number marking preceded by "UN", "NA", or "ID" as appropriate must be marked in characters at least 12 mm (0.47 inches) high. Packages with a maximum capacity of 30 liters (8 gallons) or less, 30 kg (66 pounds) maximum net mass, or cylinders with a water capacity of 60 liters (16 gallons) or less must be marked with characters at least 6 mm (0.24 inches) high. Packages with a maximum capacity of 5 liters (1.32 gallons) or 5 kg (11 pounds) or less must be marked in a size appropriate for the size of the package.

(i) *Transitional exception*. For domestic transportation, until January 1, 2017, the identification number markings are not subject to the minimum size requirements specified in paragraph this (a)(1).

(ii) Exception for permanently marked packagings. For domestic transportation, a packaging manufactured prior to January 1, 2017 and permanently marked (e.g., by embossing or through a heat stamp process) with the appropriate identification number marking may continue in service until the end of its useful life regardless of whether the identification number markings meet the minimum size requirements specified in this paragraph (a)(1).

Recent Industry Issues (cont.)

How many problems can you find with this radioactive class 7 material placard? Did you review all the design, color, shape and size requirements in 49 CFR part 172 Subpart F for class 7 placarding? Should the inner border continue all the way around, including in the yellow triangle? Does the placard need to be maintained clean during transportation? Can any of the yellow color be missing in the upper portion of the placard? Is the hazard class number "7" correctly displayed on the placard (this may be left to interpretation or opinion)?

Frequently Asked Questions

Our FAQ topic for this quarter looks at 49 CFR 177.816 hazmat driver training.

• Does hazmat driver training follow the same training requirements in 172 Subpart H, like record keeping, initial and recurrent training, etc.?

Reference # 02-0255, 08-0021, 09-0149 & 11-0182

Yes, driver training is considered function-specific training.

• Are government employees transporting hazmat in government owned vehicles for official government business (like a State University) required to have driver training?

Reference # 07-0043 & 49 CFR 171.1

No, but government contractors and common carriers do not receive this exemption.

• Must driver training include hazmat employee training topics outlined in 172 Subpart H?

Reference # 08-0021, 09-0149 & 11-0182

Yes, and the Federal Motor Carrier Safety Regulations in 49 CFR Parts 390 through 397.

• Will a Commercial Driver's License (CDL) with hazmat endorsement (HM) satisfy all the HMR hazmat employee and driver requirements?

Reference # 08-0021, 09-0149 & 11-0182

No, a CDL w/HM does not fully meet both 49 CFR 172 Subpart H & 177.816.

• When is a CDL w/HM endorsement required for a hazmat driver?

Reference # 11-0182 & 49 CFR 383

When the hazmat requires placarding or the gross vehicle weight rating (GVWR) exceeds 11,793 kilograms (26,000 pounds)

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.

Recent Industry Issues (cont.)

Here is a picture of a flatbed trailer. The arrows are pointing to the weld for a stake pocket between the trailer side and rub rail. Can you see any issues with the weld? The weld is not making complete contact with the side of the trailer on the upper part of the weld. Do you take the time to inspect the condition of all anchor points for your tiedowns?

Have a Safe 4th of July!

Latest Happenings in the Federal Register

NRC Requests Strategic Plan Comments

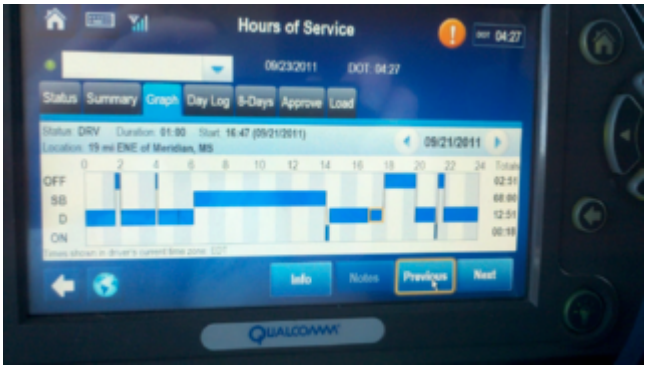
On March 05, 2014 (79 FR 12531), the Nuclear Regulatory Commission (NRC) published a federal register requesting comments on its draft NUREG–1614, Volume 6, "U.S. Nuclear Regulatory Commission Strategic Plan, Fiscal Years 2014–2018." The draft Strategic Plan provides the agency's long-term, results focused goals and objectives and its proposed strategies for achieving them for the planning period. Comments, were to be submitted by April 4, 2014.

Special Permits Incorporated Into HMRs

On March 18, 2014 (79 FR 15033), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule to adopt provisions contained in certain widely used or longstanding special permits and certain competent authority approvals that have established safety records. PHMSA is also revising 49 CFR 107.705 Paragraph (c) to allow for approval holders applying for a timely renewal to continue using their approval after the expiration date if they apply within 60 days of the expiration dates. This final ruling (HM–233C) is effective April 17, 2014.

Request Comments on NY and PA HM Permit Fees

On April 17, 2014 (79 FR 21838 and 21840), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published two public notices and requests for comment on two applications by the American Trucking Associations, Inc. (ATA) for an administrative determination whether the Federal Hazardous Material Transportation Law preempts requirements of both the City of Pittsburgh, Pennsylvania and the New York City Fire Department for a permit to transport hazardous materials by motor vehicle and the fee to obtain the permit. Comments received on or before June 2, 2014 and rebuttal comments received on or before July 16, 2014 will be considered before an administrative determination is issued by PHMSA's Chief Counsel.



Proposing to Require Electronic Logs

On March 28, 2014 (79 FR 17656), the Federal Motor Carrier Safety Administration (FMCSA) published a Supplemental Notice of Proposed Rulemaking (SNPRM) and request for comments on improving commercial motor vehicle (CMV) safety and reducing the overall paperwork burden for both motor carriers and drivers by increasing the use of electronic logging devices (ELDs) within the motor carrier industry, which would in turn improve compliance with the applicable hours-of-service (HOS) rules. Comments must be received on or before May 27, 2014.

Gross Combination Weight Rating Definition

On March 19, 2014 (79 FR 15245), the Federal Motor Carrier Safety Administration (FMCSA) published a final rule to revise the definition of "Gross Combination Weight Rating" (GCWR) in 49 CFR Sections 383.5 and 390.5 to include the sum of the gross vehicle weight ratings (GVWRs) or the gross vehicle weights (GVWs) of the power unit and the towed unit(s), or any combination thereof, that produces the highest value. This final rule is effective April 18, 2014.

Tractor GVWR (*or GVW*) + Trailer GVWR (*or GVW*) = GCWR

Latest Happenings in the Federal Register (cont.)

NRC Requests Comments for Draft Security Plan Guide

On April 25, 2014 (79 FR 23015), the Nuclear Regulatory Commission (NRC) published a federal register requesting comments on a new draft regulatory guide: DG–7005, "Standard Format and Content of Transportation Security Plans for Classified Matter Shipments." Submit comments by June 24, 2014.

FMCSA Request Comments on E-Signature Use

On April 28, 2014 (79 FR 23306), the Federal Motor Carrier Safety Administration (FMCSA) published a Notice of Proposed Rulemaking (NPRM) in the federal register to allow the use of electronic records and signatures to satisfy FMCSA's regulatory requirements. It would also update references to outdated recordkeeping and reporting methods throughout Chapter III of Subtitle B of Title 49, Code of Federal Regulations (49 CFR Parts 300–399) to make them technologically neutral. You may submit comments on or before June 27, 2014.

FMCSA Adds Roadside Inspection Guidance

On May 12, 2014 (79 FR 26868), the Federal Motor Carrier Safety Administration (FMCSA) published a notice of regulatory guidance in the federal register to address two issues involving roadside inspection of commercial motor vehicles (CMVs) equipped with automatic on-board recording devices (AOBRDs) to assist drivers with hours-of-service (HOS) recordkeeping and compliance. FMCSA amends the April 4, 1997 federal register (62 FR 16370) guidance publication for 49 CFR 395.15 to add questions 5 and 6 concerning production of records during a roadside inspection. This regulatory guidance was effective May 12, 2014.

New FMCSA Electronic HOS Safety Report

On May 12, 2014 (79 FR 27040), the Federal Motor Carrier Safety Administration (FMCSA) published a notice in the federal register to announce the availability of a new final report, "Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders." The study quantitatively evaluated whether trucks equipped with Electronic Hours-of-Service Recorders (EHSRs) have a lower (or higher) crash and hours-of-service (HOS) violation rate than those without EHSRs. A copy of the report has been placed in the docket online at www.regulations.gov. Enter the docket number, "FMCSA–2010–0167" in the keyword box and click search.

Federal Motor Carrier Prohibits Driver Coercion

On May 13, 2014 (79 FR 27265), the Federal Motor Carrier Safety Administration (FMCSA) published a Notice of Proposed Rulemaking (NPRM) in the federal register to adopt regulations that prohibit motor carriers, shippers, receivers, or transportation intermediaries from coercing drivers to operate commercial motor vehicles (CMVs) in violation of certain provisions of the Federal Motor Carrier Safety Regulations (FMCSRs) including drivers' hours-of-service limits and the commercial driver's license (CDL) regulations and associated drug and alcohol testing rules or the Hazardous Materials Regulations (HMRs). In addition, the NPRM would prohibit anyone who operates a CMV in interstate commerce from coercing a driver to violate the commercial regulations. This NPRM includes procedures for drivers to report incidents of coercion to FMCSA, rules of practice FMCSA would follow in response to allegations of coercion, and describes penalties that may be imposed on entities found to have coerced drivers. You may submit comments by August 11, 2014.

Latest Happenings in the Federal Register (cont.)

Bakken Crude Oil Safety Advisory

On May 13, 2014 (79 FR 27370), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a Safety Advisory Notice in the federal register to all persons who offer for transportation or transport, in tank cars by rail in commerce to, from or within the United States, a bulk quantity of UN1267, petroleum crude oil, Class 3, that originates in or is sourced from the Bakken formation in the Williston Basin (Bakken crude oil). The purpose of this advisory is to encourage offerors and rail carriers to take additional precautionary measures to enhance the safe shipment of bulk quantities of Bakken crude oil by rail throughout the United States. Specifically, in light of recent accidents involving the shipment of Bakken crude oil by rail, the Federal Railroad Administration (FRA) and PHMSA urge offerors and carriers of Bakken crude oil by rail tank car to select and use the railroad tank car designs with the highest level of integrity reasonably available within their fleet for shipment of these hazardous materials by rail in interstate commerce. Further, FRA and PHMSA advise offerors and carriers of Bakken crude oil to avoid the use of older, legacy DOT Specification 111 or CTC 111 tank cars for the shipment of such oil to the extent reasonably practicable.

Bakken Crude Oil Emergency Order

On May 13, 2014 (79 FR 27363), the Office of the Secretary of Transportation (OST, DOT) published a notice in the federal register to announce the availability of an Emergency Order (EO) requiring each railroad operating trains containing more than 1,000,000 gallons of Bakken crude oil (approximately 35 tank cars) in a particular state to provide the State Emergency Response Commission notification regarding the expected movement of such trains through the counties in that state. The full text of the EO can be accessed by going to www.regulations.gov and searching for docket number DOT–OST–2014–0067.

FMCSA Updates CVSA Reference

On May 14, 2014 (79 FR 27766), the Federal Motor Carrier Safety Administration (FMCSA) published a final rule in the federal register to amend the Hazardous Materials Safety Permits rules to update the current incorporation by reference of the "North American Standard Out-of-Service Criteria and Level VI Inspection Procedures and Out-of-Service Criteria for Commercial Highway Vehicles Transporting Transuranics and Highway Route Controlled Quantities of Radioactive Materials as defined in 49 CFR Part 173.403." Currently the rules reference the April 1, 2013, edition of the out-of-service criteria and through this final rule, FMCSA incorporates the April 1, 2014, edition. This final rule is effective May 15, 2014.

NRC Requests LLRW Program Comments

On May 14, 2014 (79 FR 27772), the Nuclear Regulatory Commission (NRC) published a federal register requesting comments on developments that would affect the Low-Level Radioactive Waste (LLRW) regulatory program in the next several years that would affect licensees and sited States and actions that the NRC could take to ensure safety, security, and the protection of the environment. Some examples of challenges and issues to be addressed include: (1) the desire of industry for greater flexibility and reliability in LLRW disposal options; (2) increased storage capacity for Class B and Class C LLRW because of the limited access of the Barnwell, South Carolina, disposal facility in 2008 to out-of-compact waste generators; (3) the potential need to dispose of large quantities of power plant decommissioning waste, as well as depleted uranium from enrichment facilities; (4) the limited resources in the NRC LLRW program; (5) increased security concerns related to storing LLRW in general and sealed radioactive sources in particular as a result of the September 11, 2001, terrorist attack; and (6) new waste streams that may be generated (for example, by the next generation of nuclear reactors and the potential reemergence of nuclear fuel reprocessing in the United States). Please submit comments by July 14, 2014.

June 2014 - September 2014 Training Schedule

Course	Date	Location
General Packaging Requirements for the Transport of Hazmat	June 3, 2014	Richland, WA
Radioactive Material Packaging Training	June 4, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	June 5, 2014	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	June 9-12, 2014	San Diego, CA
Air Transport of Radioactive Materials (IATA)	June 13, 2014	San Diego, CA
Load Securing of Radioactive Materials	June 13, 2014	San Diego, CA
*Attend all three NRC/DOT courses consecutively for $2,795.00 (savings of $190.00)		
Hazardous Materials Drivers Training	June 10, 2014	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	June 10-12, 2014	Las Vegas, NV
Load Securement for Drivers and Traffic Personnel	June 11, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	June 12, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Managers & Supervisors	June 17-18, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	June 24, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	June 26, 2014	Richland, WA
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	July 7-9, 2014	Las Vegas, NV
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	July 9, 2014	Las Vegas, NV
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	July 10-11, 2014	Las Vegas, NV
*Attend all three modules consecutively for $1,385.00 (savings of $510.00)		
Load Securement for Drivers and Traffic Personnel	July 9, 2014	Richland, WA
DOT/NRC Haz. Waste /Mixed Waste Packaging, Transportation and Disposal	July 14-17, 2014	Oak Ridge, TN
Air Transport of Radioactive Materials (IATA)	July 18, 2014	Oak Ridge, TN
Load Securing of Radioactive Materials	July 18, 2014	Oak Ridge, TN
*Attend all three NRC/DOT courses consecutively for $2,895.00 (savings of $190.00)		
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	July 14-16, 2014	Albuquerque, NM
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	July 16, 2014	Albuquerque, NM
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	July 17-18, 2014	Albuquerque, NM
*Attend all three modules consecutively for $1,385.00 (savings of $500.00)		
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	July 21-23, 2014	Richland, WA
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	July 23, 2014	Richland, WA
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	July 24-25, 2014	Richland, WA
*Attend all three modules consecutively for $1,385.00 (savings of $500.00)		
Hazardous Material General Awareness Transportation Training	July 22, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	July 23, 2014	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	July 28-31, 2014	Orlando, FL
Air Transport of Radioactive Materials (IATA)	August 1, 2014	Orlando, FL
Load Securing of Radioactive Materials	August 1, 2014	Orlando, FL
*Attend all three NRC/DOT courses consecutively for $2,795.00 (savings of $190.00)		
Advanced Radioactive Material Shipper Certification Training	August 5-7, 2014	Richland, WA
Hazardous Materials Drivers Training	August 5, 2014	Richland, WA
Advanced Hazardous Material Shipper Certification Training	August 12-13, 2014	Las Vegas, NV
Explosives Training for Shippers	August 14, 2014	Las Vegas, NV
Load Securement for Drivers and Traffic Personnel	August 14, 2014	Richland, WA
Advanced Hazardous Material Shipper Certification Training	August 19-20, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	August 19, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	August 20, 2014	Richland, WA
Explosives Training for Shippers	August 21, 2014	Richland, WA
Advanced Hazardous Material Shipper Certification Training	August 26-27, 2014	Albuquerque, NM
Explosives Training for Shippers	August 27, 2014	Albuquerque, NM