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Training Resources and Information for the Nuclear Industry

IATA DGR 54th Edition Now Available

The International Air Transport Association (IATA) has released their 2013 edition of the Dangerous Goods Regulations (DGR) for the safe transport of hazardous materials (dangerous goods) by air. Please take a moment to compare your 2012 edition to the new 2013 edition for each type of dangerous good you cause to be transported. Their list of major changes can be found at: http://www.iata.org/whatwedo/cargo/dangerous_goods/Documents/DGR54-Significant-Changes.pdf In addition to the major changes listed by IATA, please note the following:

- Editor contact address changed from Montreal to Geneva in the preface
- Recurrent training (1.5.0.3) and record keeping (1.5.6) changed from "date" to "month"
- Added training requirements for security staff (1.5.3 note)
- Inserted new section 1.6.1.3 to reinforce security plans are not required for class 7 excepted packages and LSA-I/SCO-I
- Revised section 1.6.3 to include Table 1.6.B-Transport Security Thresholds for Specific Radionuclides (1.6.3.1.3) which resembles IAEA Code of Conduct Category 2 material, but without "Am-241/Be" & "Pu-239/Be" (see modified figure)
- Added a new flowchart to correctly assign class 7 proper shipping names in Figure 10.4.B (10.4.1.2)
- Effective 1 January 2014, the marking "UN####" must meet minimum size requirements and all other required package markings should meet these minimum size requirements
- Overpack markings have been revised to only require the UN#### and proper shipping name of each dangerous good inside the overpack
- IATA has added a new lithium battery acceptance checklist

Submitted by James Leonard



	Category 1		Category 2		Category 3	
Radionuclide	1000 x D		10 x D		D	
	(TBq)	(Ci) ^a	(TBq)	(Ci) ^a	(TBq)	(Ci)a
Am-241	6.E+01	2.E+03	6.E-01	2.E+01	6.E-02	2.E+00
Am-241/Be	6.E+01	2.E+03	6.E-01	2.E+01	6.E-02	2.E+00
Cf-252	2.E+01	5.E+02	2.E-01	5.E-00	2.E-02	5.E-01
Cm-244	5.E+01	1.E+03	5.E-01	1.E+01	5.E-02	1.E+00
Co-60	3.E+01	8.E+02	3.E-01	8.E+00	3.E-02	8.E-01
Cs-137	1.E+02	3.E+03	1.E+00	3.E+01	1.E-01	3.E+00
Gd-153	1.E+03	3.E+04	1.E+01	3.E+02	1.E+00	3.E+01
Ir-192	8.E+01	2.E+03	8.E-01	2.E+01	8.E-02	2.E+00
Pm-147	4.E+04	1.E+06	4.E+02	1.E+04	4.E+01	1.E+03
Pu-238	6.E+01	2.E+03	6.E-01	2.E+01	6.E-02	2.E+00
Pu-239 /Be	6.E+01	2.E+03	6.E-01	2.E+01	6.E-02	2.E+00
Ra-226	4.E+01	1.E+03	4.E-01	1.E+01	4.E-02	1.E+00
Se-75	2.E+02	5.E+03	2.E+00	5.E+01	2.E-01	5.E+00
Sr-90 (Y-90)	1.E+03	3.E+04	1.E+01	3.E+02	1.E+00	3.E+01
Tm-170	2.E+04	5.E+05	2.E+02	5.E+03	2.E+01	5.E+02
Yb-169	3.E+02	8.E+03	3.E+00	8.E+01	3.E-01	8.E+00
Au-198*	2.E+02	5.E+03	2.E+00	5.E+01	2.E-01	5.E+00
Cd-109*	2.E+04	5.E+05	2.E+02	5.E+03	2.E+01	5.E+02
Co-57*	7.E+02	2.E+04	7.E+00	2.E+02	7.E-01	2.E+01
Fe-55*	8.E+05	2.E+07	8.E+03	2.E+05	8.E+02	2.E+04
Ge-68*	7.E+02	2.E+04	7.E+00	2.E+02	7.E-01	2.E+01
Ni-63*	6.E+04	2.E+06	6.E+02	2.E+04	6.E+01	2.E+03
Pd-103*	9.E+04	2.E+06	9.E+02	2.E+04	9.E+01	2.E+03
Po-210*	6.E+01	2.E+03	6.E-01	2.E+01	6.E-02	2.E+00
Ru-106 (Rh-106)*	3.E+02	8.E+03	3.E+00	8.E+01	3.E-01	8.E+00
T1-204*	2.E+04	5.E+05	2.E+02	5.E+03	2.E+01	5.E+02



Frequently Asked Questions

Our FAQ topic below is about hazmat training.

 Do personnel who perform receipt radiation and contamination surveys prior to unloading radioactive material packages from a transport vehicle require 49 CFR 172 Subpart H training?

Reference # 12-0092

Yes, training is required for any hazmat employee who performs a transportation function like handling, inspecting and affecting the remaining transportation of the hazmat.

 Is DOT hazmat training required for personnel who only close packagings or only prepare the hazardous material in a packaging?

Reference # 98-0326, 06-0255 & 09-0154

Yes, anyone who performs a hazmat function must receive training to meet 49 CFR 172.704 to include general awareness, function-specific and safety training.

Must training include the requirements in a special permit?

Reference # 09-0071 & Federal Register August 30, 2011 Page 53999-Safety Notice

Yes. This will meet the training requirements in 49 CFR 172.704(a)(2)(i).

 If an employee does not perform DOT hazmat functions for longer than 90 days, is training required?

Reference # 05-0019

Yes, all hazmat employees must receive requirement DOT training.

Does DOT require a minimum duration of training?

Reference # 03-0048

No. It is up to the employer to qualify a training program as appropriate to meet the knowledge required by each hazmat employee to fully comply with the requirements in 49 CFR during their hazmat duties.

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

What 2 placard specifications were violated here? A placard must be visible by adding either a dotted or solid line outer border when placed on a non-contrasting background color per 49 CFR



172.516(c)(7). Also, the base of the yellow triangle is too low per 49 CFR 172.556(b).



Can our package specification communications meet the required size and shape requirements when placed on a corrugated surface? DOT says "no" in their letter of interpretation 05-0276.

Who is at fault for a torn orange panel during transportation? The shipper should do everything possible to ensure all package communications meet their required specifications. This may



include offering transporters extra orange panels to replace any panels damaged during transportation.

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EnergySolutions Training and Development Newsletter



New Rulings in the Federal Register

On September 6, 2012 (77 FR 54818), the Environmental Protection Agency (EPA) published a notice of proposed rule making (NPRM) and Direct Final Rule (FR) to update and clarify several sections of the Polychlorinated Biphenyl (PCB) regulations associated with the manifesting requirements, which uses the Resource Conservation and Recovery Act (RCRA) Uniform Hazardous Waste Manifest (UHWM), under the Toxic Substances Control Act (TSCA). These changes will match, as much as possible, the manifesting requirements for PCBs under TSCA to the manifesting requirements for hazardous waste under RCRA, of which the regulatory changes to implement the UHWM form were promulgated in the FR published on March 4, 2005 (70 FR 10776). This final rule is effective December 5, 2012.

On October 01, 2012 (77 FR 60056), the Pipeline and Hazardous Materials Administration (PHMSA) published a correction to 49 CFR Part 173. This is to make technical corrections in Sections 173.133 and 173.134. In 173.133 Assignment of packing group and hazard zones for Division 6.1 materials, paragraph (e) is redesignated as (c). In 173.134 Class 6, Division 6.2 - Definitions and exceptions, on page 543, the second paragraph (c) is removed and (c)(2) is revised. This correction is effective immediately.

On October 22, 2012 (77 FR 64450), the PHMSA published a NPRM to amend the HMRs to incorporate provisions contained in the following widely used or long-standing special permits and competent authority approvals that have established safety records: DOT-SP 9275, 11263, 11836, 13124, 12134, 12825, 14479, 14903, 14908, 15062, 15075, 15076, 15077, 15078, 15079, 15092, 15094, 15095, 15143; and approvals CA2005120010, CA20060660005, CA2006060006 & CA2006010012. These represent variances from current regulations on topics categorized as follows: Limited quantities of liquids and solids containing ethyl alcohol; transportation of solid coal tar pitch compounds; transportation of certain ammonia solutions in UN1H1 and UN6HA1 drums; transportation of spent bleaching earth; requalification of non-DOT specification cylinders in life-saving appliances; use of regulated medical waste containers displaying alternative markings; and incorporation of Oxygen Generator special permits to harmonize with FAA Modernization and Reform Act of 2012. Comments must be received by December 21, 2012.

On October 29, 2012 (77 FR 65497), the FMCSA published a withdrawal of its direct final rule (DFR) dated August 27, 2012, amending the definition of "gross combination weight rating" (GCWR) in 49 CFR parts 383 and 390. The DFR would have taken effect on October 26, 2012. However, the Agency received several adverse comments in response to the DFR and will, therefore develop a notice of proposed rule making to request public comments on proposed changes to the GCWR definition. The direct final rule published August 27, 2012 (77 FR 51706) is withdrawn effective October 26, 2012.

On October 05, 2012 (77 FR 60935), the PHMSA published a final rule to correct editorial errors, make minor regulatory changes, and improve the clarity of certain provisions in the Hazardous Materials Regulations (HMRs). The intended effect of this final ruling is to enhance the accuracy and reduce misunderstandings of the regulations by correcting typographical errors, incorrect Code of Federal Regulations (CFR) references and citations, inconsistent use of terminology, misstatements of certain regulatory requirements and inadvertent omissions of information. These amendments are non-substantive changes, do not impose new requirements and will appear in the next published revision of the 49 CFR. This final rule is effective October 05, 2012.

On October 01, 2012 (77 FR 59818), the Federal Motor Carrier Safety Administration (FMCSA) published a final rule to make technical corrections throughout title 49 CFR Subtitle B, Chapter III. The FMCSA is making minor editorial changes to add revised delegations of authority from the Secretary of Transportation (Secretary), correct errors and omissions, and improve clarity. This rule does not make any substantive changes to the affected parts of the Federal Motor Carrier Safety Regulations (FMCSRs). This final rule is effective October 1, 2012.

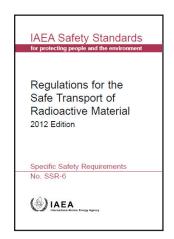
On October 01, 2012 (77 FR 59768), the Department of Homeland Security, Coast Guard (DHS CG) published a final rule to make technical corrections throughout Titles 46 CFR & 49 CFR. This ruling will make conforming amendments and technical corrections to the Coast Guard shipping and transportation regulations and will have no substantive effect on the regulated public. These changes are provided to coincide with the annual re-codification of Titles 46 and 49 on October 1, 2012. This final rule is effective October 1, 2012.

EnergySolutions Training and Development Newsletter



IAEA Replaces TS-R-1 with SSG-6

The International Atomic Energy Agency (IAEA) has released their 2012 edition of the Safety Standards Regulations for the Safe Transport of Radioactive Material under Specific Safety Requirements No. SSR-6. This will replace the 2009 edition under Safety Requirements No. TS-R-1. As a reminder, DOT currently references the IAEA TS-R-1 1996 edition in 49 CFR 171.7



with a proposed ruling dated August 12, 2011 to adopt the IAEA TS-R-1 2009 edition. SSR-6 can be found at: http://www-pub.iaea.org/MTCD/Publications/PDF/ Pub1570_web.pdf

Stay Up-To-Date with Regulatory Changes

EnergySolutions Training is now uploading the latest federal registers and letters of interpretation on www. energysolutionstraining.com as they become available.

Do not wait until your refresher class or hear from someone else that you are out of compliance. Visit our website to stay up-to-date with the latest happenings and changes to our regulatory world.



Bear Creek Operations (BCO) Facility Tour

Thanks to all who participated and helped make our BCO site tour a great success. We received a lot of positive feedback. We will continue to offer facility tours in conjunction with our NRC/DOT/EPA Hazardous Waste/Mixed Waste classes in Salt Lake City (Clive), Oak Ridge (Bear Creek) and Aiken (Barnwell).



New Online Class Available



Training on the transport of lithium batteries by air and highway is now available online. These batteries are becoming the most popular power source in all our portable equipment. Make sure you are trained to understand when these batteries are regulated and how to prepare them for transportation in accordance with the air and/or highway regulations.

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New Environmental Classes Offered

We have added the following classes to help you meet your training needs with hazardous waste:

RCRA Container Waste Management for personnel performing waste management duties in Satellite Accumulations Areas, 90-Day Accumulation Areas and Permitted Treatment Storage and/or Disposal (TSD) Facilities.

RCRA Hazardous Waste Identification for personnel responsible for the Identification of RCRA Hazardous Waste in accordance with 40 CFR Part 261.

RCRA Requirements for Satellite Accumulation Areas for personnel who utilize Satellite Accumulation Areas for the accumulation of RCRA Hazardous Waste.

Washington State Waste Designation for personnel responsible for the designation of waste in accordance with the Washington State Dangerous Waste Regulations

2013 January Training Schedule

Course	Date	Location				
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	January 7-9, 2013	Las Vegas, NV				
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	January 9, 2013	Las Vegas, NV				
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	January 10-11, 2013	Las Vegas, NV				
*Attend all three modules consecutively for \$1,285.00 (savings of \$510.00)						
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	January 8-10, 2013	Albuquerque, NM				
Hazardous Materials Drivers Training	January 8, 2013	Richland, WA				
Highway Route Control Quantity (HRCQ)	January 9, 2013	Richland, WA				
Hazardous Material General Awareness Transportation Training	January 10, 2013	Richland, WA				
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	January 14-16, 2013	Richland, WA				
Load Securement for Drivers and Traffic Personnel	January 15, 2013	Richland, WA				
Federal Motor Carrier Safety Regulations for Drivers	January 16, 2013	Richland, WA				
Advanced Hazardous Waste Shipper Certification Training	January 22-24, 2013	Richland, WA				
Advanced Mixed Waste Shipper Certification Training	January 28-31, 2013	Richland, WA				
Advanced Mixed Waste Shipper Certification Training	January 28-31, 2013	Las Vegas, NV				
DOT/NRC Hazardous Waste/Mixed Waste Packaging, Transportation and Disposal	January 28-31, 2013	Oak Ridge, TN				

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