The MODERATOR



Training Resources and Information for the Nuclear Industry

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FedEx IATA DGR Variation #18 Update

FedEx Express will be requiring any Dangerous Goods Shippers beginning January 10, 2011 to use software with dangerous goods compliance edit checks to prepare a Shipper's Declaration for Dangerous Goods originating in the U.S. This change is implemented through a new FedEx Express International Air Transport Association (IATA) Operator Variation (FX-18). You can use certain FedEx electronic shipping solutions to prepare compliant Shipper's Declaration for Dangerous Goods forms. The current solutions that provide this capability include FedEx Ship Manager Server and FedEx Ship Manager Software. If you currently use one of these solutions to prepare your dangerous goods shipment documentation, you are already in compliance and are not required to do anything further. If you use FedEx Ship Manager at fedex.com, or air bills and/or air waybills, for processing your FedEx Express dangerous goods shipments, you can continue to do so. However, the Shipper's Declaration for Dangerous Goods form templates on fedex.com will no longer be permitted and will be removed from the site on Jan. 10, 2011. FX-18 does not apply to the following:

- Shipments originating in non-U.S. locations (including U.S. territories overseas, such as Puerto Rico)
- 2. U.S.-origin shipments moving on an IATA 023 air waybill. FedEx Express® air cargo services that require an IATA 023 air waybill include FedEx International Airport-to-Airport SM, FedEx International Express Freight® and FedEx International Premium®. Air cargo services shipments tendered on IATA 023 air waybills may continue to use the templates
- Dangerous goods shipments that do not require a Shipper's Declaration for Dangerous Goods form (for example, when UN1845 Dry Ice is the only dangerous goods)
- 4. Shipments containing Class 7 Radioactive Materials.

Certain fields on the Shipper's Declaration for Dangerous Goods form can be handwritten, including shipper's name, technical name/title of signatory, place and date. However, other fields on the form must be completed using software with dangerous goods compliance edit checks. For questions regarding handwritten fields, contact the FedEx Dangerous please Goods/Hazardous Materials Hotline 1.800.GoFedEx 1.800.463.3339 (say "dangerous goods" or press prompt 81). FedEx Ship Manager Software downloaded can be fedex.com/us/software/downloads.html. FedEx Ship Manager Software requires a printer. For a laser printer, you must order the FedEx LZR DG DEC forms (part No. 157295) with red border hatchings to print Shipper's Declaration for Dangerous Goods forms. For a dot matrix printer, you must use the FedEx 1421C (part No.146491). There are some limitations when using FedEx Ship Manager software and hardware systems to produce a Shipper's Declaration for Dangerous Goods form. These **limitations** include:

- 1. Radioactive material with multiple radionuclides in the same package.
- 2. International multiple-piece shipments for dangerous goods that are not identical packages.





New Rulings in the Federal Register

On December 6, 2010 (75 FR 75641), the U.S. Nuclear Regulatory Commission (NRC) published a proposed ruling to add an advanced notification to Native American Tribes when transporting certain types of nuclear waste. This will be in addition to the State governors or the governor's designee. Specially. the proposed amendments in 10 CFR Parts 71 and 73 would require licensees to provide advance notification to federally recognized Tribal governments regarding shipments of irradiated reactor fuel and highway route controlled quantities of nuclear wastes destined for disposal that passes within or across their reservations. The Tribal government would be required to protect the shipment information as Safeguards Information (SGI). Submit comments on this proposed rule by February 22, 2011.

On November 30, 2010 (75 FR 73935), the U.S. Nuclear Regulatory Commission (NRC) published a final ruling amending its regulations to make miscellaneous administrative changes, including an update of the list of Agreement and Non-Agreement States, the merging of the Region II materials program with that of Region I, the correction of office titles associated with the Office of Nuclear Material Safety and Safeguards and the Office of Federal and State Materials and Environmental Management Programs, the inclusion of references to new Executive Order (E.O.) 13526, and other edits, corrections, and conforming changes. This rule is effective December 30, 2010.

On November 12, 2010 (75 FR 69348), the Environmental Protection Agency (EPA) published a final ruling updating and correcting the addresses for both the EPA Region IX office and the EPA Region IX State and local agencies in certain EPA regulations related to air pollution, small businesses, chemical imports and exports, and asbestos. These regulations require submittal of notifications, reports and other documents to the applicable EPA regional office and, in some case, to the applicable State or local agency. The jurisdiction of EPA Region IX covers the States of Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau. This technical amendment updates and corrects the addresses for submitting such information to the EPA Region IX office and the applicable State and local agency offices. This rule will be effective on November 12, 2010.

On January 5, 2011 (76 FR 454), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final ruling revising its procedures for applying for a special permit to require an applicant to provide sufficient information about its operations to enable the agency to evaluate the applicant's fitness and the safety impact of operations that would be authorized in the special permit. In addition, PHMSA is providing an online application option. The effective date of these amendments is March 7, 2011. Voluntary compliance with the provisions of this final rule is authorized after January 5, 2011.

On January 4, 2011 (76 FR 411), the Federal Motor Carrier Safety Administration (FMCSA) published a notice with their regulatory guidance changes concerning electronic signatures and documents. All prior FMCSA interpretations and regulatory guidance, including memoranda and letters, may no longer be relied upon. There are 13 questions and answers that provide this new guidance to meet these requirements. For example, question #1 asks: "May motor carriers use electronic methods to store records or documents to satisfy a document retention requirement in Chapter III of Subtitle B of Title 49. Code of Federal Regulations (49 CFR parts 300-399)?" The guidance answer is: "Yes. Anyone may, but you are not required to use electronic methods to create and store records or documents to satisfy the document retention requirements in Chapter III of Subtitle B of Title 49. Code of Federal Regulations (49 parts CFR 300-399)." And question #13 asks: "Is an electronic signature valid if a person only has access to an excerpt or summary at the time he or she signs a document?" The guidance answer is: "No. If you only provide an excerpt or summary at the time someone signs a document you may not subsequently attach his or her electronic signature to the complete document." This new regulatory guidance is effective January 4, 2011.

On January 19, 2011 (76 FR 3308), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final ruling amending the Hazardous Materials Regulations (HMRs) to maintain alignment with international standards by incorporating amendments, including changes to proper shipping names, hazard classes, packing groups, special provisions, packaging authorizations, air transport limited quantities, and vessel stowage requirements. These revisions are necessary to harmonize the HMRs with recent changes made to the International Maritime Dangerous Goods Code (IMDG), the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO), and the United Nations Recommendations on the Transport of Dangerous Goods—Model Regulations. The effective date is January 19, 2011. PHMSA is authorizing voluntary compliance beginning January 1, 2011. Delayed compliance with the amendments adopted in this final rule is required beginning January 1, 2012.

Some may argue that the "RQ" marking is in the wrong place. The more important issue here is whether the material is nonfissile or fissile-excepted. Which one is it? If the material does not contain any fissile nuclides, then "non-fissile" would be appropriate. If the material contains fissile nuclides and also meets one of the fissile exceptions in 49 CFR 173.453, then "fissileexcepted" would be appropriate. Remember that we must choose one or the other if DOT has the word "or" in italics within the proper shipping name presented in column 2 of the Hazardous Material Table.





Ooobe;;;

Proper load securement essential for the safe transportation of your hazardous materials. The pallet is damaged and the material has shifted. Should we use edge protection that is softer or harder than our tiedown material? Please consider the Federal Motor Carrier Regulations (49 CFR Parts 380 to 397, especially part 393 concerning load securing) when loading your packages in or on a vehicle.





What do you find wrong here? Is the placard allowed to be within 3 inches of other markings? Can the placard tip curl up and over the top, and still meet the shape and size requirements? Is this material waste class A unstable or class A stable? Lastly, where is the dash in the LSA marking? Be careful with your package communications, especially now with the LSA placarding requirements.





Frequently Asked Questions

Our FAQ topic for this quarter is determining the appropriate shipping basic description.

* If a material contains mostly one chemical, do I use the technical chemical name as the proper shipping name (PSN) or do I use a generic hazard class PSN?

**Reference # 10-0078

If the impurities do not sufficiently change the main component's hazards, then use the technical chemical in column 2 of the Hazardous Material Table (HMT) 49 CFR 172.101 over the generic n.o.s. PSN.

* Do I have to include the word "Waste" preceding a PSN for a universal waste, Polychlorinated Biphenyl (PCB)waste or waste from a Conditionally Exempt Small Quantity Generator (CESQG) that does not meet the Hazardous Waste definition in 49 CFR 171.8 because of the 40 CFR Part 262 EPA manifesting exemption for these type wastes?

Reference # 04-0186, 08-0123

No. These wastes do not meet the DOT definition for a hazardous waste.

* When is it appropriate to include the word "solution" or "mixture" at the end of a PSN?

**Reference # 09-0069, 09-0056, 08-0123

The word "solution" or "mixture" must only be included when shipping a hazardous material listed in column 2 of the HMT that also contains non-hazardous material, like soil, water, etc.

* How do I choose a PSN for a hazardous material with more than one hazard class or division?

Reference # 04-0058

First, find the primary and subsidiary hazards using 49 CFR 173.22a. Use the primary hazard class to find the appropriate generic hazard class PSN that also includes the subsidiary hazards. For example, the primary hazard class for a mixture that exhibits a hazard class 8 packing group II and a hazard class 3 packing group II is class 3. The appropriate PSN would be "flammable liquids, corrosive, n.o.s."

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.

Government Printing Office (GPO) Website Changes

The GPO is changing their website address and format. Finding Federal Registers (FRs) and electronic copies of the Code of Federal Regulations (CFRs) will be challenging at first. The new home web address is www.gpo.gov They have dropped the word "access" out of the address. You will need to click of the Federal Digital System (FD sys) to enter the usual lineup of federal documents. You should see the document collection in the far right column.





New Allowed Continuing Education Credits for Training

The AAHP has re-evaluated the credits you will receive for attending our transportation courses in 2010 thru 2013. Visit www.hps1.org/aahp/cec/cec11 for more information.

Title	CE Credits
Web-Based Basic Radioactive Waste Packaging & Disposal	16
Web-Based Medical/University Single Source Radioactive Waste	16
Web-Based IATA Dangerous Goods Regulations	4
4-Day Basic Radioactive Waste Packaging & Disposal	32
3-Day Advanced Refresher Radioactive Waste Pkg. & Disposal	22
1-Day IATA DGR International Air Transport of Radioactive Material	6
4-Day Hazardous/Mixed Waste Packaging & Disposal	32
2-Day IMDG International Water Transport of Radioactive Material	15

EnergySolutions Cask User Procedural Changes

Recent bolt hole thread damage to one cask and long term bolt hole thread wear to another cask required these two casks to be taken out-of-service for an extended period of time for major costly repair. During this period of repair, our available cask supply was restricted and required longer preplanning efforts by users. In an effort to mitigate further damage and limit the burden imposed by limited supply, EnergySolutions is taking the following corrective actions for the use of our 8-120B, 10-160B, and 8-120A casks:

- 1. Users must have an appropriately approved QA Program by either:
 - a. Obtaining an NRC or DOE approval of their QA program;
 - b. Submitting an equivalent QA program to EnergySolutions for approval; or
 - c. Contracting EnergySolutions to provide the QA and/or a cask handler services at the user's site.
- Customer use of impact wrenches will be limited to breaking the initial torque on the lid bolt while initiating the removal process. Once the bolt is free to rotate, the operator must stop using the impact wrench, continue with the use of a manual wrench, and finalize the removal of the bolt by hand
- 3. The use of impact wrenches for the installation of cask lid bolts is not permitted. Only manual wrenches for the installation of cask lid bolts are permitted.

To allow users sufficient time to change their internal procedures, procure manual wrenches, implement a QA program, get their QA program approved, or contract us for QA and Cask Handler support services, EnergySolutions has established a 90 day transition period prior to the April 12, 2011 effective date of implementation. For more information and/or who to contact with questions, please see the attached letter at the end of this newsletter.

This newsletter can also be viewed on our web site at www.energysolutions.com



NOTICE OF PROCEDURAL CHANGE, TRANSITION PERIOD FOR IMPLEMENTATION, AND REQUIRED ACTIONS 8-120B, 10-160B, and 8-120A Casks

Registered User, Cask User and Customer.

extended period of time for major costly repair, which further restricted supply and required even Energy*Solutions* has taken pride in supplying cask services to the nuclear industry for over thirty longer preplanning efforts by users. In an effort to mitigate further damage and limit the burden imposed by limited supply, Energy*Solutions* is taking the following steps for the use of the 8years and strives to be your cask supplier of choice for years to come. Industry wide Type B casks and select Type A casks are in limited supply which requires planning and scheduling well in advance of shipments. Recent bolt hole thread damage to one cask and long term bolt hole thread wear to another cask required these two casks to be taken out-of-service for an 120B, 10-160B, and 8-120A casks:

- Users must have an appropriately approved QA Program
- Customer use of impact wrenches will be limited to breaking the initial torque on the lid bolt while initiating the removal process. Once the bolt is free to rotate, the operator must stop using the impact wrench, continue with the use of a manual wrench, and finalize the removal of the bolt by
- The use of impact wrenches for the installation of cask lid bolts is not permitted

Approved QA Program

Energy Solutions. Although having a QA program, in and of itself, will not prevent damage due to misuse, it will mitigate the risk by having third party oversight to check that the correct, up-to-date cask handling transportation QA program requirements of 10 CFR 71 Subpart H when using the 8-120B, 10-160B, or 8-120A casks. Approval can be granted by the NRC under Part 50 or 71, DOE under Order O 460.1C, or A User or Customer must have an appropriately approved QA program that, as a minimum, meets the procedures are being referenced and followed properly Most cask users (≈95%) already have an NRC or DOE approved QA program for the use of casks, so there will be no impact from this requirement for the majority of users. The remaining users (≈5%) without an NRC or DOE approved QA program have the following options available:

- Obtain NRC or DOE approval of their QA program;
- Submit an equivalent QA program to Energy Solutions for approval; or
- Contract Energy Solutions to provide the QA and/or a cask handler services at the user's site

These actions have been common practices among other cask suppliers industry wide for many years.

140 Stoneridge Drive Columbia, South Carolina 29210



imited use of impact wrenches

the continued long term use of the casks. Based upon an Energy Solutions engineering evaluation, the 8-120B, 10-160B and 8-120A casks were identified as the cask models which would be most at risk through Limiting the use of impact wrenches is the single most affective preventative action that can be taken for the use of impact wrenches, primarily due to their high closure bolt torque and type threads. For ALARA and industrial safety risk reasons, impact wrenches will only be authorized for breaking the initial torque on the lid bolts while initiating the removal processes. Once the bolt is free to rotate, the operator must stop using the impact wrench, continue with the use of a manual wrench, and finalize the removal of the bolt by hand. Only manual wrenches for the installation of cask lid bolts are permitted.

would be forthcoming that limited the use of impact wrenches for cask operations. Subsequently on April 28, 2010, the Operating Procedure for the 8-120B cask was issued incorporating the changes as noted above. Changes to the Operating Procedures for the 10-160B and 8-120A are pending and will be Shortly after cask damage was initially identified, Energy*Solutions* informed all NRC Registered Users of the 8-120B and 10-160B casks (Letter E&L-014-10, dated March 31, 2010) of the potential problems using impact wrenches and notifying them that changes to the operating procedures for these casks

Transition Period

To allow Users sufficient time to change their internal procedures, procure manual wrenches, implement a QA program, get their QA program approved, or contract us for QA and Cask Handler support services, Energy So*lutions* has established a 90 day transition period prior to the April 12, 2011 effective date of implementation.

Required Actions

For Users with NRC or DOE approved QA program:

- Revise internal procedures, if and as necessary
- Provide notice to internal QA representative
- Follow revised cask handing procedures that have implemented these changes No notice to Energy Solutions is required, since approval of NRC or DOE QA Programs is publicly available for our verification

For Users without NRC or DOE approved QA program:

- Obtain an approved NRC or DOE approved QA program and provide evidence by the time of cask scheduling; submit an equivalent QA program to Energy Solutions for approval at least sixty (60) days prior to intended use; or, contract Energy Solutions to provide the QA and/or a cask handler services at the user's site at least thirty (30) days prior to intended use

 - Follow revised cask handing procedures that have implemented these changes Provide a notice to Energy Solutions defining the method of QA program compliance by the April 12, 2011 effective date or prior to first use of the affected casks

Commercial Group, at (830) 758-1826, recampbell@energysolutions.com. or, Mark Lewis, Vice President Business Development and Director Logistics & Engineering Services, at (803) 758-1827 office, (803) 960-3619 mobile, mslewis@energysolutions.com. If you have any questions concerning this notice, please contact Rich Campbell, Vice President, EHSQS,

Columbia, South Carolina 29210 140 Stoneridge Drive