

Q3 2016 NEWS

WE'RE MOVING!

The EnergySolutions Columbia, South Carolina office will be moving into a new building on September 29, 2016. This move will complete the split from the Atkins acquisition. The Commercial Training Department's new address starting October 1, 2017 will be: 250 Berryhill Road, Converse Bldg., Suite 400, Columbia, SC 29210. Our fax phone will also change to (803) 772-0626. Please update your records for any future questions concerning our DOT/NRC Hazardous Material Transportation (NRC 79-19) Courses focusing on Logistics (Hittman), Processing (Barnwell, Bear Creek or Clive) and Disposal (Barnwell or Clive). All other Columbia, SC phone numbers and website will remain the same



SAFETY ADVISORY: DRIVER E-CIG USE

The Federal Motor Carrier Safety Administration (FMCSA) published a safety advisory on its website (www.fmcsa.dot.gov) to provide notice and information to owners and operators of Commercial Motor Vehicles (CMVs) concerning incidents that have occurred relating to the possession and use of battery-powered portable electronic smoking devices (e.g., e-cigarettes, e-cigs, e-cigars, e-pipes, e-hookahs, personal vaporizers, electronic nicotine delivery systems) and the transportation safety risks associated with the use of these devices. The use of battery-powered portable electronic smoking devices has resulted in incidents including explosions, serious personal injuries, and fires. The explosions regularly involved the ejection of a burning battery case or other components from the device which subsequently ignited nearby flammable or combustible materials. Motor carriers and drivers should be cognizant of the risks associated



with these devices and exercise good judgment and appropriate discretion in their possession, storage, charging or use on, around or while operating a CMV, and adhere to the smoking prohibitions on, near or when loading and unloading a motor vehicle transporting hazardous materials in accordance with 49 CFR 177.834(c) and 397.13.

TYPE B CASK UPDATES

The EnergySolutions Cask Division located at the Barnwell Logistics Facility (BLF) has issued two (2) newsletters announcing a new Certificate of Compliance (CoC) No.9168, Revision 23, for the Model No. 8-120B package & an updated BLF contact

list (CDN-2016-5), and information concerning the new pre-shipment leakage rate testing requirements that will come in effect for 8-120B & 10-160B Casks in 2017 (CDN-2016-2). Please visit the EnergySolutions' Customer Portal for your own copy of these newsletters. <https://customerportal.energysolutions.com>

For any technical questions about EnergySolutions' casks, please contact:

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JANUARY 23–24, 2017

ADVANCED NRC/DOT RADIOACTIVE WASTE SHIPPER

Course Duration: 16 hours | Retrain Frequency: 3 years

This 2-day review course is ideal for experienced radioactive waste shippers who requiring a quick regulation refresher, learn about recent regulatory or industry issues, and get recertified. This course is being held in conjunction with the upcoming EnergySolutions' Annual Conference held in Salt Lake City, Utah, on January 25 – 26, 2017. The conference includes a tour of EnergySolutions' Clive disposal site, presentations, and panel discussions. Attending both the conference and refresher training back-to-back provides the ultimate in industry updates.

Register for this Course

<https://www.energysolutionstraining.com/classes/register/dot-nrc-epa-hazardous-waste-mixed-waste-packaging-transportation-and-disposal-sep-20-2016>

Register for Conference

<http://www.energysolutions.com>





THE LATEST HAPPENINGS IN THE FEDERAL REGISTER

DOT CORRECTS 3 HAZMAT TABLE ENTRIES:

On May 27, 2016 (81 FR 33602), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a CFR correction to re-instate the following entries: 1. On page 202, for "Cyanuric triazide" and on page 211, for "Dinitrosobenzylamidine and salts of (dry)" as forbidden; and 2. On page 275, for "Power device, explosive, see Cartridges, power device" in Title 49 of the Code of Federal Regulations, Parts 100 to 177, revised as of October 1, 2015, in 49 CFR 172.101, in the Hazardous Materials Table.

MISCELLANEOUS HMR UPDATES: On June 02, 2016 (81 FR 35483), the PHMSA published a final rule amending the Hazardous Materials Regulations (HMR) to make miscellaneous amendments in order to update and clarify certain regulatory requirements. The amendments in this rulemaking include, but are not limited to, removing the packing group (PG) II designation for certain organic peroxides, self-reactive substances, and explosives; incorporating requirements for trailers of manifolded acetylene cylinders; providing requirements to allow for shipments of damaged wet electric batteries; and revising the requirements for the packaging of nitric acid, testing of pressure relief devices on cargo tanks, and shipments of black or smokeless powder for small arms. This final rule is effective July 5, 2016 with voluntary compliance authorized June 2, 2016.

CMV PASSENGER SEAT BELT USE: On June 07, 2016 (81 FR 36474), the Federal Motor Carrier Safety Administration (FMCSA) published a final rule to revise the Federal Motor Carrier Safety Regulations (FMCSRs) in 49 CFR Part 392 by requiring passengers in property-carrying commercial motor vehicles (CMVs) to use the seat belt assembly whenever the vehicles are operated on public roads in interstate commerce. This rule holds motor carriers and drivers responsible for ensuring that passengers riding in the property-carrying CMV are using the seat belts required by the Federal Motor Vehicle Safety Standards (FMVSSs). This rule is effective August 8, 2016.

CVSA LEVEL VI INSPECTION REFERENCE UPDATED: On June 17, 2016 (81 FR 39587), the FMCSA published a final rule to amend its Hazardous Materials Safety Permits rules by updating the current incorporation by reference of the Commercial Vehicle Safety Alliance's (CVSA) "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 (HRCQ) as defined in 49 CFR 173.403" to the April 1, 2016 edition. This final rule is effective June 17, 2016.

DOT UPDATES CIVIL PENALTIES: On June 29, 2016 (81 FR 42266), the PHMSA published an interim final rule to revise the maximum and minimum civil penalties for a knowing violation of the Federal hazardous material transportation law or a regulation, order, special permit, or approval issued under that law in 49 CFR Parts 107 and 171. The maximum civil penalty for a knowing violation is now \$77,114, except for violations that result in death, serious illness, or severe injury to any person or substantial destruction of property, for which the maximum civil penalty is \$179,933. In addition, the minimum civil penalty amount for a violation relating to training is now \$463. The effective date of this final rule is August 1, 2016.

DOT PROPOSES MISC. HMR CHANGES: On June 30, 2016 (81 FR 42609), the PHMSA published a notice of proposed rulemaking (NPRM) amending the HMRs in 49 CFR Parts 171 – 180 to update, clarify, or provide relief from miscellaneous regulatory requirements that include, but are not limited to, the following: Incorporating by Reference (IBR) multiple publications from both the Compressed Gas Association (CGA) and the Chlorine Institute; addressing inconsistencies with domestic and international labels and placards; permitting alternative testing for aerosols; no longer mandating that excepted quantities comply with the emergency response telephone requirement; allowing electronic signatures for Environmental Protection Agency (EPA) manifest forms; and no longer requiring the service pressure to be marked on DOT 8 and 8L cylinders. Please submit comments by August 29, 2016.

NRC REVISES CIVIL PENALTY POLICY: On July 22, 2016 (81 FR 47689), the Nuclear Regulatory Commission (NRC) published a final rule issuing a revision to its Enforcement Policy (Enforcement Policy or Policy) to reflect the new maximum civil penalty amount the agency can assess for a violation of the Atomic Energy Act of 1954, as amended (AEA), or any regulation or order issued under the AEA. By interim final rule, the NRC changed this amount from \$140,000 to \$280,469 per violation per day, and also provides guidance regarding instances where the NRC may exercise discretion in mitigating the amount of a civil penalty. This revision to the Enforcement Policy is effective on August 1, 2016.

FMCSA UPDATES 49 CFR PER FAST ACT: On July 22, 2016 (81 FR 47714), the FMCSA published a final rule to revise the Federal Motor Carrier Safety Regulations (FMCSRs) in 49 CFR Parts 365 - 396 by exempting welding trucks used in the construction and maintenance of pipelines from FMCSA's regulations. It excepts

drivers of ready-mixed concrete trucks and hi-rail vehicles, as well as drivers of commercial motor vehicles (CMVs) transporting livestock and bees, from some of the hours of service (HOS) requirements. It also extends the length of the time (from 2 years to 5 years) that an exemption or renewal of an exemption may provide relief from the FMCSRs. This final rule is effective July 22, 2016.

FMCSA REVISES 49 CFR: Safe Operation: On July 22, 2016 (81 FR 47722), the FMCSA published a final rule to revise the FMCSRs in 49 CFR Parts 393 & 396 and Appendix G to Subchapter B of Chapter III by adding a definition of "major tread groove" and an illustration to indicate the location of tread wear indicators or wear bars on a tire signifying a major tread groove; revising the rear license plate lamp requirement to eliminate the requirement for an operable rear license plate lamp on vehicles when there is no rear license plate present; prohibiting the operation of a vehicle with speed-restricted tires at speeds that exceed the rated limit of the tire; providing specific requirements regarding when violations or defects noted on an inspection report must be corrected; including provisions for the inspection of antilock braking systems (ABS) and automatic brake adjusters, speed-restricted tires, and motor coach passenger seat mounting anchorages; eliminating the option for a motor carrier to satisfy the annual inspection requirement through a violation-free roadside inspection; and amending the inspector qualification requirements. The rule is effective July 22, 2016.

FMCSA REVISES 49 CFR: Periodic Inspection: On July 22, 2016 (81 FR 47732), the FMCSA published a final rule to revise regulatory guidance regarding the periodic inspection of commercial motor vehicles (CMVs) concerning 49 CFR Section 396.17, Question 1 and Section 396.23, Question 1. This regulatory guidance is effective July 22, 2016.

EPA REQUESTS COMMENT ON E-MANIFEST USER FEES: On July 26, 2016 (81 FR 49071), the Environmental Protection Agency (EPA) published a proposed ruling to propose its user fee methodology applicable to electronic and paper manifests submitted to the national electronic manifest system (or e-Manifest system) that is being established by EPA under the Hazardous Waste Electronic Manifest Establishment Act. After the implementation date for the e-Manifest system, certain users of the hazardous waste manifest would be required to pay a prescribed fee for each electronic and paper manifest they use and submit to the system in order for EPA to recover its costs of developing and operating the national e-Manifest system.

The Latest Happenings in the Federal Register, *cont'd.*

Comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before August 25, 2016.

DOT REQUESTS COMMENT ON CYLINDERS:

On July 26, 2016 (81 FR 48977), the PHMSA published a notice of proposed rulemaking (NPRM) to revise certain requirements applicable to the manufacture, use, and requalification of DOT-specification cylinders in 49 CFR Parts 107 – 180. Specifically, PHMSA is proposing to incorporate by reference or update the references to several Compressed Gas Association publications, amend the filling requirements for compressed and liquefied gases, expand the use of salvage cylinders, and revise and clarify the manufacture and requalification requirements for cylinders. Comments must be submitted by September 26, 2016.

DOT REQUESTS COMMENT ON RAIL LIABILITY:

On July 26, 2016 (81 FR 48885), the PHMSA published a notice requesting comment on a study of the levels and structure of insurance for railroad carriers transporting hazardous materials. Comments on this notice will be accepted until September 9, 2016.

NRC DISCONTINUES 8 RULINGS:

On July 29, 2016 (81 FR 49863), the NRC published a notice discontinuing eight (8) rulemaking activities: 1. Controlling the Disposition of Solid Materials; 2. Entombment Options for Power Reactors; 3. Transfers of Certain Source Materials by Specific Licensees; 4. Approach to Risk-Informed, Performance-Based Requirements for Nuclear Power Reactors; 5. Expansion of the National Source Tracking System; 6. Sabotage of Nuclear Facilities, Fuel, or Designated Material; 7. Security-Force Fatigue at Nuclear Facilities; and 8. Domestic Licensing of Source Materials-Amendments and Integrated Safety Analysis. The purpose of this action is to inform that these rulemaking activities are being discontinued and to provide a brief discussion of the NRC's decision to discontinue them. Effective July 29, 2016, the rulemaking activities discussed in this document are discontinued.

EPA UPDATE: COAL COMBUSTION RESIDUALS:

On August 5, 2016, the EPA published a direct final ruling (81 FR 51802) and a proposed ruling (81 FR 51838) concerning the Hazardous and Solid Waste Management System. Both rulings extend for certain inactive coal combustion residuals (CCR) surface impoundments the compliance deadlines established by the regulations for the disposal of CCR under subtitle D of the Resource Conservation and Recovery Act (RCRA). These revisions are taken in response to a partial vacatur ordered by the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) on June 14, 2016. The direct

final rule is effective on October 4, 2016 without further notice, unless EPA receives adverse comment by August 22, 2016 on either the proposed or the final ruling.

DOT REVISES "SERVICE AGENT" DEFINITION:

On August 8, 2016 (81 FR 52364), the DOT published a final rule to revise the definition of "service agent" in 49 CFR 40.3 to include all entities that provide services for DOT mandated drug and alcohol programs. This final rule is effective on August 8, 2016.

FMCSA UPDATES ROUTING REGISTRY:

On August 8, 2016 (81 FR 47732), the FMCSA published a final rule to provide the most current revisions to the National Hazardous Materials Route Registry (NHMRR) and procedures to facilitate the update of the NHMRR by State and Tribal government routing agencies. The NHMRR is a listing, as reported by States and Tribal governments, of all designated and restricted road and preferred highway routes for transportation of highway route controlled quantities (HRCQ) of Class 7 radioactive materials (RAM) (HRCQ/RAM) and non-radioactive hazardous materials (NRHMs). Effective date is August 8, 2016.

NRC UPDATES REGGUIDE 8.10 ALARA:

On August 11, 2016 (81 FR 52974), the NRC published a notice about issuing Revision 2 to Regulatory Guide (RG) 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposures as Low as is Reasonably Achievable." This revision describes methods and procedures that the NRC staff considers acceptable for maintaining radiation exposures to employees and the public as low as is reasonably achievable (ALARA). Revision 2 to RG 8.10 will be available on August 11, 2016.

DOT REVISES RAIL TANK CAR DESIGN:

On August 15, 2016 (81 FR 53935), the PHMSA published a final rule to codify in the HMRs (49 CFR Parts 173 & 179) a revised phase-out schedule for all DOT Specification 111 tank cars used to transport unrefined petroleum products (e.g., petroleum crude oil), ethanol, and other Class 3 flammable liquids. This will also require that each tank car built to meet the DOT Specification 117 and each non-jacketed tank car retrofitted to meet the DOT Specification 117R be equipped with a thermal protection blanket that is at least 1/2-inch thick and meets existing thermal protection standards; and mandate minimum top fittings protection requirements for tank cars retrofitted to meet the DOT Specification 117R. This final rule is effective on August 15, 2016.

NRC ENHANCING PUBLIC MEETING POLICY:

On August 31, 2016 (81 FR 60026), the NRC published a notice to propose revising its public meeting policy by further clarifying and enhancing participation in public meetings conducted by the NRC. The revised policy statement redefines the three (3) categories of public meetings and identifies the level

of public participation offered at each type of meeting. Please submit comments by November 14, 2016.

DOE FUTURE NUCLEAR WASTE SITE OPEN MEETING:

On September 01, 2016 (81 FR 60351), the Fuel Cycle Technologies, Office of Nuclear Energy, Department of Energy (DOE) published a notice of public meeting to summarize public input received on the design of a consent-based siting process for Spent Nuclear Fuel and High-Level Radioactive Waste Storage and Disposal Facilities. The DOE is designing a consent-based process for siting facilities that will be a part of an integrated waste management system to transport, store, and dispose of spent nuclear fuel and high-level radioactive waste. DOE will summarize the comments received and discuss next steps in designing a consent-based siting process at a webinar meeting scheduled for Thursday September 15, 2016 from 2:00–4:00 p.m. Eastern Daylight Time. Department officials will be available to discuss consent-based siting during an informal open house 30 minutes before and after the formal meeting.

RECENT LESSONS LEARNED, INDUSTRY EVENTS, OPERATING EXPERIENCES



Should the identification number include the letters "UN" for a Limited Quantity package? Did you answer "Yes" as per 49 CFR 172.422(a)? It may be difficult to see, but the weight marking uses "LBS" as an abbreviation for pounds... is this correct? Yes, DOT uses many variations for pounds throughout 49 CFR. To name a few examples: "lb" is used in 49 CFR 171.7(k)(5), 171.10(b)(2) & 172.102(c)(1) SP "137;" "lb." is used in 49 CFR 171.7(l)(1), 173.304a(d)(4) and 173.316(c)(1); "lbs." is used in 49 CFR 172.102(c)(1) SP "145;" 172.102(c)(5) SP "N84;" & 173.5(b)(2)(i); and "lbs" is used in 49 CFR 172.102(c)(5) SP "N83;" 172.820(a)(1) & 173.6(a)(4)(i)(A).

FAQs

Using lab packs as authorized in 49 CFR 173.12(b)

Can we use an intermediate bulk container (IBC) for a lab pack's outer packaging? Reference # 02-0191, 13-0093

No, only drums are authorized for the lab pack outer packaging. Plus, an IBC is not authorized to have inner packagings.

Can we offer hazardous material samples for transport to our lab, via highway, using a lab pack, when it has not been determined that the samples will be disposed of or recovered? Reference # 13-0102

Yes, if the samples will ultimately be recovered or disposed of as waste following evaluation by your lab, they may be transported by highway.

Can we use one generic shipping description for the lab pack vice using the specific fixed description ("+" in column 1 of the 172.101 hazardous material table) for each respective content? Reference # 00-0021, 06-0168, 07-0024, 07-0122, 07-0144, 09-0156

Yes, the additional materials with fixed shipping descriptions that meet the hazard class/divisions specified in 173.12(b) may be transported using a generic shipping description instead of the fixed description.

Is it correct to include a Class 7 subsidiary hazard in the shipping description for a material that meets the definition of multiple hazards including a Limited Quantity Class 7 radioactive material? Reference # 07-0024

Yes, if it is specifically determined that a material meets the defining criteria for a subsidiary hazard that is not shown in Column 6 of the HMT for a hazardous materials description, the subsidiary hazard class or division number must be identified on the shipping paper in accordance with 172.202(a)(2).

To access any DOT letters of interpretation, go to: <http://www.phmsa.dot.gov/hazmat>. Then, click on "Interpretations." Next, search by entering the reference number in the search box or search by the applicable regulatory section number, or search by the published date.

pop quiz

CAN YOU IDENTIFY AT LEAST TWO ISSUES WITH THIS LABEL?



Label information must be legibly printed (manual or mechanical) using a durable weather resistant means of marking per 49 CFR 172.403(g).

The "contents" block is missing a list of radionuclides. We cannot be sure if they were forgotten or faded during transport. Also, the units are missing in the "activity" block. Just as a reminder, which type of units should have been used for the activity? Did you answer some variation of SI units or appropriate form of "Becquerel" (i.e. MBq, GBq, TBq, etc.)? Please use a peer check before shipping to prevent this again and a possible violation.

JUST WHEN WE THOUGHT WE'D SEEN IT ALL!



Someone emailed us this picture. Thanks for sharing your pictures and stories with us! We are allowed to use a "hinge-type" placard if the placard will meet all the placard

specifications in 49 CFR Part 172 Subpart F. Can you make out the hazard class number in the bottom corner? Should we bend the corners to make the placard fit? We hope you answered "no" to the last question.

2017 COURSE SCHEDULE

DOT/NRC 4-Day Radioactive Waste Packaging, Transportation & Disposal (NRC 79-19) with IATA/DOT Air Transport of Radioactive Materials (1 Day) Training, *and* DOT/NRC/EPA 4-Day Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal Training

All DOT/NRC training courses meet the requirements of 49 CFR Part 172 Subpart H and NRC IE Notice 79-19

| Course | Date | CEU** | Tuition | Location |
|--|------------------|-------|---------|--------------------|
| Advanced DOT/NRC Radioactive Waste Packaging, Transportation & Disposal*** | January 23 - 24 | -- | \$1195 | Salt Lake City, UT |
| Customer Portal, Clive WAC, and Cask Leak Test Troubleshooting | January 25 | -- | \$0 | Salt Lake City, UT |
| Clive Disposal Site Facility Tour | January 25 | -- | \$0 | Salt Lake City, UT |
| EnergySolutions Annual Customer Conference | January 26 | -- | \$0 | Salt Lake City, UT |
| DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal | February 7 - 10 | 32 | \$1895 | Oak Ridge, TN |
| Bear Creek Operations (BCO) Facility Tour | February 9 | -- | \$0 | Oak Ridge, TN |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | Feb. 27 - Mar. 2 | 32 | \$1795 | San Diego, CA |
| Air Transport of Radioactive Materials (IATA/DOT)* | March 3 | 8 | \$945 | San Diego, CA |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | April 24 - 27 | 32 | \$1795 | Surfside Beach, SC |
| Air Transport of Radioactive Materials (IATA/DOT)* | April 28 | 8 | \$945 | Surfside Beach, SC |
| DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal | May 16 - 19 | 32 | \$1895 | Salt Lake City, UT |
| Clive Disposal Site Facility Tour | May 18 | -- | \$0 | Clive, UT |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | June 5 - 8 | 32 | \$1795 | Mount Pleasant, SC |
| Air Transport of Radioactive Materials (IATA/DOT)* | June 9 | 8 | \$945 | Mount Pleasant, SC |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | July 31 - Aug. 3 | 32 | \$1795 | Orlando, FL |
| Air Transport of Radioactive Materials (IATA/DOT)* | Aug 4 | 8 | \$945 | Orlando, FL |
| DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal | Sept. 12 - 15 | 32 | \$1895 | Columbia, SC |
| Barnwell Disposal Site & Processing Facilities Tour | Sept. 14 | -- | \$0 | Barnwell, SC |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | October 23 - 26 | 32 | \$1795 | Hilton Head, SC |
| Air Transport of Radioactive Materials (IATA/DOT)* | Oct. 27 | 8 | \$945 | Hilton Head, SC |
| DOT/NRC Radioactive Waste Packaging, Transportation & Disposal | Dec. 4 - 7 | 32 | \$1795 | Las Vegas, NV |
| Air Transport of Radioactive Materials (IATA/DOT)* | Dec. 8 | 8 | \$945 | Las Vegas, NV |

IATA*: If an IATA class is taken in conjunction with the basic class during the same week, there is a \$200 multi-class discount

CEU**: The American Academy of Health Physics (AAHP) has awarded continuation education credit hours for these courses

Advanced***: A 10% discount is offered for early registration by November 30, 2016