The Nuclear Regulatory Commission (NRC) has updated the list of individuals to receive advance notification of radioactive material and nuclear material shipments required by either 10 CFR Part 37 (Category 1 and 2), Part 71 (HRCQ) or Part 73 (Spent Nuclear Fuel) on May 17, 2021. This list of States, Territories and Participating Tribes designees can be downloaded from the NRC website at https://scp.nrc.gov/special/designee.pdf.

Important Dates to Remember

September 1, 2021 — Begin SQG EPA re-notification and every 4 years.

September 23, 2021 — Begin using NUREG/BR-0204 Revision 3 and new NRC LLRW manifests.


January 01, 2023 — Begin IATA Competency-based Training Standards.

January 01, 2025 — Begin using updated IATA Shipper’s Declaration forms.

NEW NRC MANIFESTING FAQS

The Nuclear Regulatory Commission (NRC) has added a webpage listing answers, examples and guidance for numerous questions addressed from its February 11, 2021 public meeting concerning the status of the implementation of NUREG/BR-0204 Revision 3, and its revised Uniform Low-Level Radioactive Waste Manifest (540-541-542) Forms. The Revision 3 NRC forms are available for download as of June 25, 2021. All NRC forms can be found on their Document Collection website. The NRC stated licensees may transition from using Revision 2 to Revision 3 forms anytime on or before September 23, 2021. For additional information on the transition to the new forms and guidance, please visit the NRC Manifesting website.

NRC UPDATES ADVANCED NOTIFICATION DESIGNEE LIST

The Nuclear Regulatory Commission (NRC) has updated the list of individuals to receive advance notification of radioactive material and nuclear material shipments required by either 10 CFR Part 37 (Category 1 and 2), Part 71 (HRCQ) or Part 73 (Spent Nuclear Fuel) on May 17, 2021. This list of States, Territories and Participating Tribes designees can be downloaded from the NRC website at https://scp.nrc.gov/special/designee.pdf.
Spent Nuclear Fuel Transportation Myths

The Commercial Vehicle Safety Alliance (CVSA) recently published an article on the “Five Common Myths About Transporting Spent Nuclear Fuel” in its Guardian (1st Quarter, 2021, Volume 28, Issue 1) based on the DOE, Office of Nuclear Energy’s article found at: https://www.energy.gov/ne/articles/5-common-myths-about-transporting-spent-nuclear-fuel. Five (5) major concerns the public may have on the safe transport of used reactor fuel were addressed. One thing to note, is the long history and perfect track record of spent fuel transportation. The DOE website also contains a very informative 3-minute video with archival footage of spent nuclear fuel transportation container testing by national lab researchers. For more information on CVSA and other transport articles, please visit the CVSA Guardian website at: https://www.cvsa.org/guardian-issues/.

IMO Extends IMDG Code Use


NIOSH Pocket Guide Has Gone Mobile

The Centers for Disease Control and Prevention (CDC) has published a mobile application for The National Institute for Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards (mNPG). The mNPG is a database of workplace chemical information including exposure limits, chemical/physical properties, personal protective equipment, respirators, and first aid . . . just like the print, online and PDF versions of the NPG available at the NIOSH home webpage. The mNPG has a few advantages like being customizable, easy to use, and convenient on any apple or android device. Some mNPG features include: 1. Search by chemical name, trade name or synonym, DOT number and CAS number; 2. Save chemical records as favorites for later use; 3. Customize how you view chemical data; and 4. Review chemical records for physical properties, health hazards, first aid, respirator and personal protective equipment recommendations and regulatory information. Click on the following link for more information or see the demo video on the new NIOSH Pocket Guide to Chemical Hazards (mNPG).
Recent Lessons Learned, Industry Events, and Operating Experiences

Strap Sabotage!?! Is there a prohibition on the use of damaged load securement devices? Yep! All tiedowns must be in good working condition with no damage per 49 CFR 393.104(b). Should a driver have caught this tiedown damage during transport and/or before delivery? Yes, again! Drivers must stop periodically and inspect all load securement components per 392.9(b). Also, is there anything a shipper can do to prevent a sharp edge from cutting a strap? Yes, once again! Edge protection must be used whenever a tiedown would be subject to abrasion or cutting at the point where it touches an article of cargo. The edge protection must resist abrasion, cutting and crushing per 393.104(f)(4). Immediately below is an example of edge protection used to protect the tiedown at the top edge of the box:

Marking Mistakes! So, what do you think about using gray tape on an orange panel? The orange panel's outer border must be black and 15mm wide per 49 CFR 172.332(b)(1), and all markings must not be obscured per 172.304. Also, how far apart or how close should the orange panel be displayed to the placard? Hopefully, you said, "Displayed in proximity to each other" per 172.334(f). Emergency responders and regulators should not have to hunt for these two communications!

Puckering Placard!?! How many issues can you identify with this placard? Did you see the rips? Placards should be durable per 49 CFR 172.519(a) and visible per 172.516(a). Are identification numbers allowed on radioactive class 7 placards? Not for domestic shipments! Identification numbers are prohibited per 49 CFR 172.334(a). Be careful placarding to ensure they meet all the placarding specifications in 49 CFR 172 Subpart F.
FAQ: Shipping Low Specific Activity Material “LSA” & Surface Contaminated Objects “SCO” (49 CFR 173.427)

* If a package contains LSA/SCO & a hazardous substance, must any size package bear the “RQ” marking as required by § 173.427(a)(6)(vi)?
   Reference (21-0036)
   Yes, all packages transported in accordance with this provision, regardless of capacity or weight, that contain a hazardous substance must bear the “RQ” marking.

* Will the bulk marking size requirements of 49 CFR 172.302(b) apply to the “RQ” marking on a bulk package?
   Reference (21-0036)
   Yes. This includes the height of at least 50mm (2in) and width of at least 6mm (0.25in).

* Can an exclusive use LSA/SCO shipment be moved from different modes/carriers?
   Reference (03-0061, 04-0267)
   Yes, when the shipment is made in a freight container (as defined in 49 CFR 171.8) and there is no loading nor unloading from within the freight container itself.

* Can batteries containing sulfuric acid in liquid form be classified as either LSA or SCO?
   Reference (08-0079, 15-0014)
   Neither. These batteries are not a “solid object” as required in the SCO definition (49 CFR 173.403), nor have their radioactivity “distributed throughout” as required in the LSA definition.

* Does the requirement in 49 CFR 173.427(a)(6)(ii) “prohibiting loose radioactive material in the conveyance” prohibit the transportation of unpackaged LSA in the same conveyance as packaged LSA?
   Reference (13-0101)
   Yes, unpackaged LSA and packaged LSA may not be in the same conveyance.

* Would the UN identification number or proper shipping name marking, and applicable labeling be permitted on LSA or SCO packages shipped exclusive use and marked in accordance with 49 CFR 173.427(a)(6)(vi)?
   Reference (07-0115, 13-0101)
   Yes, even though excepted from the requirements of marking and labeling, shippers may permissively mark and label.

FAQ:
Shipping Low Specific Activity Material “LSA” & Surface Contaminated Objects “SCO” (49 CFR 173.427)

DOT letters of interpretation can be found at: https://www.phmsa.dot.gov
Click on: “Regulations and Compliance” then “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 PDF on our training class e-media handout.

SEASONAL SAFETY
Summer is here, along with the heat. Be prepared by drinking plenty of liquids to stay hydrated and by planning rest areas with shade. Also, know the signs for heat exhaustion and heat stroke to save your or the life of another.

Like a wise person once said, “We usually do not plan to fail, but fail to plan.” Take a minute to plan and prepare for success. Review your First Aid knowledge and have any needed supplies for your summertime adventures. Be safe and stay healthy!
THE LATEST HAPPENINGS

IN THE FEDERAL REGISTER

Federal Semi-Annual Regulatory Agendas – March 2021. On March 31, 2021, the Department of Energy (86 FR 16888); the Department of Labor (86 FR 16920); the Department of Transportation (86 FR 16926); the Department of Homeland Security (86 FR 16906); the Environmental Protection Agency (86 FR 16952); and the Nuclear Regulatory Commission (86 FR 17036) published their respective notices in the federal register making available their portion of the semi-annual Unified Agenda of Federal Regulatory and Deregulatory Actions.

DOT Revises Admin Procedures and Policies. On April 02, 2021 (86 FR 17292), the Department of Transportation (DOT), Office of the Secretary of Transportation (OST), Pipeline and Hazardous Materials Administration (PHMSA), Federal Motor Carrier Safety Administration (FMCSA), National Highway Traffic Safety Administration (NHTSA), and Federal Transit Administration (FTA) published a final rule in the federal register removing DOT’s internal policies and procedures relating to the issuance of rulemaking and guidance documents from the Code of Federal Regulations (CFRs). In addition, this final rule removes regulations concerning the initiation and conduct of enforcement actions, including administrative enforcement proceedings and judicial enforcement actions brought in Federal court. This final rule is effective on May 3, 2021.

NRC Tribal Participation Request. On April 5, 2021 (86 FR 17646), the Nuclear Regulatory Commission (NRC) published a notice in the federal register inviting public comment on a new proposed information collection entitled, “Tribal Participation in the Advance Notification Program.” Only those federally recognized Indian tribes with reservations and either receiving or seeking to receive the advance notifications would be asked to respond to the specific information request. An Office of Management and Budget (OMB) control number has not yet been assigned to this proposed information collection. Please submit comments by June 4, 2021. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

DOT 2021 Civil Penalty Adjustments. On May 03, 2021 (86 FR 23241), the Department of Transportation (DOT) published a final rule in the federal register to adjust the civil penalty amounts for inflation that may be imposed for violations of certain DOT regulations. This includes: the Office of the Secretary of Transportation (OST) & Federal Aviation Administration (FAA) in 14 CFR; the Great Lakes St. Lawrence Seaway Development Corporation (GLS) in 33 CFR; the Maritime Administration (MARAD) in 46 CFR; and the Pipeline and Hazardous Materials Administration (PHMSA), Federal Railroad Administration (FRA), Federal Motor Carrier Safety Administration (FMCSA) & National Highway Traffic Safety Administration (NHTSA) in 49 CFR. In addition, this final rule amends the FAA regulations to set forth the new civil penalties established in Division V, Title I of the Consolidated Appropriations Act, 2021. The rule also corrects a rounding error in an FAA penalty. This final rule is effective on May 3, 2021. Also, on June 02, 2021 (86 FR 29528), the PHMSA published a federal register to correct an error resulting from an inaccurate amendatory instruction. This did not change any civil penalty amounts established in this May 03, 2021 (86 FR 23241) final rule. The correction final rule is effective on June 2, 2021.

MARSSIM Rev. 2 Comment Request. On June 16, 2021 (86 FR 32034), the Department of Defense (DoD), Department of Energy (DOE), Environmental Protection Agency (EPA), and the Nuclear Regulatory Commission (NRC) published a notice in the federal register to announce the availability of a draft revision document, entitled the “Multi-Agency Radiation Survey and Site Investigation Manual” (MARSSIM) for public comment. MARSSIM provides information on planning, conducting, evaluating, and documenting environmental radiological surveys of surface soil and building surfaces for demonstrating compliance with regulations. MARSSIM, when finalized as Revision 2, will be a multi-agency consensus document. The agencies are seeking public comment in order to receive feedback from the widest range of interested parties and to ensure that all information relevant to developing the document is received. The agencies will review public comments received on the draft MARSSIM Revision 2 as well as comments from a concurrent, independent, scientific peer review. The agencies will review comments received during the public comment period and make revisions to the document as appropriate. The EPA has setup a MARSSIM webpage for more information. Comments must be received on or before September 14, 2021.

FMCSA Updates National HazMat Route Registry. On June 17, 2021 (86 FR 32306), the Federal Motor Carrier Safety Administration (FMCSA) published a notice in the federal register to announce revisions to the National Hazardous Materials Route Registry (NHMRR) reported to the FMCSA from April 1, 2020 through March 31, 2021. The NHMRR is a listing, as reported by States and Tribal governments, of all designated and restricted roads and preferred highway routes for transportation of Highway Route Controlled Quantities of Class 7 Radioactive Materials (HRCQ/RAM) and Non-Radioactive Hazardous Materials (NRHM). The full current NHMRR for each State is posted on the FMCSA’s website at: https://www.fmcsa.dot.gov/regulations/hazardous-materials/national-hazardous-materials-routeregistry.

NRC Implements Rev 3 Manifests. On June 25, 2021 (86 FR 33783), the Nuclear Regulatory Commission (NRC) published a notice in the federal register announcing the availability of revisions to the NRC Form 540 (Uniform Low-Level Radioactive Waste Manifest “Shipping Paper”), NRC Form 541 (Uniform Low Level Radioactive Waste Manifest...
"Container and Waste Description"), and NRC Form 542 (Uniform Low-Level Radioactive Waste Manifest "Manifest Index and Regional Compact Tabulation"). The forms are available for implementation, consistent with the forms included in NUREG/BR–0204, Revision 3, "Instructions for Completing NRC's Uniform Low-Level Radioactive Waste Manifest". Revised NRC Forms 540, 541 & 542 became effective on June 25, 2021. Users of the NRC Forms 540, 541 & 542 should transition to the revised forms on or before September 23, 2021.

**FMCSA Finalizes Entry-Level Driver Training.** On June 30, 2021 (86 FR 34631), the Federal Motor Carrier Safety Administration (FMCSA) published a final rule in the federal register finalizing its February 4, 2020 interim final rule (interim rule), which revised a December 8, 2016, final rule, "Minimum Training Requirements for Entry-Level Commercial Motor Vehicle Operators" (ELDT final rule). This action finalizes the extension of the compliance date for the ELDT final rule from February 7, 2020, to February 7, 2022. This action provides FMCSA additional time to complete development of the Training Provider Registry (TPR) and provides State Driver Licensing Agencies (SDLAs) time to (IT) systems and procedures, as necessary, to accommodate their receipt of driver-specific ELDT data from the TPR. This final rule is effective on July 30, 2021. Petitions for Reconsideration of this final rule must be submitted to the FMCSA Administrator no later than July 30, 2021.

**2021 Commercial Open-Enrollment Training Schedule**

Radioactive Class 7 Material Packaging, Transportation & Disposal Regulatory Compliance Courses

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DATE</th>
<th>CEU**</th>
<th>TUITION</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation &amp; Disposal</td>
<td>July 12 - 16</td>
<td>40</td>
<td>$2,195</td>
<td>Clinton, TN</td>
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<tr>
<td>Bear Creek Operations (BCO) Facility Tour</td>
<td>July 15</td>
<td>--</td>
<td>$0</td>
<td>Oak Ridge, TN</td>
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<tr>
<td>DOT/NRC Radioactive Waste Packaging, Transportation &amp; Disposal</td>
<td>August 2 - 5</td>
<td>32</td>
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<tr>
<td>Air Transport of Radioactive Materials (IATA/DOT)</td>
<td>August 6</td>
<td>8</td>
<td>$985*</td>
<td>Orlando, FL</td>
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<tr>
<td>DOT/NRC Radioactive Waste Packaging, Transportation &amp; Disposal</td>
<td>October 18 - 21</td>
<td>32</td>
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<tr>
<td>Air Transport of Radioactive Materials (IATA/DOT)</td>
<td>October 22</td>
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<td>DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation &amp; Disposal</td>
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<td>Bear Creek Operations (BCO) Facility Tour</td>
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<tr>
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<td>December 10</td>
<td>8</td>
<td>$985*</td>
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</tbody>
</table>

*If an IATA class is taken in conjunction with the DOT/NRC class during the same week, there is a $280 multi-class discount

**The American Academy of Health Physics (AAHP) has pre-approved continuation education credit hours for these courses**