

Q3 2017 NEWS

DOT Chart Updated & Mobile Now

The DOT Chart 16 is the latest version of the Hazardous Materials Markings, Labeling and Placarding Guide, which is updated when new markings, labels, or placards are added to the Hazardous Materials Regulations (HMR, 49 CFR Parts 171 - 180). In addition to the print version, the Chart 16 is now available as a free mobile application for Android and iOS devices.


The following updates have been included in the new DOT Chart 16:

- The Hazardous Materials Markings section includes the addition of the new lithium battery handling mark with a transition date of December 31, 2018
- The new class 9 label for Lithium battery handling was added to the Hazardous Materials Warning Labels section with an effective date of January 2019

- The yellow organic peroxide 5.2 placard was replaced with the red and yellow organic peroxide 5.2 placard in the Hazardous Materials Warning Placards section

You can access the DOT Chart 16 PDF and mobile applications from the: [Chart 16 Homepage](#) Printed copies will be available from the DOT ordering page by the first week in September.

NOTE: The DOT Chart 16 is for general guidance only and should not be used to determine compliance with 49 CFR Parts 100-185. For example, footnote 1 in Table 1 for placarding Class 7 radioactive material has not updated in DOT Chart 16 to reflect the current requirements in 49 CFR 172.504(e).




DOT CHART 16

Hazardous Materials Markings, Labeling and Placarding Guide

Refer to 49 CFR, Part 172:

- Marking - Subpart D
- Labeling - Subpart E
- Placarding - Subpart F



NOTE: This document is for general guidance only and should not be used to determine compliance with 49 CFR, Parts 100-185.

HAZARDOUS MATERIALS MARKINGS










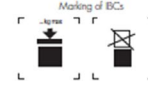
<p>Package Orientation (Red or Black)</p>  <p>§172.312(a)</p>	<p>Keep Away from Heat</p>  <p>§172.317</p>	<p>OVERPACK</p> <p>§173.25(a)(4)</p>	<p>Fumigant Marking (Red or Black)</p>  <p>§172.302(g) and §173.9</p>	<p>INHALATION HAZARD</p> <p>§172.313(a)</p>
<p>HOT</p> <p>§172.325</p>	<p>Biological Substances, Category B</p>  <p>§172.332(a)</p>	<p>UN3373</p> <p>§173.199 (a)(5)</p>	<p>NEW lithium battery handling marking, Transition December 31, 2018</p>  <p>§173.185</p>	<p>Marine Pollutant</p>  <p>§172.322</p>
<p>Limited Quantity</p>  <p>§172.315</p>	<p>ORM-D, Transition December 31, 2020</p>  <p>§172.316</p>	<p>Exempted Quantity</p>  <p>§173.4a(g)</p>	<p>Making of IBCs</p>  <p>§178.703(b)(7)</p>	



CHART 16 Now Available AS FREE MOBILE APP

Download on the App Store

GET IT ON Google play

Important Dates to Remember

January 1, 2016

Exclusive Use only when required by 49 CFR (HM-215M, 80 FR 1076, January 8, 2015)

January 1, 2017

Type A package documentation including content detailed analysis to be kept on file for 2 years (HM-250, 79 FR 40590, July 11, 2014)

January 1, 2018

Uranium hexafluoride (UF6): add Division 6.1 poisonous material (HM-215N, 82 FR 15796, March 30, 2017)

January 1, 2019

Labels with 2mm inner border (HM-215M, 80 FR 1076, January 8, 2015 & HM-215N, 82 FR 15796, March 30, 2017)

Shaping the Future



ENERGYSOLUTIONS

**16TH ANNUAL CONFERENCE
& TRAINING SESSION**

January 29 – 31, 2018

Grand/Little America | Salt Lake City, Utah

ADVANCED DOT/ NRC RADIOACTIVE WASTE SHIPPER

COURSE DURATION: 16 HOURS | RETRAIN FREQUENCY: 3 YEARS

This 2-day advanced course is ideal for experienced radioactive waste shippers who need a quick regulation refresher, want advanced shipper issues, learn about recent regulatory or industry changes, and get recertified. **This course is being held in conjunction with the upcoming EnergySolutions' Annual Conference held in Salt Lake City, Utah, January 31 – February 1, 2018. 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.** We look forward to seeing you in class!

Register for this Course:

<https://www.energysolutionstraining.com/classes/schedule>

Register for Conference:

<http://www.energysolutions.com>

Importance of Compliance

Why should we comply with the regulations governing the transport and disposal of radioactive material? Did you answer with any of the following: 1. Stay out of trouble, 2. Keep your job, 3. Protect the public, 4. Properly inform drivers, law enforcement and emergency responders, 5. Prevent a violation, fine or shipping restriction, and/or 6. Stay out of the limelight? The last possible answer listed is what prompted this article reminding us why we do what we do. There have been some recent alarming articles in the media. One was a USA Today front page article informing the world how the failure to comply could put the public at risk. Malone, P. (2017, August 01). Nuclear labs endanger public with radioactive mail. USA Today. Retrieved from <https://www.usatoday.com>. If you missed the article, please visit: USA Today Nuclear Lab Mail Article. Another recent article was published in the Tri-City Herald stating a power plant has been ordered by the state authorities to not ship any radioactive waste until further notice. Culverwell, W. (2017, August 11). Energy Northwest barred from shipping nuclear waste after mislabeled shipment. Tri-City Herald. Retrieved from <http://www.tri-cityherald.com>. A direct link to the article can be found here: [Tri-City Herald News Article](#).

IATA DGR 58th Edition Addendum

The International Air Transport Association (IATA) published an addendum to the IATA Dangerous Goods Regulations (DGR) on 20 June 2017. There are several amendments and corrections to the 58th Edition effective from 01 January 2017 to include:

- New or amend State Variations (Section 2.8.2)
- New or amend Operator Variations (Section 2.8.4)
- Revise lithium battery-powered electronic devices in checked baggage (Subsection 2.3)
- Revise Class 2 definition (Paragraph 3.2.5.1)
- Revise "Hydrofluoric acid" proper shipping in name (Table 4.2)
- Revise Special Provision A212 concerning UN 2031 Nitric acid (Section 4)
- Amend Packing Instruction 203 "Aerosols in Division 2.1 and 2.2" (Section 5)
- Amend Packing Instruction Y963 "ID8000 Consumer commodities" (Section 5)
- Revise 10.8.3.9.3(c) for Category "II-Yellow" and "III-Yellow" only (Section 10)
- Amend State contact details (Appendix D.1)
- This addendum may be downloaded at:
[IATA DGR Downloads](#).

FAQs

Type A Packaging

*** If the contents to be shipped in a Type A package is different than what is indicated in the manufacturer's documentation, will the user have perform a detailed analysis?**

Reference # 03-1060; 05-0074; 05-0082; 06-0009; 15-0038; 16-0143

Yes, testing must be documented by using the methods allowed in 49 CFR 173.461(a).

*** Can a HEPA style vent be installed on Type A packaging? Reference # 06-0189**

Yes, the HMRs do not prohibit the use of a vent as long as the packaging will meet all the design requirements specified in 49 CFR 178.350.

*** Who is the person certifying the Type A package and required to mark their name and address on the package per 178.3?**

Reference # 03-1060; 05-0074; 08-0148

The shipper must certify the package and include their marking indicating the package meets all the 49 CFR requirements. A manufacturer is only required to meet the Part 178 packaging requirements.

*** Can a padlock be used as a tamper evidence style seal? Reference # 10-0121**

Yes, a lock is believed to be not readily breakable.

*** Is a drain plug considered to be a closure or a mechanical device like a valve? Reference # 05-0227**

No, a drain plug does not require a tamper seal or be protected to prevent unauthorized operation.

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.

popquiz



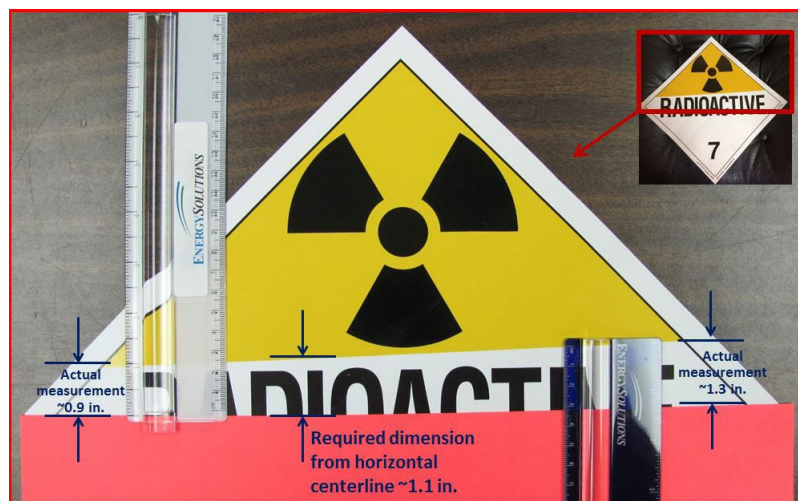
Can you identify at least 3 things wrong with markings on this cask?

The gross mass marking is about a half (1/2) inch high. Does this meet the minimum height requirement of 50mm (2in) for this bulk packaging as outlined in 49 CFR 172.302(b)(3)? The package type marking "TYPE B(U)" is behind the impact limiter turnbuckle and faded. Does this meet the legibility requirements can be found in 49 CFR 172.304? The third issue concerns the radiation symbol painted on the innermost receptacle and faded. Does this meet the requirement to be on the outermost receptacle and resistant to effects of fire and water per 49 CFR 172.310(d)? and does this radiation symbol conform to the dimensional requirements in 49 CFR 172 Appendix B?



Here someone used a nail for an anchor point through the webbing of this strap. How many levels of wrong is this?

Will the nail damage the webbing of the strap? Also, will this action weaken the strap and/or decrease its strengthen rating? What is the anchor point rating of the nail and the board it is nailed to? How many more issues can you identify? And what would you have done differently to secure this strap properly? Be safe and smart about your load securing.



Please double check that your placards meet all the placarding requirements in 49 CFR 172 Subpart F before use.

This placard looked good at first glance, but after closer examination was found to be out of specification. The base of the yellow triangle in the upper portion of this class 7 placard did not measure the required 29 mm (1.1 inches) above the horizontal center line across the entire placard per 49 CFR 172.556(b).



THE LATEST HAPPENINGS

IN THE FEDERAL REGISTER

NRC REVISES SNM REGGUIDES: On May 31, 2017, the Nuclear Regulatory Commission (NRC) published two (2) notices in the federal register concerning Special Nuclear Material accountability Regulatory Guides (RGs). The first notice (82 FR 25016) withdraws the following three regulatory guides: RG 5.28 "Evaluation of Shipper-Receiver Differences in the Transfer of Special Nuclear Material," RG 5.49 "Internal Transfers of Special Nuclear Material," and RG 5.57 "Shipping and Receiving Control of Strategic Special Nuclear Material." These 3 RGs were issued by the NRC staff in the 1970s to 1980s to provide guidance that was considered acceptable for complying with the NRC's regulations in 10 CFR Part 74 "Material Control and Accounting of Special Nuclear Material". The effective date of the withdrawal of RGs 5.28, 5.49 and 5.57 is May 31, 2017. The second notice (82 FR 24997) issues a new Regulatory Guide (RG) 5.41 "Shipping, Receiving, and Internal Transfer of Special Nuclear Material at Fuel Cycle Facilities" which consolidates into one document the NRC guidance concerning the material control and accounting requirements pertaining to shipments, receipts and internal transfers of special nuclear material. In addition, this new RG 5.41 provides updated guidance for source material (SM) and depleted uranium (DU) at uranium enrichment facilities. Revision 0 to RG 5.41 is available on the NRC's website at [NRC Reg-Guides](#).

FMCSA WITHDRAWS 2014 PROPOSED RULE: On June 05, 2017 (82 FR 25753), the Federal Motor Carrier Safety Administration (FMCSA) published a notice in the federal register withdrawing its November 28, 2014 (79 FR 70839) advance notice of proposed rulemaking (ANPRM) concerning financial responsibility for motor carriers, freight forwarders, and brokers. FMCSA is authorized to establish minimum levels of financial responsibility for motor carriers at or above the minimum levels set by Congress. FMCSA sought public comment in the ANPRM on whether to exercise its discretion to increase the minimum levels of financial responsibility, and, if so, to what levels. After reviewing all public comments to the ANPRM, FMCSA has determined that it has insufficient data or information to support moving forward

with a rulemaking proposal, at this time. As of June 5, 2017 the proposed rulemaking published on November 28, 2014 at 79 FR 70839 is withdrawn.

EPA E-MANIFEST ROLLOUT PUBLIC MEETING: On July 14, 2017 (82 FR 32546), the Environmental Protection Agency (EPA) published a notice in the federal register announcing a public Hazardous Waste Electronic Manifest System ("e-Manifest") Advisory Board meeting to consider and advise the Agency about the initial launch of the e-Manifest System (Meeting Theme: "Implementing e-Manifest: User Registration and Account Activation"). The meeting will be held on September 26-28, 2017, from approximately 9:00 a.m. to 5:00 p.m. EST. The EPA is encouraging the public to submit written comments and requests for oral comments. This meeting may be webcast. Please refer to the e-Manifest Web site at [EPA e-Manifest](#) for information.

INTERNATIONAL DANGEROUS GOODS TRANSPORT STANDARDS: On July 26, 2017 (82 FR 34745), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a notice in the federal register to request comments on issues being considered during the 51st and 52nd sessions of the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCOE TDG). Copies of working documents, informal documents, and the meeting agenda may be obtained from the United Nations (UN) Transport Division's Web site at [UNSCOE TDG 2017 Working Documents](#). Comments must be received by November 17, 2017.

Topics on the agenda for the UNSCOE TDG meeting include:

- Explosives and related matters;
- Listing, classification, and packing;
- Electric storage systems;
- Transport of gases;
- Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods;
- Global harmonization of the Transport of Dangerous Goods Regulations with the Model Regulations;
- Cooperation with the International Atomic Energy Agency (IAEA);

- Guiding principles for the Model Regulations; and
- Issues relating to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

WATERS OF THE UNITED STATES DEFINITION RECODIFICATION: On July 27, 2017 (82 FR 34899), the Environmental Protection Agency (EPA) and the Department of the Army (Army) published a proposed rule in the federal register to initiate the first step in a comprehensive, two-step process intended to review and revise the definition of "waters of the United States." This first step proposes to rescind the definition of "waters of the United States" in 40 CFR Parts 110 - 401, which currently governs administration of the Clean Water Act (CWA) published in the June 29, 2015 Clean Water Rule (80 FR 37054). Proposing to recodify the regulations that existed before the 2015 Clean Water Rule will provide continuity and certainty for regulated entities, the States, agency staff, and the public. In a second step, the agencies will pursue notice and comment rulemaking in which the agencies will conduct a substantive reevaluation of the definition of "waters of the United States." Comment period has been extended to September 27, 2017 in the August 22, 2017 Federal Register (82 FR 39712).

FMCSA RULEMAKING PROCESS PROPOSED CHANGES: On August 07, 2017 (82 FR 36719), the Federal Motor Carrier Safety Administration (FMCSA) published a notice of proposed rulemaking (NPRM) in the federal register to amend its rulemaking procedures in 49 CFR Part 389 by revising the process for preparing and adopting rules, petitions, and direct final rules. Also, FMCSA adds new definitions, and makes general administrative corrections throughout its rulemaking procedures. These proposed actions are authorized under the Fixing America's Surface Transportation (FAST) Act and the Administrative Procedure Act (APA). Comments on this NPRM must be received on or before October 6, 2017.

Commercial Training Schedule

Radioactive Class 7 Material Packaging, Transportation & Disposal Courses

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
2 0 1 7				
DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal	Sept. 11 - 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/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal	November 6 - 10	32	\$1895	Oak Ridge, TN
Bear Creek Operations (BCO) Facility Tour	November 9	--	\$0	Oak Ridge, TN
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
2 0 1 8				
Advanced DOT/NRC Radioactive Waste Packaging, Transportation & Disposal Refresher	January TBD	--	\$1195	Salt Lake City, UT
Clive Disposal Site Facility Tour	January TBD	--	\$0	Salt Lake City, UT
EnergySolutions Annual Customer Conference	January TBD	--	\$0	Salt Lake City, UT
DOT/NRC Radioactive Waste Packaging, Transportation & Disposal	Feb. 26 - Mar. 1	32	\$1895	Mount Pleasant, SC
Air Transport of Radioactive Materials (IATA/DOT)	March 2	8	\$945*	Mount Pleasant, SC
DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal	March 19 - 23	32	\$1995	Salt Lake City, UT
Clive Disposal Site Facility Tour	March 22	--	\$0	Clive, UT
DOT/NRC Radioactive Waste Packaging, Transportation & Disposal	April 23 - 26	32	\$1895	Surfside Beach, SC
Air Transport of Radioactive Materials (IATA/DOT)	April 27	8	\$945*	Surfside Beach, SC
DOT/NRC Radioactive Waste Packaging, Transportation & Disposal	June 4 - 7	32	\$1895	Monterey, CA
Air Transport of Radioactive Materials (IATA/DOT)	June 8	8	\$945*	Monterey, CA
DOT/NRC/EPA Hazardous Waste/Mixed Waste Packaging, Transportation & Disposal	July 16 - 20	32	\$1995	Oak Ridge, TN
Bear Creek Operations (BCO) Facility Tour	July 19	--	\$0	Oak Ridge, TN

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