

Tech Control Live presents
Regulation Changes 2019

- 49CFR
- IMDG
- IATA



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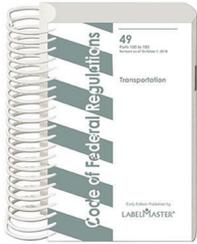
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Your Instructor:
Sean Kelly – Manager DGI Tech Control



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The Changes: 49CFR



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Revisions Civil Penalty Amounts



- this final rule provides the 2018 inflation adjustment to civil penalty amounts that may be imposed for violations of certain DOT regulations.



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Civil Penalties



Per this final rule, the maximum civil penalty for a knowing violation is now \$79,976, 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 \$186,610. In addition, the minimum civil penalty amount for a violation relating to training is now \$481.

Effective Date: November 27, 2018.



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HM-219A

Compliance December 7, 2018



- Incorporating by Reference (IBR) multiple publications from the Compressed Gas Association (CGA), the Chlorine Institute, and the Department of Defense (DoD).
- Revising the table in § 180.407(g)(1)(iv) to make this section consistent with the applicable packaging specification (e.g., § 178.347).
- Addressing inconsistencies with domestic and international labels and placards.
- Revising § 173.150(g) include the use of the International System of Units (SI).
- Excepting limited quantities of "UN1942, Ammonium nitrate" from requiring permission from the Captain of the Port (COTP) before being loaded or unloaded from a vessel at a waterfront facility.
- Allowing for combination non-bulk packagings that are tested and marked for a liquid hazardous material to be filled with a solid hazardous material.



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HM-219A Final Rule



- Including an additional hazardous material description for transport in roadway striping vehicles.
- Extending the service life of interim compliant toxic inhalation hazard (TIH) tank cars to the full service life of all other tank cars.
- Allowing the use of plastic, metal, or composite pallets to transport materials classed and marked as limited quantities.
- No longer mandating that excepted quantities comply with the emergency response telephone requirement.
- Harmonizing the recordkeeping requirements for portable tanks.
- Allowing for printing tolerances for labels and placards.
- Allowing electronic signatures for Environmental Protection Agency (EPA) manifest forms.
- No longer requiring the service pressure to be marked on Department of Transportation (DOT) 8 and 8L cylinders.
- Acknowledging that the marked date of manufacture on a composite intermediate bulk container (IBC) may differ from the marked date of manufacture on the inner receptacle of that IBC.
- Revising the basis weight tolerance for fiberboard boxes from +/- 5% to +/- 10% from the nominal basis weight reported in the initial design qualification test report.



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HM-259 Notac

Effective October 18, 2018



- revises certain special provisions,
- packaging requirements,
- information to the pilot-in-command requirements, and
- exceptions for passengers and crewmembers
- In addition to facilitating harmonization with international standards



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HM-251F

In coordination with the Federal Railroad Administration, this final rule to remove requirements pertaining to electronically controlled pneumatic brake systems on high-hazard flammable unit trains

Effective September 25, 2018



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HM-218H Miscellaneous Amendments

- Emergency response telephone numbers
- Packaging instructions for certain shipments of nitric acid
- Test period extension to 10 years for certain MC 331 cargo tanks in dedicated propane delivery service
- Hazardous Materials Table revisions
- Pressure relief device testing for cargo tank motor vehicles
- Effective July 18, 2018



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HM-215N Final Rule

- 1) Proper Shipping Names & UN Numbers for Engines
- 2) New communication requirements for Lithium Batteries
- 3) New entries for Class 4.1
- 4) New entries for Resin Kits
- 5) A slew of new Special Provisions and
- 6) Changes to Training, Marking, Labeling, and Documentation



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HM-2150 Proposed Harmonization Rule

- Align 49 CFR with the ICAO Regulations, the IMDG Code, UN Modal Regulations and others
- Articles containing dangerous goods
- Lithium Battery Test Summary
- Baggage Equipped with Lithium Batteries
- Segregation of Lithium Batteries from Specific Hazardous Materials
- Alternative criteria for classification of corrosive materials
- Provisions for Polymerizing Substances



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Class 9 Label



OLD



NEW



• Place in USA Numbers
• Place for telephone number for additional information



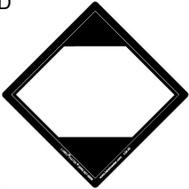
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Limited Quantities / ORM-D

- HM-215K Eliminating ORM - D
- December 31, 2020 / Ground
- December 31, 2012 / AIR



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The Changes: IMDG



Amendment 39 - 18



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Indicates Changes



- Amendment 39 -18 in effect January 1, 2019
- Transition period all of 2019
- Most carriers enforce during transition period

■ This symbol indicates a new item



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Limited Quantities



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IMDG

- New criteria for Articles containing dangerous goods
- New entries for classes 4 and 5
- Section 2.8 classification for corrosives has been overhauled
- Updates to Packing Instructions



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IMDG

- Eighteen new segregation groups are identified (see paragraph 3.1.4.4)
- Section 7.2.8 has been updated to reflect the new segregation group codes.
- SG1 has been amended, new segregation codes SG76, SG77 & SG78 added
- There are new entries TOXIC SOLID, FLAMMABLE, INORGANIC, N.O.S. (UN 3535) and LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT (UN3536).



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IMDG

- There are new entries UN numbers 3537 to 3548 covering 'ARTICLES CONTAINING DANGEROUS GOODS'.
- The eighteen new segregation groups have now been coded and included in column 16b of the DGL (note: if a substance belongs to a segregation group (as identified in paragraph 3.1.4.4) it is now identified in the DGL, column 16b, by inclusion of the 'SGG' code. The intention is to make the identification of belonging to a segregation group more easily recognizable directly from the DGL).



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IMDG

- The heading in column 4 of the DGL now reads "subsidiary hazard(s)".

UN No.	Proper shipping name (PSN)	Class or division	Subsidiary hazard(s)	Packing group	Special provisions	Limited and excepted quantity provisions		Packing		IBC
						Limited quantities	Excepted quantities	Instructions	Provisions	
015	015 3.1.2	03 2.0	03 2.0	03 2.0, 3	03 3.3	030 3.4	030 3.3	03 4.1, 4	03 4.1, 4	030 4.1, 4



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IMDG

- Many substances in the DGL have now been assigned SG35, SG36 and/or SG49 (stow separated from acids/alkalis/cyanides)
- The EmS guide has been updated and revised to reflect new assignments in column 15 of the DGL.

UN No.	Proper shipping name (PSN)	Class or division	Subsidiary hazard(s)	Packing group	Special provisions	Limited and excepted quantity provisions	Packing	IBC	Properties and observations	
									EmS	EmS
015	015 3.1.2	03 2.0	03 2.0	03 2.0, 3	03 3.3	030 3.4	030 3.3	03 4.1, 4	03 4.1, 4	030 4.1, 4



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Part 5 - Consignment Procedures

- A new Class 9 Miscellaneous Dangerous Goods Hazard Label has been added when Lithium Metal or Ion Batteries – Special Provision SP384 has also been added which refers to Section 5.2.2.2.2 which refers to label model number 9A




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Part 5 – Container Weight Verification

Method No. 1:

- Upon the conclusion of packing and sealing a container and using calibrated and certified equipment, the shipper may weigh, or have arranged that a third party weigh, the packed container. SOLAS Regulation, paragraph 4.1; IMO Guidelines, paragraph 5.1.1. The scale, weighbridge, lifting equipment or other devices used to verify the gross mass of the container must meet the applicable accuracy standards and requirements of the State in which the equipment is being used. IMO Guidelines, paragraph 7.1.
- Method No. 1 is appropriate to use for any packed container and any kind of goods



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Part 5 – Container Weight Verification

Method No. 2:

- The shipper (or, by arrangement of the shipper, a third party) may weigh all packages and cargo items, including the mass of pallets, dunnage and other packing and securing material to be packed in the container, and add the tare mass of the container to the sum of the single masses of the container's contents. IMO Guidelines, paragraph 5.1.2.

Effective Date July 1, 2016



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Part 5 – Container Weight Verification

Method No. 2:

- The tare mass of the particular container is visible on the exterior of the container and should be used. IMO Guidelines, paragraph 12.1.
- Estimating the weight of a container's contents is not permitted.
- The party packing the container cannot use the weight somebody else has provided, except in one specific set of defined circumstances where the cargo has been previously weighed and that weight is clearly and permanently marked on the surface of the goods



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The Changes: IATA



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2.3

2.3.0—New text has been introduced to clarify that the most appropriate entry in 2.3 that describes the item must be used and where an article contains more than one item of dangerous goods, all applicable provisions must be met.

In addition, 2.3.0.5 requires that where a passenger's carry-on baggage cannot be accommodated in the cabin, the operator must verify with the passenger that the carry-on baggage item does not contain dangerous goods forbidden in checked baggage.

Table 2.3.A has also been revised to reflect these limits.



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IATA

- 2.3.2.2, 2.3.2.3 and 2.3.2.4—The provisions applicable to battery-powered mobility aids have been revised to simplify and standardize the requirements for loading in an aircraft where the operator is responsible for ensuring that the mobility aid is properly restrained and protected against damage from baggage or other cargo.
- The term “collapsible” that was applied to lithium ion battery powered mobility aids has been deleted.



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2.8 Operator Variations

A number of additions, deletions, and amendments submitted by various operators

FX-02
Toxic PGI & PGI
4GX



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Section 3 Classification

- 3.5.1.2.2 - Clarification on the classification of ammonium nitrate fertilizers.
- 3.6.2.6 - Classification of infected animal material has been deleted.
- 3.8 - Significant changes to the provisions for the classification of corrosive substances and in particular the methods to assign packing groups to mixtures.
- These changes reflect the work of the UN Subcommittee with the GHS Subcommittee to better align the classification provisions for transport for Class 8 substances with those for supply and use.



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Classification

- 3.9.2.6—(f) new classification criteria have been added to address hybrid lithium batteries that are comprised of lithium metal and lithium ion cells.
- (g) identifies that manufacturers and subsequent distributors of lithium cells or batteries must make available a summary of the UN 38.3 tests with effect from 1 January 2020.
- 3.11.4—New classification criteria have been added for energetic samples.
- 3.12—New provisions for the classification of articles containing dangerous goods, n.o.s. This addresses the classification of articles where the type or quantity of dangerous goods that are an integral part of the article exceed that allowed as UN 3363.



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IATA 4.2 List of Dangerous Goods

- addition of twelve new UN numbers, UN 3537 to UN 3548, that have been assigned to articles containing dangerous goods in Classes 2, 3, 4, 5, 8 and 9 and Division 6.1;
- modification to the entries for UN 3316—Chemical kit and First aid kit to delete reference to packing groups II and III. The shipper must assign the appropriate packing group based on the most restrictive packing group in the kit as specified in special provision A44;
- addition of “stabilized” to UN 3302, 2-Dimethylaminoethyl acrylate;
- assignment of ID 8001 to Disilane. This has been done as a placeholder until the UN Subcommittee addresses a gap in the existing regulations for pyrophoric gases. The entry for disilane identifies that it is completely forbidden;



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IATA 4.2 List of Dangerous Goods

- assignment of ID 8001 to Disilane. This has been done as a placeholder until the UN Subcommittee addresses a gap in the existing regulations for pyrophoric gases. The entry for disilane identifies that it is completely forbidden;
- addition of a new entry, UN 3536, Lithium batteries installed in cargo transport unit. This entry is to address multi modal containers with installed lithium ion batteries, battery management systems and other electronics that function as a large fixed-base battery; • the emergency response drill code, ERG Code shown in column N, for all lithium battery entries has been changed from “9FZ” to “12FZ”. This reflects a change agreed by the ICAO DGP to identify that the inherent hazard for lithium batteries is not “9—No general inherent risk” and a new drill number “12—Fire, heat, smoke, toxic and flammable vapour”, was adopted.
- new entry, UN 3535, Toxic solid, flammable, inorganic, n.o.s. *



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4.4 Special Provisions

- replacement of A21, A134, A203 and A207, assigned to vehicles, which all become “not used” with a new special provision A214;
- revision to A59 to include reference to a maximum gauge pressure under which the exception for unserviceable or damaged tire assemblies applies;
- revision to A67 to include the test requirements for classification of non-spillable batteries from Packing Instruction 872



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4.4 Special Provisions

- revisions to A79 and A90 and change to A89 to become “not used”, to clarify the classification of ammonium nitrate fertilizers;
- revision to A107 to address the transport of UN 3363, Dangerous goods in apparatus or dangerous goods in machinery where the quantity of the dangerous goods exceeds the allowance in PI 962;
- revision to A201 to include provisions permitting the transport of lithium metal or lithium ion batteries as cargo on passenger aircraft with the approval of the States of Origin, destination and operator



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4.4 New Special Provisions

- A213—Identifies that hybrid lithium batteries which are comprised of lithium metal cells and lithium ion cells, must be assigned to UN 3090 or UN 3091 and the limits that apply when assigned to Section II;
- A334—Identifies the conditions that apply to lithium batteries shipped under approval as provided by special provision A201
- A806—Provides information on how a shipper must determine the subsidiary hazard(s) for articles containing dangerous goods, n.o.s. and identifies that any subsidiary hazard must be shown on the Shipper’s Declaration;
- A807—Identifies that the assigned entry must not be used for disilane or other pyrophoric gases.



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Section 5 Packing Instructions

- PI 200 and PI 218—Have been revised to clarify the terminology associated with the calculation of the pressure in the cylinder.
- PI 361 and PI 364—Has been revised to restrict UN 1308, Zirconium suspended in a flammable liquid in packing groups I and II to combination packagings with a maximum of 75 kg gross weight of the completed package.



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Section 5 Packing Instructions

- PI 459—Packing provisions for small quantities of energetic samples have been added.
- PI 620 and PI 650—The conditions for the pressure differential test and the temperature ranges have been separated to be stand-alone requirements.
- PI 958—Changes have been made to introduce the use of combination packagings, in addition to single packagings.
- PI 966 and PI 969—Clarification has been introduced into these packing instructions on the number of spare cells or batteries that may be in a package with equipment.



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Section 6 UN Spec's

- 6.4.2—This subsection has been revised to bring in reference to new ISO standards and also to identify the period during which the ISO standards may be applied for manufacture and also after which time the standards may no longer be used.



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Section 7 Marking & Labeling

- 7.2.1—A note has been added to draw attention to the correct application of GHS pictograms on packages.
- 7.2.2.3.2(a)—The specification for hazard labels has been revised to remove the requirement for the outside line to be a minimum of 2 mm in thickness.
- 7.2.2.3.2(c)—Clarification has been added that the new Class 9 lithium battery hazard label must not have any text in the bottom half other than the class number "9".
- Lithium battery handling label—The provisions that previously existed in 7.2.4.7 and Figure 7.4.H have been deleted as the lithium battery handling label is no longer valid in air transport.



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Section 8 Documentation

- 8.1.1 and 8.1.7 - Notes have been added under these paragraphs to identify that Shipper's Declaration form in the format as shown in the 59th edition of the DGR remain valid until 31 December 2024. These notes have been added as the design of the Shipper's Declaration form has been revised to replace "subsidiary risk" by "subsidiary hazard". The form has also been modified to remove reference to the title of the signatory and the place for signature. These requirements were removed in the 58th edition of the DGR, but the form had not been revised.
- 8.1.9 - All example Shipper's Declarations have been modified as described above.





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Section 8 Documentation

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper: (Required field)

Page: of Pages

Consignee: (Required field)

Shipper's Reference No. (optional):

TRANSPORT DETAILS

Mode of transport: (Required field)

Origin: (Required field)

Destination: (Required field)

Point of Departure (optional):

Point of Destination (optional):

WARNING: (Required field)

Address to comply in all respects with the applicable Dangerous Goods Regulations may be in lieu of the appropriate box subject to tight packing.

Shipment type (select non-applicable): (NON-HAZARDOUS) | HAZARDOUS

NATURE AND QUANTITY OF DANGEROUS GOODS

Dangerous Goods Identification		Quantity and Type of Packing	Packing Group	Preliminary	Approved
Proper Shipping Name	Class, Division, Subclass or Hazard				

Additional handling information:

I hereby declare that the contents of this declaration are fully and accurately described above to the best of my knowledge, and the described dangerous goods are classified, packaged, marked and labeled in accordance with the applicable Dangerous Goods Regulations and are in all respects in proper condition for transport according to applicable international and national provisions regarding transport that all of the applicable air transport requirements have been met.

Name of Signer:

Date:

Signature (Use black ink):




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Section 9 Handling

- 9.3.2.1.4—A new provision has been added to identify that engines or machinery assigned to Class 3, UN 3528, do not require segregation from dangerous goods with a primary or subsidiary hazard of Division 5.1.
- 9.3.4.3—An additional exception for accessibility on loading of Cargo Aircraft Only dangerous goods has been included to allow loading of UN 3528 or UN 3529 in any location on cargo aircraft.
- 9.5.1.1.3—The information required on the Notac to the pilot-in-command has been revised to also require that the date of the flight be shown





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Appendix A

- Appendix A—There are a number of changes to the defined terms in the glossary

GLOSSARY



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Appendix B

In Appendix B.2.2.4 new Cargo IMP codes have been added for UN 3090, Section II of PI968—EBM and UN 3480, Section II of PI 965—EBI. These two new IMP codes facilitate the differentiation of Section II lithium batteries (UN 3090 and UN 3480) from those lithium batteries in Section II packed with equipment or contained in equipment (UN 3091 and UN 3481), which are currently assigned to ELM and ELI respectively.



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Appendix C

- Appendix C—There are revisions to the list of self-reactive substances in Table C.1 and organic peroxides in Table C.2.



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Appendix D

- Appendix D—contact details for competent authorities have been updated.



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Appendix E

Changes have been made to the list of UN Specification Packaging Suppliers (E.1) and the Package Testing Facilities (E.2).



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Appendix F

- Appendix F—the list of Sales Agents (F.2), IATA Accredited Training Schools (F.3—F.5) and IATA Authorized Training Centers (F.6) have been revised.



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Appendix H

- The content of 1.5 in Appendix H has been revised to reflect the changes to the provisions for dangerous goods training as agreed by the ICAO Dangerous Goods Panel for competency-based training. At this time the new provisions will be adopted with effect 1 January 2021 with a 2-year transition. Appendix H also contains extensive guidance material for competency-based training. This guidance material is draft and industry is invited to review and comment as appropriate.

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