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## SIGNIFICANT CHANGES AND AMENDMENTS TO THE 62ND EDITION (2021)

The 62<sup>nd</sup> edition of the IATA *Dangerous Goods Regulations* incorporates all amendments made by the ICAO Dangerous Goods Panel in developing the content of the 2021–2022 edition of the ICAO Technical Instructions as well as changes adopted by the IATA Dangerous Goods Board. The following list is intended to assist the user to identify the main changes introduced in this edition and must not be considered an exhaustive listing. The changes have been prefaced by the section or subsection in which the change occurs.

### 1—Applicability

**1.2.7—Exceptions.** The list of exceptions has been revised to include dangerous goods required for the preservation of organs intended for transplant and dangerous goods dropped for pest management activities.

**1.5—Training Requirements.** Subsection 1.5 as shown in Appendix I in the 61<sup>st</sup> edition has been adopted to implement a competency-based approach to dangerous goods training and assessment. Subsection 1.5 from the 61<sup>st</sup> edition has been moved to Attachment A of Appendix H as there is a 2-year transition period until 31 December 2022, during which time the training provisions from the 61<sup>st</sup> edition may continue to be used.

**1.7—Dangerous Goods Security.** New entries have been added to the indicative list of high consequence dangerous goods shown in Table 1.7.A.

### 2—Limitations

#### 2.3—Dangerous Goods Carried by Passengers or Crew

**2.3.2.2—**The provisions for mobility aids powered by nickel-metal hydride or dry batteries have been revised to permit a passenger to carry up to two spare batteries to power the mobility aid.

**2.3.4.2—**The allowance for a passenger to carry a self-inflating safety device, such as a life-jacket or vest, has been revised to permit up to two personal safety devices per person and not more than two spare gas cartridges per device.

**2.3.5.8—**The provisions for portable electronic devices (PED) and spare batteries for PED have been revised to amalgamate the provisions for electronic cigarettes and for PED powered by wet non-spillable batteries into 2.3.5.8. Clarification has been added to identify that the provisions also apply to dry batteries and nickel-metal hydride batteries, not just lithium batteries.

#### 2.4—Transport of Dangerous Goods by Post

**2.4.2(a)—**Has been revised to identify that where dry ice is used as a refrigerant for UN 3373, all applicable parts of PI 954 must be met and the DPO must offer the mail article to the operator separately from other mail to allow the operator to comply with the applicable requirements for acceptance and information to the pilot-in-command.

### 3—Classification

**3.6.2.5—**Addition of new criteria to address solid medical waste containing Category A infectious substances.

**3.8.3—**Revisions to the criteria for assignment of packing groups to corrosive substances and mixtures.

### 4—Identification

#### 4.2—List of Dangerous Goods

The amendments to the List of Dangerous Goods include:

- addition of three new UN numbers, UN 0511, UN 0512 and UN 0513 for **Detonators, electronic** in Divisions 1.1B, 1.4B and 1.4S respectively;
- addition of a new proper shipping name, **Dangerous goods in articles** to UN 3363;
- addition of a new UN number, UN 3549 for **Medical waste, Category A, affecting animals** and **Medical waste, Category A, affecting humans**;
- UN 2216, **Fish meal, stabilized**—Has been revised. Rather than being forbidden/forbidden, Fish meal, stabilized is now permitted on both passenger aircraft and Cargo Aircraft Only;
- the packing instruction number for UN 3291, **Biomedical waste, n.o.s., Clinical waste, unspecified, n.o.s., Medical waste, n.o.s.** and **Regulated medical waste, n.o.s.** has been changed from PI 622 to be PI 621;
- addition of “stabilized” to the proper shipping name for UN 2522, **2-Dimethylaminoethyl methacrylate**.

## 4.4—Special Provisions

The amendments to the special provisions include:

- inclusion of the State of the operator, as an approving authority for lithium batteries shipped under special provisions A88 and A99. These special provisions have also been revised to identify that the packing instruction number shown on the Shipper's Declaration must be the one identified in the special provision from the Supplement to the ICAO Technical Instructions, i.e. PI 910 for A88 and PI 974 for A99;
- replacement of “machinery or apparatus” by “article” in A107. This change reflects the addition of the new proper shipping name **Dangerous goods in articles** to UN 3363;
- revision to A145 to include reference to waste gas cartridges and waste receptacles, small, containing gas. The special provision now includes an allowance that waste gas cartridges and waste receptacles, small, containing gas that were filled with a Division 2.2 gas and have been pierced are not regulated;
- significant revisions to A154 to address damaged and defective lithium batteries;
- revision to A201 to allow for the transport, in the case of urgent medical need, of lithium batteries as cargo on a passenger aircraft with the approval of the State of origin and the approval of the operator.

New special provisions include:

- A215—assigned to UN 3077 and UN 3082 which permits the shipper to use a listed proper shipping name as the technical name;
- A219—assigned to UN 2216, **Fish meal, stabilized** specifying that antioxidants must be added to the fish meal to prevent spontaneous combustion.

## 5—Packing

**5.0.2.5**—new text has been added clarifying that packagings may meet more than one tested design type and may bear more than one UN specification mark.

### Packing Instructions

**PI 378** and **PI 972**—Have been revised to permit the fuel tanks of machinery to have up to one quarter of a tank of fuel where the machinery cannot be loaded other than upright.

The single packagings permitted in **PI 457, PI 463, PI 465, PI 470, PI 471, PI 479, PI 482, PI 490, PI 491** and **PI 555** have been revised to align to the packagings permitted in the UN Model Regulations and elsewhere in the DGR.

**PI 492, PI 870, PI 871** and **PI 872**—Have been revised to clarify that the cells and/or batteries are packed directly into the outer packagings.

**PI 622**—Has been renumbered to become PI 621 to align to the numbering in the UN Model Regulations.

**PI 650** and **PI 959**—Have been revised to clarify that the diamond-shaped mark with the UN number must appear on one side of the package.

**PI 956**—Has been revised to include reference to UN 2216, **Fish meal, stabilized**.

**PI 957**—Has been revised to allow for both combination and single packagings.

**PI 962**—Has been revised to include reference to the new proper shipping name **Dangerous goods in articles** and to use “article” or “articles” in place of “machinery or apparatus”.

**PI Y963**—Has been revised to identify that a unit load device prepared by a single shipper may contain dry ice as a refrigerant for the consumer commodities.

**PI 965** to **PI 970**—Have been revised to:

- specifically reference that lithium cells or batteries identified as damaged or defective in accordance with Special Provision A154 are forbidden for transport; and
- in Section II identify that where there are packages from multiple packing instructions on one air waybill that the compliance statement may be combined into a single statement. Examples of such statements have been included in 8.2.7.

**PI 967** and **PI 970**—Have been revised to require that:

- equipment must be secured against movement in the outer packaging; and
- multiple pieces of equipment in a package must be packed to prevent damage from contact with other equipment in the package.

## **6—Packaging Specifications and Performance Tests**

The revisions to Section 6 include:

- clarification of the size of the UN specification marks on packagings (6.0.4.1, 6.5.3.1);
- clarification of the application of the year of manufacture for plastic drums and jerricans (6.0.4.2.1(f));
- a new provision for packagings that are tested to more than one design type (6.0.7);
- revision to the maximum capacity for metal aerosols (6.1.7.2);
- addition of a new provision identifying that for aluminium and other metal drums that suitable internal protective coatings or treatments must be applied if the materials used for the drum are not compatible with the contents to be transported (6.2.2.7, 6.2.7.7). This provision already exists for steel drums and steel and aluminium jerricans;
- revisions to the ISO references for UN cylinders and closed cryogenic receptacles (6.4.2).

## **7—Marking & Labelling**

**7.1.4.4.1**—Has been revised to clarify the height of the UN/ID number and the letters “UN” or “ID” on packages.

**7.1.5.5.3**—The minimum dimensions of the lithium battery mark have been revised.

## **8—Documentation**

**8.1.6.9.2, Step 7**—The requirements on how to describe multiple overpacks on the Shipper's Declaration have been revised, with an additional example provided (Figure 8.1.Q).

**8.2.1**—The statement required on the air waybill when dangerous goods are offered on a Shipper's Declaration has been revised to align the language to the use of electronic documentation where the Shipper's Declaration is not “attached” but rather is “associated”. There is a two year transition period during which time either wording is acceptable.

## **9—Handling**

**9.1.9**—The previous text recommending that operators should include the transport of dangerous goods as part of their safety risk assessment process has been revised to make the requirement mandatory.

**9.6.4**—The requirement to provide a report to the State of origin has been deleted.

## **10—Radioactive Materials**

The revisions to Section 10 include:

- identification in the scope that for the transport of radioactive materials the provisions are based on Revision 1 of IAEA Safety Standards Series No. SSR-6 (10.0.1.1);
- replacement of “radiation level” by “dose rate”;
- addition of new radionuclides for Germanium, Iridium, Nickel, Strontium and Terbium (Table 10.3.A);
- revision to the statement on the air waybill when dangerous goods are offered on a Shipper's Declaration (10.8.8.1).

**Appendix A**—There are a number of changes, deletions and additions to the defined terms in the glossary. These include:

- addition of definitions for carry-on and checked baggage;
- addition of definition for detonators, electronic;
- addition of definition for dose rate;
- deletion of “radiation level”;
- revision to the definition for self-accelerating decomposition temperature.

**Appendix C**—Changes to the list of currently assigned organic peroxides (Table C.2).

**Appendix D**—Contact details for competent authorities have been updated.

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

**Appendix F**—The list of Sales Agents (F.2), IATA Accredited Training Schools (F.3—F.5) and IATA Authorised Training Centres (F.6) have been revised.

**Appendix H**—The guidance material on development and implementation of competency-based training for dangerous goods has been revised based on engagement with, and input from training providers and member airlines. In addition, Subsection 1.5 from the 61<sup>st</sup> edition has been moved to Attachment A in Appendix H.