



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/15)**

Montreal, 27 April to 1 May 2015

Agenda Item 5: Development of mitigating measures to address risks associated with the transport of lithium batteries including measures that address recommendations from the Second International Multidisciplinary Lithium Battery Transport Coordination Meeting

5.1: "Bulk" shipments of excepted lithium batteries and cells

LIMITATIONS ON OVERPACKS, CONSOLIDATIONS AND SHIPPER LOADED UNITS FOR SECTION II OF PACKING INSTRUCTIONS 965 AND 968

(Presented by D. Brennan)

SUMMARY

This working paper proposes that the provision for shippers to overpack multiple packages of lithium batteries under Section II of Packing Instructions 965 and 968 be reviewed, along with restrictions on shippers loading such packages into a unit load device and removal of the ability of freight forwarder to group these packages from one or more shippers into a consolidated consignment.

Action by the DGP-WG: The DGP-WG is invited to revise Section II of Packing Instructions 965 and 968 as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 A working paper was presented to the Dangerous Goods Panel Working Group of the Whole (DGP-WG/14, Rio de Janeiro, Brazil, 20 to 24 October 2014) (see paragraph 3.5.2.1.1 c) of the DGP-WG/14 Report) on the topic of restricting the number of packages permitted in an overpack of both lithium ion cells and batteries and lithium metal cell and batteries prepared in accordance with Section II of Packing Instructions 965 and 968.

1.2 There was some discussion at DGP-WG/14 on the merits of the proposal in the working paper as well as a separate proposal for a total prohibition on placing such packages in an overpack (see paragraph 3.5.2.1.1 d) of the DGP-WG/14 Report (DGP-WG/14-WP/24).

1.3 Subsequent to DGP-WG/14 there was some revision to the original proposal and a draft paper circulated for comments in advance of DGP-WG/15. There were some comments regarding the proposal to require the name and address of the shipper and/or consignee to be marked on packages and as this is a possible consideration for all packages prepared in accordance with Section II of all of the lithium battery packing instructions, this has not been included as part of the proposals in this working paper.

1.4 There was only one objection to still allow for a limited number of packages to be placed in an overpack. However, the number of packages indicated, four, is arbitrary and there is nothing by way of science that supports having four packages in an overpack instead of two or six or ten. The basis for still allowing a limited number of packages in an overpack is in recognition that very small packages may benefit from a level of protection afforded by assembly into a larger unit for handling purposes.

1.5 In the changes shown in this working paper it is proposed to revise the text that was adopted into Section II of Packing Instruction 968 that restricts consolidation of packages with other cargo as the text in place in the 2015–2016 Technical Instructions has been seen as not allowing batteries packed in accordance with Section II of Packing Instruction 968 to be on the same air waybill as any other cargo. However, in reading the text referenced by Part 5;1.1 j) the requirement is that packages must be offered to the operator separately from other cargo, not that these cannot be on the same air waybill.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to revise Section II of Packing Instructions 965 and 968 as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 4 OF THE TECHNICAL INSTRUCTIONS

Part 4

PACKING INSTRUCTIONS

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Chapter 11

CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

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Packing Instruction 965

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II. SECTION II

With the exception of Part 1;2.3 (General — Transport of dangerous goods by post), 5;1.1 g), 5;1.1 j) (Shipper's responsibilities — general requirements), 7;4.4 (Operator's responsibilities — Reporting of dangerous goods accidents and incidents), 8;1.1 (Provisions concerning passengers and crew — Dangerous goods carried by passengers or crew) and paragraph 2 of this packing instruction, lithium ion cells and batteries offered for transport are not subject to other additional requirements of these Instructions if they meet the requirements of this section.

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II.1 General requirements

Cells and batteries must be packed in strong outer packagings that conform to Part 4;1.1.1, 1.1.3.1 and 1.1.10 (except 1.1.10.1).

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II.2 Additional requirements

- Cells and batteries must be packed in inner packagings that completely enclose the cell or battery then placed in a strong outer packaging.
- Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to a short circuit.
- Each package must be capable of withstanding a 1.2 m drop test in any orientation without:
 - damage to cells or batteries contained therein;
 - shifting of the contents so as to allow battery to battery (or cell to cell) contact;
 - release of contents.
- Each package must be labelled with a lithium battery handling label (Figure 5-32).
- Each consignment must be accompanied with a document with an indication that:
 - the package contains lithium ion cells or batteries;
 - the package must be handled with care and that a flammability hazard exists if the package is damaged;
 - special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; and
 - a telephone number for additional information.
- The words "lithium ion batteries, in compliance with Section II of PI965" must be placed on the air waybill, when an air waybill is used.
- Consignments of lithium ion batteries prepared in accordance with the provisions of Section II must be offered to the operator separately from dangerous goods or non-dangerous goods and must not be loaded into a unit load device before being offered to the operator.

- Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.

II.3 Outer packagings

Boxes

Drums

Jerricans

Strong outer packagings

II.4 Overpacks

Not more than [four (4)] packages may be placed into an overpack and the overpack must not contain other packages containing dangerous goods. When packages are placed in an overpack, the lithium battery handling label required by this packing instruction must either be clearly visible or the label must be affixed on the outside of the overpack and the overpack must be marked with the word "Overpack".

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Packing Instruction 968

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II. SECTION II

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II.1 General requirements

Cells and batteries must be packed in strong outer packagings that conform to Part 4;1.1.1, 1.1.3.1 and 1.1.10 (except 1.1.10.1).

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II.2 Additional requirements

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- The words "lithium metal batteries, in compliance with Section II of PI968 — cargo aircraft only" or "lithium metal batteries, in compliance with Section II of PI968 — CAO" must be placed on the air waybill, when an air waybill is used.
- Consignments of lithium metal batteries prepared in accordance with the provisions of Section II must ~~not be consolidated with other shipments of~~ be offered to the operator separately from dangerous goods or non-dangerous goods and must not be loaded into a unit load device before being offered to the operator.
- Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.

II.3 Outer packagings

Boxes

Drums

Jerricans

Strong outer packagings

II.4 Overpacks

Not more than [four (4)] packages may be placed into an overpack and the overpack must not contain other packages containing dangerous goods. When packages are placed in an overpack, the lithium battery handling label and the cargo aircraft only label (Figure 5-26) required by this packing instruction must either be clearly visible or the labels must be affixed on the outside of the overpack and the overpack must be marked with the word "Overpack".

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