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Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

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Display Packs of Limited Quantities

Transmitted by the Council on Safe Transportation of Hazardous Articles (COSTHA)

Introduction

- 1. Many consumer products meet the classification criteria for one of the nine hazard classes. Due to the limited amount of material contained in the consumer packaging, they are eligible for transport by road as a limited quantity when contained in an outer packaging that does not exceed a gross mass of 30 kg (3.4.2 of ADR).
- 2. The packaging requirements in 3.4.3 of ADR permit the use of inner packagings packed in strong outer packagings. Eligible packaging exceptions are provided for shrink-wrapped trays that do not exceed 20 kg.
- 3. However, many retail locations are foregoing the traditional shelf-displays of individual consumer products and are introducing "display packs" of products. Such display packs are prebuilt before distribution. They and are "opened" and placed directly on the store floor as a display.
- 4. The advantages of display packs include a reduction in the amount of packaging necessary for distribution (less fibreboard waste), a reduction in the space required on shelves, reduced labour needed for restocking shelves, and reduced handling of packages.
- 5. The current provisions in 3.4.2 and 3.4.3 of ADR preclude the use of display packs for limited quantity packages due to the gross mass of the display which may exceed 500 kg.

Discussion

- 6. In the United States of America, provisions for display packs have been adopted into the regulations (49 CFR, § 173.156 (c)) or authorized through exemptions. Such display packs are subject to the following requirements:
 - "(c) Display packs. Display packs (...) of consumer commodities or limited quantity packages that exceed 30 kg gross weight limitation may be transported by container/trailer in trailer-on-flatcar (TOFC) or container-on-flat-car (COFC) service, roadrailer and/or railrunner trailers, motor vehicle, or cargo vessel under the following conditions:
 - (1) *Packaging*. Combination packages must conform to the [general packaging] requirements of subpart B of this part and meet the following, as appropriate:

- (i) Primary containers must conform to the quantity limits for inner packagings prescribed in [for the representative hazard class];
- (ii) Primary containers must be packed into trays that secure individual containers from shifting inside the completed combination package during transportation;
- (iii) Tray(s) must be placed into a fibreboard box, and the fibreboard box must be banded and secured to a pallet by metal, fabric, or plastic straps to form a single palletized unit; and
- (iv) The maximum net quantity of hazardous material permitted in one palletized unit is 550 kg (1,210 lbs.).
- (2) *Marking*. The outside of each package must be plainly and durably marked in accordance with one of the following, as appropriate:
- (i) (...)
- (ii) As a limited quantity as prescribed in §172.315 of this subchapter."
- 7. Such packages remain subject to all the other requirements that apply to dangerous goods shipped in limited quantities.
- 8. Display packs prepared as described above have a long safety record by road, rail, and vessel in the United States, which have authorized the provisions for more than 20 years.
- 9. COSTHA has provided additional information, including examples of such display packs, as an Annex to this document.

Proposal

- 10. COSTHA requests that the Joint Meeting consider the value of adopting a similar provision into Chapter 3.4 of ADR:
 - [3.4.5] Display packs of limited quantity packages intended for retail distribution are excepted from the gross mass limitation of 3.4.1.2 if packed in accordance with the following provisions:
 - Outer packagings shall meet the general requirements of 4.1.1.1, 4.1.1.2, and 4.1.1.4 through 4.1.1.8;
 - <u>Inner packagings shall be securely packed into trays that prevent shifting</u> or movement of the inner packagings;
 - Trays shall be placed into a strong outer packaging that is securely attached to a pallet through metal, plastic or fabric straps to form a palletized unit;
 - Gross mass of the completed package shall not exceed 550 kg.

Annex 1

Examples of Display Packs

To meet growing retail customer demands, some of our members offer a wide range of "display-ready" SKUs to retailers. Such units reduce the retailer's labour, handling and set-up costs, reduce the need to restock product, and increases impulse purchases by shoppers. Several examples are shown below.













Any consumer products can be part of a display-ready pack, including products that are regulated as hazardous materials / dangerous goods. Examples of DG-regulated products manufactured by some of our members are shown below.

Types of DG	Examples
Flammable and Non-Flammable Aerosols (metal and plastic cans)	Air Fresheners, Hair Sprays, Shave Foams, Antiperspirants
Flammable Liquids (glass and plastic containers)	Hair Styling Products, Aftershaves, Skin Toners, Cosmetics
Flammable Solids	Deodorant Sticks
Oxidizers	Laundry Additives
Corrosives	Auto-dishwashing Gels, Laundry Additives
Lithium battery-powered devices	Rechargeable Shavers and Toothbrushes
Environmentally Hazardous Substances	Disinfectants, Anti-Dandruff Shampoos, Air Fresheners

When a display-ready pack contains DG-regulated products and exceeds 30 kg gross weight, it is shipped under the conditions of 49 CFR 173.156(c) [Note: In February 2016, PHMSA incorporated multiple, long-standing Special Permits into the HMR. The provisions of Special Permit 11458 were included as §173.156(c)]. The specific requirements for shipping display packs under this section are:

- 1. Inner packages must meet the requirements for Limited Quantities
- 2. Products are packed in trays to secure the individual containers from shifting
- 3. The trays are stacked and covered with a fibreboard box that is banded to the pallet by metal, fabric, or plastic straps to form a single, palletized unit.
- 4. The maximum net quantity of hazardous material in any palletized unit is 550 kg.
- 5. The outside of the fibreboard box is marked with the Limited Quantity mark.



Example of a finished display pack constructed per the requirements of §173.156(c)

The transportation of limited quantities in the above-described display packs in the U.S.A. has provided an equivalent level of safety as that afforded by shipping limited quantities per the provisions §173.150-155 and §173.306, as evidenced by PHMSA's incorporation of SP-11458 into the HMR. Likewise, our member has not experienced any packaging failure issues with these display packs since 2002 when it was first granted party status to SP-11458.