



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)**

**TWENTY-THIRD MEETING**

**Montréal, 11 to 21 October 2011**

**Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2013-2014 Edition**

**REQUIREMENTS FOR LIMITED QUANTITIES OF ENVIRONMENTALLY  
HAZARDOUS SUBSTANCES**

(Presented by the Dangerous Goods Advisory Council)

**摘要**

本工作文件的建议将澄清数量有限的危害环境的物质不受技术细则的限制。

危险物品专家组对行动：请危险物品专家组同意附录中提出的建议。

**1. INTRODUCTION**

1.1 Based on a proposal by the International Air Transport Association (IATA) at the DGP-WG/08 meeting in The Hague in November 2008 (see DGP/22-WP/2, paragraph 3.2.11), it was agreed that environmentally hazardous substances (EHS) should be regulated. Up until the current edition of the Technical Instructions, shippers were permitted — but not required — to declare EHS as regulated when transported by air.

1.2 It should be recalled that IATA's proposal recognized that while such materials did not pose a risk in air transport, they were transported to airports. IATA reasoned that for the period when these substances were in transport to the airport they should communicate the environmental hazard so that proper steps could be taken in the event of an emergency.

1.3 Packages of environmentally hazardous substances that exceed the limited quantity threshold values (i.e. more than 5 kg or 5 L per inner packaging or more than 30 kg per outer packaging) are fully regulated as dangerous goods by all modes, and the hazard communication requirements and packaging requirements are essentially the same for both surface and air transport. However, for limited

quantities of environmentally hazardous substances, the requirements for air transport are now substantially more severe than when transported by surface (road, rail and sea). Requirements that apply to limited quantities of EHS transported by air that exceed the requirements that apply in the case of surface transport to the airport include:

- a) the package must bear the Class 9 hazard label whereas no label is required for surface transport;
- b) the package must be marked with the UN number and proper shipping name whereas these markings are not required for surface transport;
- c) the package must bear the limited quantity mark with a Y whereas only an empty limited quantity mark is required for surface transport;
- d) the package must be capable of withstanding a 1.2 meter drop test and must be capable of withstanding a 3 meter stack test whereas strong outer packaging is required for surface transport;
- e) the package is subject to general packing requirements described in the applicable Y packing instructions (Y956 and Y964), including closure requirements not applicable in the case of surface transport; and
- f) the package must be accompanied by a dangerous goods transport document whereas no transport document is required for surface transport.

In addition, air carriers are now required to identify these limited quantities of EHS on the Notification to Captain (NOTOC) and they are subjected to acceptance checks.

1.4 Considering the basis for the IATA proposal was to align the Technical Instructions requirements with those for ground transport to the airport, raises the question of whether the above listed requirements for transporting limited quantities of EHS by air are necessary. In addition, whether EHS in limited quantities actually pose a risk to the environment in air transport is questionable.

1.5 Regulating limited quantities of EHS was not a trivial change. Application of the UN EHS criteria has meant that many more substances are now regulated as dangerous goods. Packages in the EHS limited quantity size range (i.e. up to 5 L or 5 kg per inner packaging) are of a size most commonly transported by air. The additional requirements applied to limited quantities of EHS transported by air come at a substantial cost and one has to ask whether they are justified considering the original intent was to simply harmonize with ground transportation regulations. Is air transport safety enhanced by regulating this large number of packages that really pose no threat onboard an aircraft? Doesn't regulation of limited quantities of EHS detract from air carrier attention to substances that pose an actual danger in air transport and consequently detract from overall air transport safety?

1.6 Further, even though the Y limited quantity mark is intended to reduce confusion, the presence of labels and UN number and proper shipping name markings on limited quantities of EHS are confusing when transported by surface modes. Regulating limited quantities of EHS by air causes even more problems in countries such as the United States where limited quantities of EHS are not subject to regulation when transported by road or rail.

1.7 It is DGAC's opinion that limited quantities of EHS (i.e. those classified as UN 3077 or UN 3082 in inner packagings of 5 L/kg in packages where the gross mass is less than 30kg) should not be

subject to the Technical Instructions. Where such packages are required to be marked with the limited quantity diamond for surface transport (see paragraph 3.4.7 of the UN Model Regulations), we propose that the package be marked with the UN number (i.e. UN 3077 or UN 3082) in association with the limited quantity mark to avoid confusion.

-----

## 附录

### 对《技术细则》拟议的修订

#### 建议 1:

按下列所示在危险物品表UN3082和UN3077项第7栏增加引述新的特殊规定AXXX，并删除Y964和Y956及第11栏“30公斤G”：

## 第3部分

### 危险物品表，特殊规定和限制数量与例外数量

.....

## 第2章

### 危险物品表（表 3-1）的编排

名称 1	UN 编号 2	类别或 项别 3	次要 危 险性 4	标 签 5	国家差异 条款 6	特殊 规定 7	UN 包装 等级 8	例外数量 9	客 机		货 机	
									包装 说明 10	每个 包装件最 大净量 11	包装 说明 12	每个 包装件最 大净量 13
<b>Environmentally hazardous substances, liquid, n.o.s.*</b> 危害环境的液态物质，未另作规定的*	3082	9		Miscellaneous 杂项危险物品	CA 13 DE 5 US 4	A97 A158 <u>AXXX</u>	III	E1	964 <del>Y964</del>	450L 30 kg-G	964	450 L
<b>Environmentally hazardous substances, solid, n.o.s.*</b> 危害环境的固态物质，未另作规定的*	3077	9		Miscellaneous 杂项危险物品	CA 13 DE 5 US 4	A97 A158 A179 <u>AXXX</u>	III	E1	956 <del>Y956</del>	400 kg 30 kg-G	956	400 kg 

.....

**建议 2:**

第 3 部分 3, 表 3-2 增加下述特殊规定:

**第 3 章**  
**特殊规定**

.....

表 3-2 特殊规定

.....

本细则 UN

Axxx	<u>因其符合2.9.2.1 a)危害环境物质标准而被分类为危险品的物质, 如其内包装不超过5公斤(固体)或5升(液体)或外包装总质量不超过30公斤时, 不受本细则限制。当此类包装件为地面运输之目的贴有限制数量标志时, 必须在包装件地面运输所要求的限制数量标志附近标明联合国编号3077或3082。</u>
------	---

.....

**建议 3:**

3; 4.1.2 “第 9 类” 一行删除 UN 3077 和 UN 3082:

**第 4 章**  
**限制数量的危险物品**

.....

**4.1 适用范围**

.....

4.1.2 只有那些允许客机运输并符合以下类、项和包装等级(如果适用)标准的危险物品, 才可按照限制数量危险物品的规定运输:

第 2 类 仅限 2.1 项和 2.2 项下的 UN 1950, 和 2.1 项和 2.2 项下无次要危险性的 UN 2037

.....

第 9 类 仅限 UN 1941, UN 1990, UN 2071, ~~UN 3077, UN 3082~~, UN 3316, UN 3334 和 UN 3335

.....

建议 4:

4; 11 包装说明 Y956 的标题中删除联合国 3077, 包装表中删除 UN3077 项。包装说明 Y964 的标题中删除联合国 3082, 包装表中删除 UN3082 项。

## 第 4 部分

### 包装说明

.....

包装说明 Y956						
限制数量						
仅限于UN 3077和UN 3335的客机和货机运输						
.....						
组合包装						单一包装
联合国编号和运输专用名称	包装等级	内包装 (见 6.3.2)	(每个容器) 内包装数量	每个包装件 总量	每个包装件的总毛重	
UN 3077 <del>Environmentally hazardous substance, solid, n.o.s.</del> 危害环境的固态物质, 未另作规定的	III	玻璃	5.0 kg	30 kg	30 kg	否
		塑料	5.0 kg			
		金属	5.0 kg			
		纸袋	5.0 kg			
		UN 3335 Aviation regulated solid, n.o.s.* 空运受管制固体, 未另作规定的*	塑料袋			
		纤维	5.0 kg			
.....						

包装说明 Y964

限制数量

仅限于 UN 1941, UN 1990, ~~UN 3082~~ 和 UN 3334 的客机和货机运输

.....

组合包装					单一包装
联合国编号和运输专用名称	内包装 (见 6.3.2)	(每个容器) 内包装数量	每个包装件 总量	每个包装件总 毛重	
UN 1941 <b>Dibromodifluoromethane</b> 丙酸丁酯	玻璃	5.0 L	30 kg	30 kg	否
UN 1990 <b>Benzaldehyde</b> 苯甲醛	塑料	5.0 L			
<del>UN 3082 <b>Environmentally hazardous substance, liquid, n.o.s.</b></del> 危害环境的液态物质, 未另作规定的					
UN 3334 <b>Aviation regulated liquid, n.o.s.*</b> 空运受管制液体, 未另作规定的*	金属	5.0 L			

.....