



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/21)**

Virtual Meeting, 24 to 28 May 2021

Agenda Item 2: Managing air-specific safety risks and identifying anomalies

2.2: Develop proposals, if necessary, for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2023-2024 Edition

**PRECEDENCE OF CLASSIFICATION ENVIRONMENTALLY HAZARDOUS SUBSTANCE
VS AVIATION REGULATED SUBSTANCE**

(Presented by D. Brennan)

SUMMARY

This working paper proposes that there should be clarification that where a substance meets the classification criteria for an environmentally hazardous substance as set out in the UN Model Regulations that this takes precedence over the assignment of the substance to the entry for aviation regulated liquid or solid, UN 3334 or UN 3335, notwithstanding that the substance may have narcotic, noxious or other properties.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Effective the 1987-1988 Edition of the Technical Instructions, the Dangerous Goods Panel (DGP) adopted into Table 3-1 an entry “**Other regulated substances**” for any material with properties that if spilled or leaked could impact on crew members being able to perform their duties.

1.2 In the 1997-1998 Edition of the Technical Instructions, the entry was modified to become ID 8027, **Aviation regulated liquid, n.o.s.** and **Aviation regulated solid, n.o.s.** Following representation by ICAO to the UN Subcommittee of Experts, the entries were assigned to UN 3334 for the liquid entry and UN 3335 for the solid entry. This change became effective in the 1999-2001 Edition of the Technical Instructions.

1.3 Part 2 — Classification of Dangerous Goods, in 2;9.2 — Assignment to Class 9, Table 2-16 identifies that aviation regulated solid or liquid is:

... any material which has narcotic, noxious or other properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties.

1.4 Associated with the entries in Table 3-1 is Special Provision A27 that identifies that:

A27 (276) This includes any substance which is not covered by any of the other classes but which has narcotic, noxious or other properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties.

1.5 What is not clear from either the text in Part 2;9.2, Table 2-16 or Special Provision A27 is how aviation regulated substances should be treated within Class 9, specifically where a substance is classified as an environmentally hazardous substance.

1.6 This issue has been raised recently where a shipper offered for transport a concentrated celery oil, which is used as a food flavouring. The substance was assigned to UN 3082 — **Environmentally hazardous substance, liquid, n.o.s.** based on the classification criteria set out in the UN Model Regulations for environmentally hazardous substances. However, due to the presence of an odour from the packages, the operator during the acceptance check rejected the consignment on the basis that it should be classified as UN 3334 — **Aviation regulated liquid, n.o.s.**

1.7 The conflict in classification identifies some practical issues:

- a) there are no quantitative criteria to classify a substance as UN 3334 or UN 3335;
- b) there is no precedence within Class 9; and
- c) both the aviation regulated entries and the environmentally hazardous substances are assigned to exactly the same packing instructions (Packing Instructions 956 and 964).

1.8 The issue with assignment to UN 3334 or UN 3335 is that odour is very subjective and what may be deemed to be noxious by one person may be seen by another as very pleasant. There is also the conflict in that there are well-defined criteria for the classification of environmentally hazardous substances, which apply across all modes of transport, and it is believed that this must take precedence over classification as aviation regulated.

1.9 To address this conflict it is proposed to amend the information on aviation regulated substances in Table 2-16 to identify that where a substance meets the classification criteria as dangerous to the aquatic environment and assignment to UN 3077 or UN 3082, this take precedence over assignment to aviation regulated. It is also proposed to amend Special Provision A27 to include similar criteria.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to consider the revisions to the Technical Instructions as set out in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 2 OF THE TECHNICAL INSTRUCTIONS

Part 2

CLASSIFICATION OF DANGEROUS GOODS

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Chapter 9

CLASS 9 — MISCELLANEOUS DANGEROUS
SUBSTANCES AND ARTICLES, INCLUDING
ENVIRONMENTALLY HAZARDOUS SUBSTANCES

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9.2 ASSIGNMENT TO CLASS 9

The substances and articles of Class 9 are subdivided as shown in Table 2-16.

Table 2-16. Substances and articles of Class 9

<i>UN number</i>	<i>Name</i>	<i>Notes</i>
...		
<i>Other substances or articles presenting a danger during transport, but not meeting the definitions of another class</i>		
...		
3334	Aviation regulated liquid, n.o.s.	Aviation regulated liquid is any material which has narcotic, noxious or other properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties. <u>However, where a liquid meets the classification criteria as an environmentally hazardous substance as set out in 2.9.3 of the UN Model Regulations then it must be assigned to UN 3082, Environmentally hazardous substance, liquid, n.o.s.</u>

UN number	Name	Notes
3335	Aviation regulated solid, n.o.s.	Aviation regulated solid is any material which has narcotic, noxious or other properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties. <u>However, where a solid meets the classification criteria as an environmentally hazardous substance as set out in 2.9.3 of the UN Model Regulations then it must be assigned to UN 3077, Environmentally hazardous substance, solid, n.o.s.</u>
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PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

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Part 3

**DANGEROUS GOODS LIST,
SPECIAL PROVISIONS AND
LIMITED AND EXCEPTED QUANTITIES**

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Chapter 3

SPECIAL PROVISIONS

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Table 3-2. Special provisions

TIs UN

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A27 (276) This includes any substance which is not covered by any of the other classes but which has narcotic, noxious or other properties such that, in the event of spillage or leakage on an aircraft, extreme annoyance or discomfort could be caused to crew members so as to prevent the correct performance of assigned duties. However, where a substance meets the classification criteria as an environmentally hazardous substance as set out in 2.9.3 of the UN Model Regulations then it must be assigned to UN 3077 or UN 3082, as appropriate.

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