



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/24)**

Montreal, 21 to 25 October 2024

Agenda Item 3: Facilitating safe transport of dangerous goods by air (Ref: REC-A-DGS-2027)

**INCLUSION OF BLOOD AND BLOOD COMPONENTS UNDER THE GENERAL
EXCEPTIONS**

(Presented by S. Bitossi)

SUMMARY

The general exceptions provided in Part 1;1.1.5.1 a) of the Technical Instructions only apply to dangerous goods that support the preservation of tissues or organs intended for use in transplantation and do not include blood or blood components intended for life saving transfusions or transplantation.

Action by the DGP-WG: Action by the DGP-WG is in paragraph 22.

1. INTRODUCTION

1.1 Part 1;1.1.5.1 of the ICAO Technical Instructions provides a list of dangerous goods that, when carried under certain circumstances, may be excepted from full compliance with the Instructions. Part 1; 1.1.5.1 a) states:

1.1.5 General exceptions

1.1.5.1 Except for 7;4.2, these Instructions do not apply to dangerous goods carried by an aircraft where the dangerous goods are:

a) to provide, during flight, medical aid to a patient or to preserve tissues or organs intended for use in transplantation when those dangerous goods:

- 1) have been placed on board with the approval of the operator; or
- 2) form part of the permanent equipment of the aircraft when it has been adapted for specialized use;

providing that:

- 1) gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
- 2) equipment containing wet cell batteries is kept and, when necessary, secured in an upright position to prevent spillage of the electrolyte;

- 3) lithium metal or lithium ion cells or batteries meet the provisions of 2;9.3 and spare lithium batteries are individually protected so as to prevent short circuits when not in use;

Note.— For dangerous goods that passengers are permitted to carry as medical aid, see 8;1.1.2.

1.2 A new life saving refrigerator, that has been designed specifically to carry blood and blood components, is emerging within air ambulance operations.

1.3 This portable blood refrigerator can be both plugged into the aircraft system or be powered by the battery within. When plugged into the aircrafts power, the battery can recharge in flight whilst maintaining constant power and temperature.

1.4 The ability to charge in flight means that there is no requirement for batteries swapping whilst in flight or when transiting to remote areas or distant locations.

1.5 Currently, Part 1;1.1.5.1 a) only applies to the preservation of tissues or organs intended for use in transplantation and does not include blood or blood components intended for life saving transfusions or transplantation.

1.6 The addition of blood or blood components intended for life saving transfusions to Part 1;1.1.5.1 a) would then be consistent with the provisions of Part 2;6.3.2.3.7 whereby tissues and organs intended for use in transplantation are grouped together.

1.7 Without the inclusion of blood or blood components to this part of the General Exceptions, portable refrigerators used for carrying bloods cannot utilise the provisions of Part 1;1.1.5.1 a) and would therefore require a State exemption for the dangerous goods to be carried in the manner that the refrigerator was designed (i.e. in the cabin where it can be monitored during flight by air ambulance officers, doctors, nurses or medics, or easily accessed for operational need or when required to provide medical aid to a patient in flight).

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to review and agree to the proposed revision to Part 1;1.1.5.1 a) as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 1 OF THE TECHNICAL INSTRUCTIONS

Part 1

GENERAL

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Chapter 1

SCOPE AND APPLICABILITY

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1.1 GENERAL APPLICABILITY

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1.1.5 General exceptions

1.1.5.1 Except for 7;4.2, these Instructions do not apply to dangerous goods carried by an aircraft where the dangerous goods are:

a) to provide, during flight, medical aid to a patient or to preserve blood, blood components, tissues or organs intended for use in transfusion or transplantation when those dangerous goods:

- 1) have been placed on board with the approval of the operator; or
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- 1) gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
- 2) equipment containing wet cell batteries is kept and, when necessary, secured in an upright position to prevent spillage of the electrolyte;
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