International Civil Aviation Organization

DGP/24-WP/45
30/8/13

WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-FOURTH MEETING

Montréal, 28 October to 8 November 2013

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 2015-2016 Edition

UN NUMBERS NOT INCLUDED IN THE LIST OF DANGEROUS GOODS

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SUMMARY

This working paper proposes to add a number of items to Table 3-1 which although assigned UN numbers and listed in the UN Model Regulations are not currently listed in the Technical Instructions

Action by the DGP: The DGP is invited to amend Table 3-1, Special Provision A123 and to add new special provisions to the Technical Instructions as shown in Appendix A to this working paper. The DGP is also invited to amend Table S-3-1 (Classes 3 to 9) of the Supplement to the Technical Instructions as shown in Appendix B to this working paper.

1. INTRODUCTION

1.1 There are a number of items of dangerous goods which, although assigned UN numbers and listed in the UN Model Regulations, are not currently listed in Table 3-1. It is believed this is because, given the nature these items, there would never be a need to transport them by air. However, for one item, UN 1327 **Hay**, **Straw** or **Bhusa**, enquires were recently received in the United Kingdom by an operator wishing to transport large quantities for feeding race horses and the wording of the applicable special provision 281 of the UN Model Regulations suggests that carriage by air may be subject to special authorization, but there is no corresponding requirement in the Technical Instructions. A request was also received concerning the carriage of another omitted item, UN 1374 **Fish meal**. The omission of these items has also caused confusion, as it is sometimes not clear whether, by not being listed, an item is not restricted or forbidden for carriage.

1.2 During DGP-WG/12 two working papers (DGP-WG/12-WP/29 and DGP-WG/12-WP/34 were presented regarding this subject. There was strong support for adding these substances to the Technical Instructions.

1.3 While analyzing the UN numbers not listed in Table 3-1, the following was noted:

a) most of them are unstabilized substances of Division 4.2, in Packing Group II and III and a general approach has been followed to list these as forbidden on both passenger and cargo aircraft but with Special Provision A2, so these could be carried on cargo aircraft with approval of the State or Origin and the State of the Operator.

b) UN 1327 when not wet, damp or contaminated with oil is not dangerous and it is proposed to show this UN number with an equivalent special provision to special provision 281 of the UN Model Regulations.

c) With UN 2216 Fish meal, fish scrap and UN 3497 Krill meal UN special provision 300 applies and these substances shall not be transported if the temperature at the time of loading exceeds certain levels. Therefore, it is proposed to also list these UN numbers as forbidden on both passenger and cargo aircraft but with Special Provision A2 assigned.

d) For UN 3359 Fumigated transport unit the possibility exists that these units would contain small amounts of toxic gases, therefore it is proposed that these would be forbidden for transport by air under any circumstances.

e) Batteries, nickel-metal hydride (UN 3496) are only regulated for sea transport. It is proposed to list this UN number with two new special provisions, to show under which conditions these batteries can be carried by air. This is similar to the approach for Batteries, dry with the current Special Provisions A123.

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APPENDIX A

PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

Part 3

DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND LIMITED AND EXCEPTED QUANTITIES

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Chapter 2

ARRANGEMENT OF THE DANGEROUS GOODS LIST (TABLE 3-1)

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Table 3-1. Dangerous Goods List

Name	UN No.	Class or division	Sub-sidiary risk	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger aircraft		Cargo aircraft	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Sulphuric acid with not more than 51% acid	2796	8		Corrosive								
Hay	1327	4.1				AXXX						
Straw	1327	4.1				AXXX						
Busha	1327	4.1				AXXX						
Fibres, animal burnt, wet or damp	1372	4.2				A2			Forbidden		Forbidden	
Fibres, vegetable burnt, wet or damp	1372	4.2				A2			Forbidden		Forbidden	
Fish meal, unstabilized	1374	4.2				A2			Forbidden		Forbidden	
Fish scrap, unstabilized	1374	4.2				A2			Forbidden		Forbidden	

Wool waste, wet	1387	4.2				A2			Forbidden		Forbidden	
Rags, oily	1856	4.2				A2			Forbidden		Forbidden	
Textile waste, wet	1857	4.2				A2			Forbidden		Forbidden	
Krill meal	3497	4.2				A2			Forbidden		Forbidden	
Fish meal, stabilized	2216	9				A2			Forbidden		Forbidden	
Fish scrap, stabilized	2216	9				A2			Forbidden		Forbidden	
Fumigated cargo transport unit	3359	9							Forbidden		Forbidden	
Fibres, vegetable, dry	3360	4.1				A2			Forbidden		Forbidden	
Batteries, nickel-metal hydride	3496	9				AYYY AZZZ						

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Chapter 3

SPECIAL PROVISIONS

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Table 3-2. Special provisions

TIs	*UN*	
. . .		
A123		This entry applies to Batteries, electric storage, not otherwise listed in Table 3-1. Examples of such batteries are: alkali-manganese, zinc-carbon~~, nickel metal hydride~~ and nickel-cadmium batteries. Any electrical battery or battery-powered device, equipment or vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent: a) a short circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals); and b) unintentional activation. The words “not restricted” and the special provision number A123 must be provided on the air waybill when an air waybill is issued.
AXXX	281	The transport by air of hay, straw or bhusa, wet, damp or contaminated with oil is forbidden unless exempted in accordance with Part 1;1.1.3. Hay, straw and bhusa, when not wet, damp or contaminated with oil are not subject to these Instructions.

TIs	*UN*	
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AYYY		Any nickel-metal hydride battery or battery-powered device, equipment or vehicle with these batteries having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent: a) a short circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals); and b) unintentional activation. The words “not restricted” and the Special Provision number AYYY must be provided on the air waybill when an air waybill is issued.
AZZZ	(117)	Only regulated for sea transport, not subject to these Instructions.
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APPENDIX B

PROPOSED AMENDMENT TO THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS

Part S-3

DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND QUANTITY LIMITATIONS

Chapter 4

SUPPLEMENTARY DANGEROUS GOODS LIST

Classes 3 to 9

Table S-3-1. Supplementary Dangerous Goods List (Classes 3 to 9)

									Passenger aircraft		Cargo aircraft	
Name	*UN No.*	*Class or division*	*Subsidiary risk*	*Labels*	*State variations*	*Special provisions*	*UN packing group*	*Excepted quantity*	*Packing instruction*	*Max. net quantity per package*	*Packing instruction*	*Max. net quantity per package*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
Sulphuric acid with not more than 51% acid	2796	8		Corrosive								
Fibres, animal burnt, wet or damp	1372	4.2		Spontaneous combustion		A2	III		Forbidden	471	(100 kg)	
Fibres, vegetable burnt, wet or damp	1372	4.2		Spontaneous combustion		A2	III		Forbidden	471	(100 kg)	
Fish meal, unstabilized	1374	4.2		Spontaneous combustion		A2 AYYY	II		Forbidden	471	(100 kg)	
Fish scrap, unstabilized	1374	4.2		Spontaneous combustion		A2 AYY Y	II		Forbidden	471	(100 kg)	
Wool waste, wet	1387	4.2		Spontaneous combustion		A2	III		Forbidden	471	(100 kg)	
Rags, oily	1856	4.2		Spontaneous		A2			Forbidden	471	(100 kg)	

				combustion								
Textile waste, wet	1857	4.2		Spontaneous combustion		A2	III		Forbidden	471	(100 kg)	
Krill meal	3497	4.2		Spontaneous combustion		A2 AYYY	II III		Forbidden Forbidden	471	(100 kg)	
Fish meal, stabilized	2216	9		Miscellaneous		A2	III		Forbidden	956	200 kg	
Fish scrap, stabilized	2216	9		Miscellaneous		A2	III		Forbidden	956	200 kg	
Fibres, vegetable, dry	3360	4.1		Solid flammable		A2 A48			Forbidden	4XX	[No limit]	
Fumigated cargo transport unit	3359	9				AZZZ			Forbidden			

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