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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
Bern, 16–20 March 2020
Item 5 (a) of the provisional agenda

Proposals for amendments to RID/ADR/ADN:
Pending issues

Period of use for plastic packagings for medical waste of UN No. 3549

Transmitted by the Government of Switzerland* **

Summary

Executive summary: Packagings for medical waste of Category A (UN No. 3549) should be subject to the same requirements as those for substances of UN Nos. 2814 and 2900. Furthermore, it should be possible to use plastic packagings for more than five years, as is the case for packagings for other Category A infectious substances of UN Nos. 2814 and 2900.

Action to be taken: Amend packing instruction P622

Related documents: 
ECE/TRANS/WP.15/AC.1/2019/22/Add.1
ECE/TRANS/WP.15/AC.1/156, para. 18 (i)
Informal document INF.25 of the 107th session of WP.15
ECE/TRANS/WP.15/248 paras. 25–27
UN/SCETDG/56/INF.15

Introduction

1. Taking into account the arguments put forward in informal document INF.25 of the 107th session of the Working Party on the Transport of Dangerous Goods (WP.15), WP.15

* Subprogramme 2 of the programme budget for 2020 (A/74/6 (Sect. 20) and additional information).
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and the RID Committee of Experts’ standing working group agreed not to maintain the following amendment, which had been adopted at the Joint Meeting in September 2019:

“4.1.8.6 At the end of the sentence, add “, nor to UN No. 3549 MEDICAL WASTE, CATEGORY A, AFFECTING HUMANS or MEDICAL WASTE, CATEGORY A, AFFECTING ANIMALS.””

2. The working groups adopted that decision pending a decision by the Joint Meeting in March (see paras. 25 to 27 of ECE/TRANS/WP.15/248 and para. 9 of draft report OTIF/RID/CE/GTP/2019-A). WP.15 also noted that a proposal on the subject was to be submitted to the Sub-Committee of Experts on the Transport of Dangerous Goods in December 2019, which was done in document UN/SCETDG/56/INF.15.

3. During the discussion on that document, two experts expressed reservations about the idea of allowing the use of plastic packagings for the transport of hospital waste of UN No. 3549 beyond the five-year period, although they understood the situation that hospitals could find themselves in if they had unused stocks of packaging that were past their expiry date. The arguments against this happening can be summarized as follows:

- When the packing requirements for UN No. 3549 were drafted, attention was paid to developing requirements for packagings that are easily produced and readily available in the trade, which is not the case for packagings for the other entries for Category A infectious substances, UN Nos. 2814 and 2900. Hospitals would therefore not need to keep stocks of the packagings.
- Plastics undergo degradation over time depending on storage and climatic conditions and the products they contain.

4. The majority of the experts and delegates who spoke nevertheless expressed their interest in finding a solution to the problem. None of the experts were in favour of reusing packagings intended for the disposal of infectious medical waste of UN No. 3549, since the safety conditions for them to be returned from incineration centres cannot be met.

5. The expert from Switzerland took note of the comments made and offered to submit a revised proposal taking account of the arguments put forward. Although the plan is to continue the discussions in the Sub-Committee of Experts, the mandate of WP.15 to seek the advice of the Joint Meeting remains valid in view of the urgent need to provide an answer to hospitals that procured stocks of packaging compliant with the new packing instruction P622 in 2014 and of the fact that any decisions that the Sub-Committee of Experts takes in July 2020 will not enter into force in RID/ADR/ADN until 2023.

6. The following answers can be given to arguments against the principle of applying the same rules for the period of validity for plastic drums and jerricans for UN No. 3549 as for UN Nos. 2814 and 2900:

- There is already a risk of degradation of plastics over time for UN Nos. 2814 and 2900, with the aggravating factor that, for those two UN numbers, indefinite reuse is allowed under 4.1.8.3. That is not the case for UN No. 3549, where the packaging is used only once and is burned at destination. In any case, the consignor may not use packagings which do not meet the type approval conditions or which are not suitable for transport. The consignor must comply with 4.1.1.1.
- The argument that the packaging is readily available, meaning that hospitals would not need to maintain a stock, does not reflect reality. When a patient is admitted, hospitals cannot be dependent on the length of time of the administrative procedures to obtain the necessary funds to purchase the packaging, nor on production and delivery times.

7. In the texts already adopted, in contrast to the provisions for other Category A infectious substances (UN Nos. 2814 and 2900), the provisions for Category A medical waste of UN No. 3549 (SP 395, P622, LP622) do not refer to 4.1.8. In particular, unlike P620 for UN Nos. 2814 and 2900, P622 for medical waste of UN No. 3549 does not contain any cross-reference to 4.1.8. Consequently, the provisions of 4.1.8.2 applicable to UN Nos. 2814 and 2900 do not apply to UN No. 3549. Thus, for medical waste of UN No. 3549, the permitted period of use for plastic drums and jerricans is limited to five years in accordance with 4.1.1.15.
8. There are some arguments that would justify applying the same rule on use after the five-year period to UN No. 3549 as to UN Nos. 2814 and 2900:

(a) Hospitals need to have these packagings rapidly available when a patient presents with a disease of this type, so the hospital must have the packagings in its stocks. Given the volume of waste generated by a patient and the production and delivery times that packaging manufacturers can guarantee, hospitals cannot wait for a patient to be admitted before placing packaging orders. It is therefore imperative for them to have several weeks’ worth of stocks to enable them to cope with both packaging delivery times and the large volumes of waste generated.

(b) However, as this type of disease is relatively rare, it is likely that the packaging will not be used regularly and will remain in hospital stocks for a long period of time without being used. This is already the case in Switzerland. The packagings are still in good condition because they have not been used.

(c) The five-year limit on use may be justified for packagings that have been used with different contents or filled with dangerous goods under ambient conditions that may affect the performance of the packaging. This should not be the case for new packaging stored in hospitals awaiting patients with Category A diseases and intended for use in the transport of UN No. 3549. Furthermore, outer packagings do not come into direct contact with the products, and solid infectious substances are unlikely to be so aggressive as to change the structure of the packaging. In this connection, it should be noted that the use of large plastic packagings that comply with the new packing instruction LP622 is not limited to five years, since they do not come into contact with the substances being transported either.

(d) Unlike packagings for UN Nos. 2814 and 2900, packagings for UN No. 3549 are not reused several times because they are intended to be incinerated after transport.

9. The only difference between packagings for UN No. 3549 and those for UN Nos. 2814 and 2900 are the type approval tests. The packaging tests for UN Nos. 2814 and 2900 in Chapter 6.3 are more stringent (9 m drop test) than those for packing group I for UN No. 3549 (1.8 m drop test). They are also more expensive and the type designation code displays the marking “Class 6.2”. These packagings have a de facto dedicated use for infectious substances of category A. The difference in the period of use cannot be justified on the basis of the tests, nor on the basis of the frequency and type of use. Unlike P620 packagings, P622 packagings are used only once and are burned at destination because there is no waste incineration plant with the infrastructure, personnel and procedures necessary to ensure the sterilization required to guarantee safe reuse of the packagings in question. Consequently, the risk of deterioration over time of packagings used once is even lower than for packagings for UN Nos. 2814 and 2900, which are used several times.

10. The decisive factor in allowing use beyond the five-year period, as currently permitted in 4.1.8.2 for Category A infectious substances, is first and foremost the type of products transported. Since P622 outer packagings are not in contact with the infectious substances themselves, there is no risk of deterioration during the single journey to the incineration plant. In this connection, it should be noted that the use of large plastic packagings that comply with the new packing instruction LP622 is not limited to five years, since they do not come into contact with the substances being transported either.

11. It would therefore seem that the same criteria can be applied for UN No. 3549 as for UN Nos. 2814 and 2900. This means that, if it is guaranteed that plastic packagings that comply with P622 are used only for infectious substances, consideration could be given to permitting the same period of use for them as for plastic packagings used for UN Nos. 2814 and 2900, that is, a period of use not dependent on the provisions of 4.1.1.15.

12. In order to permit the use of such packagings beyond the five-year period without the need for special authorizations for plastic drums and jerricans of UN No. 3549, the approach adopted in packing instruction P621 for waste containing infectious substances of Category B should be introduced by excluding 4.1.1.15 in new packing instruction P622, on condition of the dedicated use of such packagings for substances of UN No. 3549. The principle of exclusive use for UN No. 3549 should be introduced in the additional requirements in P622.
Proposal

13. Switzerland proposes the following amendments to packing instruction P622 in 4.1.4.1, as adopted in ECE/TRANS/WP.15/AC.1/2019/22/Add.1:

Amend the second sentence to read as follows (new text in bold underlined):

“The following packagings are authorized provided the general provisions of 4.1.1, except 4.1.1.15, and 4.1.3 are met:

Add the following new additional requirement 8:

“8. Subsection 4.1.1.15 is not applicable for drums and jerricans used exclusively for the carriage of UN No. 3549.”