Carriage of articles containing PCBs that are contaminated with dioxins and furans

Transmitted by the Government of Germany*,**

**Summary**

**Executive summary:** Uniform conditions of carriage for used articles containing PCBs, such as condensers and transformers which, because of their use, are also contaminated with substances of Class 6.1.

**Action to be taken:** Amendment of 2.1.3.4.2.

**Related documents:** None.

**Introduction**

1. P906 is the packing instruction that applies to polychlorinated biphenyls (PCBs), polyhalogenated biphenyls, polyhalogenated terphenyls and halogenated monomethyldiphenylmethanes of UN Nos. 2315, 3151, 3152 and 3432. For articles

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containing such substances, such as transformers or condensers, paragraph 2 sets out specific packing options. These include the use of non design type approved packagings and unpackaged carriage in metal trays, which also enable large devices to be carried.

2. These packing options are particularly important for the carriage of wastes, as there are still devices containing PCBs that have to be disposed of, both from industry and households. These are devices that are filled with chlorinated thermal oils. Examples of such devices, in addition to condensers and transformers, are oil radiators or hydraulic pistons from the mining industry. Because of their use, these used devices are also contaminated with polyhalogenated dibenzodioxins and dibenzofurans of Class 6.1.

3. In Germany, such transport has so far been carried out on the basis of special national provisions. According to these national provisions, such devices must always be classified as toxic (UN 2810 or UN 2811), although simplified packing requirements also apply. In reviewing whether the national rules are still necessary, it emerged that the exclusive application of RID/ADR/ADN can lead to a problem for the carriage of wastes. It must also be assumed that such transport also takes place across borders.

4. RID/ADR/ADN 2.1.3.4.2 applies to the classification of devices containing PCBs. According to 2.1.3.4.2, solutions and mixtures containing UN Nos. 2315, 3151, 3152 or 3432 must always be classified under the same entry of Class 9, provided they do not contain any additional dangerous components, other than components of packing group (PG) III of classes 3, 4.1, 4.2, 5.1, 6.1 or 8 and do not have the hazard characteristics as indicated in 2.1.3.5.3. This means that devices with substances containing PCBs can no longer be assigned to UN No. 2315 if they are also contaminated with polyhalogenated dibenzodioxins and dibenzofurans that meet the criteria for classification as UN 2811 PG I or PG II. The waste management industry has confirmed that contamination can reach such a level.

5. Used devices with substances containing PCBs, which are also contaminated with highly toxic or toxic substances, could be carried in accordance with the regulations on the basis of two approaches: one possibility would be to include packing options as in P906, paragraph 2, in packing instructions P001 and P002, which apply to UN 2810 and UN 2811. However, this implies that, depending on the degree of contamination with polyhalogenated dibenzodioxins and dibenzofurans, there must be separate classification in Class 9 or Class 6.1. However, such a differentiation might be difficult to afford in terms of waste transport. There are no generally applicable data for assessing toxicity and toxicity upon inhalation that can be called upon. Presumably, devices where the contamination by toxic residues has not been assessed in each individual case are already being carried as Class 9 in accordance with P 906, paragraph 2. A more practice-based solution would therefore be to amend RID/ADR/ADN 2.1.3.4.2. The aim of this would be to stipulate that used devices must also be assigned to UN Nos. 2315, 3151, 3152 or 3432 if they are also contaminated with substances of Class 6.1, PG I or II. In addition, the devices must not have the hazard characteristics as indicated in 2.1.3.5.3 (a) to (g) and (i).

Proposal

6. Insert the following new sentence at the end of 2.1.3.4.2:
“Used articles, e.g. transformers and condensers, shall always be classified under the same entry of Class 9, provided:

– they do not contain any additional dangerous components, other than components of packing group III of classes 3, 4.1, 4.2, 4.3, 5.1 or 8 or components of Class 6.1, and

– they do not have the hazard characteristics as indicated in 2.1.3.5.3 (a) to (g) and (i).”