

*HAZARDOUS WASTE IDENTIFICATION GUIDE*

*ANNEX 6*

*CLASSIFICATION OF WASTE CONTAINING POPS*

## 1. CUT-OFF VALUES FOR POPS IN ACCORDANCE WITH ANNEX IV TO THE POP REGULATION

Annex 1 to the Waste Management Rules specifies that wastes containing polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF), DDT (1,1,1-trichloro-2,2-bis (4-chlorophenyl)ethane), chlordane, hexachlorocyclohexanes (including lindane), dieldrin, endrin, heptachlor, hexachlorobenzene, chlordecone, aldrin, pentachlorobenzene, mirex, toxaphene hexabromobiphenyl and/or PCB exceeding the concentration limits indicated in Annex IV to the POP Regulation shall be classified as hazardous.

*Table 1: 15 POPs which are always classified as hazardous if their concentration exceeds the cut-off values.*

| Chemical substances   | Cut-off value, % |
|---|------------------|
| Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF) | 0.0000015        |
| DDT (1,1,1-trichloro-2,2-bis (4-chlorophenyl)ethane)            | 0.005            |
| Chlordane   | 0.005            |
| Hexachlorocyclohexanes, including lindane                       | 0.005            |
| Dieldrin  | 0.005            |
| Endrin  | 0.005            |
| Heptachlor  | 0.005            |
| Hexachlorobenzene   | 0.005            |
| Chlordecone   | 0.005            |
| Aldrin  | 0.005            |
| Pentachlorobenzene  | 0.005            |
| Polychlorinated Biphenyls (PCB)                                 | 0.005            |
| Mirex   | 0.005            |
| Toxaphene   | 0.005            |
| Hexabromobiphenyl   | 0.005            |

In 2016, 10 new POPs were added to Annex IV to the POP Regulation, including the concentration limits (see Table 2). Waste is considered hazardous when the substances listed below reach the generic concentration limits laid down in the CLP Regulation. Three of these POPs are not classified under the CLP.

*Table 2: 10 new POPs, in accordance with Annex IV to the POP Regulation, are classified as hazardous if their concentration exceeds the concentration limit laid down in the CLP Regulation.*

| 10 new POPs  | Concentration Limit, % |              |
|--|------------------------|--------------|
|  | POP, Annex IV          | CLP, generic |
| Endosulfan   | 0.005                  | 0.25         |
| Hexachlorobutadienes (HCBs)  | 0.01                   | –            |
| Polychlorinated naphthalenes (PCNs)  | 0.001                  | –            |
| Hexabromocyclodecane   | 0.1                    | 3            |
| Alkanes, C <sub>10</sub> -C <sub>13</sub> , chlorine (short chain chlorinated paraffins) (SCCPs)   | 1                      | 1*           |
| Perfluorooctane sulfonic acid and its derivatives (PFOS)   | 0.005                  | 0.3          |
| Brominated flame retardants (sum of the concentrations of tetrabromodiphenyl ether, pentabromodiphenyl ether, hexabromodiphenyl ether, heptabromodiphenyl ether and decabromodiphenyl ether) | 0.1                    | 10**         |
| *) 0.25, where ecotoxicity is relevant.  |                        |              |
| ** *) where ecotoxicity is relevant. Only pentabromodiphenyl ether is classified.  |                        |              |