ANNEX IV

List of substances subject to waste management provisions set out in Article 7

Substance	CAS No	EC No	Concentration limit referred to in Article 7(4)(a)	
Endosulfan	Endosulfan 115-29-7 959-98-8 33213-65-9		50 mg/kg	
Hexachlorobutadiene	87-68-3	201-765-5	100 mg/kg	
Polychlorinated naphthalenes <sup>a</sup>			10 mg/kg	
Alkanes C <sub>10</sub> -C <sub>13</sub> , chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8	287-476-5	10 000 mg/kg	
Tetrabromodiphenyl ether C <sub>12</sub> H <sub>6</sub> Br <sub>4</sub> O	40088-47-9 and others	254-787-2 and others	Sum of the concentrations of	
Pentabromodiphenyl ether C <sub>12</sub> H <sub>5</sub> Br <sub>5</sub> O	32534-81-9 and others	251-084-2 and others	tetrabromodiphenyl ether, pentabromodiphenyl	
Hexabromodiphenyl ether C <sub>12</sub> H <sub>4</sub> Br <sub>6</sub> O	36483-60-0 and others	253-058-6 and others	ether, hexabromodiphenyl ether,	
Heptabromodiphenyl ether C <sub>12</sub> H <sub>3</sub> Br <sub>7</sub> O 68928-80-3 and others		273-031-2 and others	heptabromodiphenyl ether and	

a Polychlorinated naphthalenes means chemical compounds based on the naphthalene ring system, where one or more hydrogen atoms have been replaced by chlorine atoms.

**b** The limit is calculated as PCDD and PCDF according to the following toxic equivalency factors (TEFs):

PCDD	TEF	PCDF	TEF	PCDD	TEF
2,3,7,8- TeCDD	1	2,3,7,8- TeCDF	0,1	1,2,3,6,7,8- HxCDF	0,1
1,2,3,7,8- PeCDD	1	1,2,3,7,8- PeCDF	0,03	1,2,3,7,8,9- HxCDF	0,1
1,2,3,4,7,8- HxCDD	0,1	2,3,4,7,8- PeCDF	0,3	2,3,4,6,7,8- HxCDF	0,1
1,2,3,6,7,8- HxCDD	0,1	1,2,3,4,7,8- HxCDF	0,1	1,2,3,4,6,7,8- HpCDF	0,01
1,2,3,7,8,9- HxCDD	0,1			1,2,3,4,7,8,9- HpCDF	0,01
1,2,3,4,6,7,8- HpCDD	0,01			OCDF	0,0003
OCDD	0,0003				

 $<sup>{</sup>f c}$  The calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall apply.

**d** 'Hexabromocyclododecane' means hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers: alpha-hexabromocyclododecane, beta-hexabromocyclododecane and gamma-hexabromocyclododecane.

Decabromodiphenyl ether C <sub>12</sub> Br <sub>10</sub> O	1163-19-5 and others	214-604-9 and others	decabromodiphenyl ether: 1 000 mg/kg. The [F1appropriate authority] shall review that concentration limit and shall, where appropriate F2, adopt a legislative proposal to lower that value to 500 mg/kg. The [F3appropriate authority] shall carry out such review as soon as possible and, in any event, not later than 16 July 2021.
Perfluorooctane sulfonic acid and its derivatives (PFOS) $C_8F_{17}SO_2X$ (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7 and others	217-179-8 220-527-1 249-644-6 249-415-0 274-460-8 260-375-3 223-980-3 250-665-8 216-887-4 246-262-1 206-200-6 and others	50 mg/kg

a Polychlorinated naphthalenes means chemical compounds based on the naphthalene ring system, where one or more hydrogen atoms have been replaced by chlorine atoms.

b	The limit is calculated as PCDD a	and PCDF according to th	e following toxic ed	quivalency factors (TEFs):
D	The fillit is calculated as I CDD a	and I CDI according to th	c following toxic co	quivalency factors (TEFS)

PCDD	TEF	PCDF	TEF	PCDD	TEF
2,3,7,8- TeCDD	1	2,3,7,8- TeCDF	0,1	1,2,3,6,7,8- HxCDF	0,1
1,2,3,7,8- PeCDD	1	1,2,3,7,8- PeCDF	0,03	1,2,3,7,8,9- HxCDF	0,1
1,2,3,4,7,8- HxCDD	0,1	2,3,4,7,8- PeCDF	0,3	2,3,4,6,7,8- HxCDF	0,1
1,2,3,6,7,8- HxCDD	0,1	1,2,3,4,7,8 HxCDF	- 0,1	1,2,3,4,6,7,8- HpCDF	0,01
1,2,3,7,8,9- HxCDD	0,1			1,2,3,4,7,8,9- HpCDF	0,01
1,2,3,4,6,7,8- HpCDD	0,01			OCDF	0,0003
OCDD	0,0003				

 $<sup>{</sup>f c}$  The calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall apply.

**d** 'Hexabromocyclododecane' means hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers: alpha-hexabromocyclododecane, beta-hexabromocyclododecane and gamma-hexabromocyclododecane.

D 1 11 ' . 1			
Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF)			15 μg/kg <sup>b</sup>
DDT (1,1,1- trichloro-2,2-bis (4- chlorophenyl)ethane)	50-29-3	200-024-3	50 mg/kg
Chlordane	57-74-9	200-349-0	50 mg/kg
Hexachlorocyclohexar including lindane	19-85-7 608-73-1	210-168-9 200-401-2 206-270-8 206-271-3	50 mg/kg
Dieldrin	60-57-1	200-484-5	50 mg/kg
Endrin	72-20-8	200-775-7	50 mg/kg
Heptachlor	76-44-8	200-962-3	50 mg/kg
Hexachlorobenzene	118-74-1	204-273-9	50 mg/kg
Chlordecone	143-50-0	205-601-3	50 mg/kg
Aldrin	309-00-2	206-215-8	50 mg/kg
Pentachlorobenzene	608-93-5	210-172-0	50 mg/kg
Polychlorinated Biphenyls (PCB)	1336-36-3 and others	215-648-1	50 mg/kg <sup>e</sup>
Mirex	2385-85-5	219-196-6	50 mg/kg

a Polychlorinated naphthalenes means chemical compounds based on the naphthalene ring system, where one or more hydrogen atoms have been replaced by chlorine atoms.

b	The limit is calculated as PCDD and PCDF according to the following toxic equivalency factors (TEI	Fs):

PCDD	TEF	PCDF	TEF	PCDD	TEF
2,3,7,8- TeCDD	1	2,3,7,8- TeCDF	0,1	1,2,3,6,7,8- HxCDF	0,1
1,2,3,7,8- PeCDD	1	1,2,3,7,8- PeCDF	0,03	1,2,3,7,8,9- HxCDF	0,1
1,2,3,4,7,8- HxCDD	0,1	2,3,4,7,8- PeCDF	0,3	2,3,4,6,7,8- HxCDF	0,1
1,2,3,6,7,8- HxCDD	0,1	1,2,3,4,7,8- HxCDF	0,1	1,2,3,4,6,7,8- HpCDF	0,01
1,2,3,7,8,9- HxCDD	0,1			1,2,3,4,7,8,9- HpCDF	0,01
1,2,3,4,6,7,8- HpCDD	0,01			OCDF	0,0003
OCDD	0,0003				

 $<sup>{</sup>f c}$  The calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall apply.

**d** 'Hexabromocyclododecane' means hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers: alpha-hexabromocyclododecane, beta-hexabromocyclododecane and gamma-hexabromocyclododecane.

Toxaphene	8001-35-2	232-283-3	50 mg/kg
Hexabromobiphenyl	36355-01-8	252-994-2	50 mg/kg
Hexabromocyclododeo	3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	247-148-4 221-695-9	1 000 mg/kg F4

- a Polychlorinated naphthalenes means chemical compounds based on the naphthalene ring system, where one or more hydrogen atoms have been replaced by chlorine atoms.
- **b** The limit is calculated as PCDD and PCDF according to the following toxic equivalency factors (TEFs):

PCDD	TEF	PCDF	TEF	PCDD	TEF
2,3,7,8- TeCDD	1	2,3,7,8- TeCDF	0,1	1,2,3,6,7,8- HxCDF	0,1
1,2,3,7,8- PeCDD	1	1,2,3,7,8- PeCDF	0,03	1,2,3,7,8,9- HxCDF	0,1
1,2,3,4,7,8- HxCDD	0,1	2,3,4,7,8- PeCDF	0,3	2,3,4,6,7,8- HxCDF	0,1
1,2,3,6,7,8- HxCDD	0,1	1,2,3,4,7,8- HxCDF	0,1	1,2,3,4,6,7,8- HpCDF	0,01
1,2,3,7,8,9- HxCDD	0,1			1,2,3,4,7,8,9- HpCDF	0,01
1,2,3,4,6,7,8- HpCDD	0,01			OCDF	0,0003
OCDD	0,0003				

- c The calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall apply.
- **d** 'Hexabromocyclododecane' means hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers: alpha-hexabromocyclododecane, beta-hexabromocyclododecane and gamma-hexabromocyclododecane.

## **Textual Amendments**

- F1 Words in Annex 4 substituted (31.12.2020) by The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (S.I. 2020/1358), regs. 2(2), 27(2)(a)(i)
- **F2** Words in Annex 4 omitted (31.12.2020) by virtue of The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (S.I. 2020/1358), regs. 2(2), **27(2)(a)(ii)**
- **F3** Words in Annex 4 substituted (31.12.2020) by The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (S.I. 2020/1358), regs. 2(2), **27(2)(b)**
- **F4** Words in Annex 4 omitted (31.12.2020) by virtue of The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (S.I. 2020/1358), regs. 2(2), **27(3)**

## **Changes to legislation:**

There are currently no known outstanding effects for the Regulation (EU) 2019/1021 of the European Parliament and of the Council, ANNEX IV.