German Regulation concerning Mercury – Waste Water

AbwV**	Sector / Industry	Limit value	Comments
Annex 9	Manufacture of paints and coating resins	No detection limit	Wastewater should not contain mercury compounds which result from the use of preservatives and microbicidal additives
Annex 22	Chemical Industry	a) 0.05 mg/l* b) 0.001 mg/l*	a) Wastewater flows from manufacturing, processing or use b) Others
Annex 23	Biological waste treatment plants	0.05 mg/l*	
Annex 27	Waste Treatment by chemical and physical processes (CP-facilities) and waste oil processing	0.05 mg/l*	
Annex 31	Water treatment, cooling systems, steam generation	No detection limit	Wastewater should not contain mercury compounds which result from the use of operating and auxiliary materials
Annex 33	Scrubbing of waste gases from waste combustion	9 mg/Mg waste	Calculated from a qualified random sample or 2-hour composite sample and the referring waste water volume
Annex 38	Textile manufacturing, textile finishing	No detection limit	Wastewater should not contain mercury and its compounds from the use as a preservative
Annex 39	Non-ferrous metal production	a) 0.05 mg/l* b) 1 g/Mg production capacity	b) The production-specific load level (g/Mg) refers to the approved production capacity of lead, copper, zinc and by-products and becomes effective in case of an approved production capacity of more than 10 tons per day
Annex 40	Metal working, metal processing, here: only Battery manufacture	a) 0.05 mg/l* b) 30 g/Mg	b) The production-specific load level (g/Mg) refers to the used amount of mercury in the specific waste water stream before mixing with other waste waters.

AbwV**	Sector / Industry	Limit value	Comments
Annex 42	Chlor-alkali electrolysis, amalgam process (existing plants)	a) 0.04 g/Mg Cl b) 0.05 mg/l* c) 0.3 g/Mg Cl*	a) The level has to be kept in the specific waste water stream before mixing with other waste waters. b) + c) These levels have to be kept at the point of discharge into the tap water. The production-specific load levels (g/Mg) refers to the chlorine production capacity in 24 hours.
Annex 42	Chlor-alkali electrolysis, diaphragma process (existing plants)	-	Mercury is not mentioned.
Annex 42	Chlor-alkali electrolysis, new plants	No detection limit	Waste water at the site of occurrence should not contain mercury compounds which result from the use of operating and auxiliary materials in the production process. This requirement is fulfilled, if mercury is not used as operating or auxiliary material in the operating unit “chlor-alkali electrolysis”.
Annex 48	Use of certain hazardous substances (except chlor-alkali electrolysis)	a) 0.05 mg/l* b) 0.1 g/Mg VC production capacity c) 5 g/kg Hg used d) 0.7 g/kg Hg used e) 0.05 g/kg Hg used f) 0.1 g/Mg b) 1.5 g/Mg	a) In general b) Use of mercury catalysts for vinyl chloride production c) Use of mercury catalysts for other types of production d) Production of mercury catalysts for use in vinyl chloride production e) Production of mercury catalysts for use in other types of production b) to e) refer to the capacity for use of mercury within 24 hours approved under water law. f) Titanium dioxide production, chloride process g) Titanium dioxide production, sulphate process f) and g) refer to the production capacity approved under water law.

AbwV**	Sector / Industry	Limit value	Comments
Annex 50	Dental treatment	none	Reduction of the amalgam load of the raw sewage at the place of origin by 95 %, e.g. by installation of an approved amalgam separator with a reduction efficiency of at least 95 %
Annex 51	Surface storage of waste	0.05 mg/l*	Wastewater before mixing with other waste waters.
Annex 53	Photographic processes (silver-halide photography)	0.05 mg/l*	Wastewater from the treatment of baths, before mixing with other waste waters.
Annex 55	Laundries	0.05 mg/l*	Wastewater from the washing of cleaning cloths, work wear (from the following sectors: metal processing, machinery, motor vehicles, businesses and chemical plants), carpets and mats, before mixing with other waste waters.
Annex 56	Production of printing forms, print and graphic products	No detection limit	Wastewater should not contain mercury. This requirement is regarded as fulfilled if the operating and auxiliary materials and used chemicals are listed in a logbook, their use is documented and the producer declares that these materials and chemicals do not contain mercury.

* Qualified random sample or 2-hour composite sample

** **Waste water regulation:** Verordnung über Anforderungen an das Einleiten von Abwasser in Gewässer (Abwasserverordnung - AbwV) vom 21.03.1997, zuletzt geändert am 31.7.2009, BGBl. I S. 2585

German Regulation concerning Mercury – Sewage Sludge*

Limit value	Comments
1 mg/kg d.s. soil	The application of sewage sludge on agriculturally or horticulturally used soil is prohibited if the limit value for mercury or one of the other mentioned heavy metals (lead, cadmium, chromium, copper, nickel, zinc) in soil or sewage sludge is exceeded.
8 mg/kg d.s. sewage sludge	

* **Sewage sludge regulation:** Klärschlammverordnung vom 15.4.1992 (BGBl. I S. 912), zuletzt geändert am 9.11.2010, BGBl. I S. 1504