



Group of Technical Experts on Mercury Waste

Thresholds

Minamata Convention on Mercury

Geneva, 16-18 February 2022

Existing thresholds related to mercury waste

1. Decision MC-4/6 invited parties to share information and data on the waste categories listed in the indicative list contained in table 3 of the annex to decision MC-3/5, including with respect to any relevant national or local thresholds and their establishment, and requested the secretariat to compile such information and distribute it to the group of technical experts as soon as possible and make it available electronically.
 2. The submitted information, together with information made available during the previous intersessional period, has been compiled and circulated to the group of technical experts. The most updated information is available in document UNEP/MC/WT.2/INF/2.
 3. The group of technical experts requested the secretariat to prepare a table of existing thresholds. The table is attached to this document.
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Country	Waste/media type	Value	Approach	Test method
Thresholds based on mercury concentration				
Brazil	Soil - agricultural soil	12 mg/kg	Total concentration	
Brazil	residential area soil	36 mg/kg	Total concentration	
Brazil	industrial area soil	70 mg/kg	Total concentration	
Brazil	biosolids Class 1	17 mg/kg	Total concentration	
Brazil	biosolids Class 2	57 mg/kg	Total concentration	
Canada (Saskatchewan)	Waste dangerous goods	0.01%	Total concentration	
Canada (Yukon)	Soil - agricultural, parks and residential	15ug/g	Total concentration	
Canada (Yukon)	Soil - commercial	40ug/g	Total concentration	USEPA method 1311 (TCLP)
Indonesia	Soil - hazardous waste management caterogy 1	300mg/kg	Total concentration	
Indonesia	Soil - hazardous waste management caterogy 2	75mg/kg	Total concentration	
Indonesia	Soil - non-hazardous waste management	0.3mg/kg	Total concentration	
Iran	National soil standard (pH<7, natural lands, agriculture, parks, residential)	5mg/kg	Total concentration	
Iran	National soil standard (pH<7, industrial)	30mg/kg	Total concentration	
Iran	National soil standard (pH>7, agriculture)	7mg/kg	Total concentration	
Iran	National soil standard (pH>7, groundwater protection)	10mg/kg	Total concentration	
Iran	National soil standard (pH>7, food safety)	12mg/kg	Total concentration	
Iran	National soil standard (pH>7, residential)	15mg/kg	Total concentration	
Iran	National soil standard (pH<7, natural lands, parks, industrial)	55mg/kg	Total concentration	
Iran	Threshold of mercury waste in agricultural land use	16ppm	Total concentration	
Iran	Threshold of mercury waste in forest land use	20ppm	Total concentration	
Iran	Threshold of mercury waste in contact public places	16ppm	Total concentration	
Iran	Threshold of mercury waste in Soil Reclamation	20ppm	Total concentration	
Iran	Threshold of mercury waste in industrial land use	23ppm	Total concentration	

Country	Waste/media type	Value	Approach	Test method
Iran	Threshold of mercury waste in landfill site	23ppm	Total concentration	
Japan	Dust and others contaminated with mercury or mercury compounds	15 ppm	Total concentration	
Japan	Recyclable material containing mercury (non-waste)	0.1%	Total concentration	
Korea	Slag from the process of smelting metal or non-metal is used for cement manufacturing	2mg/kg	Total concentration	
Korea	Recycling of incineration and bauxite residues as raw materials in ceramic industries	16mg/kg	Total concentration	
Korea	Recycling general waste as an alternative material for cement	2mg/kg	Total concentration	
Korea	Recycling waste organic solvents, waste paints, etc. as recycled organic solvents excluding waste isopropyl alcohol	1mg/kg	Total concentration	
Korea	Artificial soil used for ecological restoration and greening, use as filling materials for land and cover materials in landfill site	4-20 mg/kg	Total concentration	
Korea	Auxiliary fuel for cement kiln (waste excluding hazardous waste)	1.2 mg/kg	Total concentration	
Korea	Auxiliary fuel for cement kiln (Woody waste)	1 mg/kg	Total concentration	
Korea	Reclaimed fuel oil	1mg/kg	Total concentration	
Korea	Organic sludge recycled as fuel	1.2mg/kg	Total concentration	
Korea	Solid Refuse Fuel (SRF) from waste	1mg/kg	Total concentration	
Korea	Bio-SRF	1.2mg/kg	Total concentration	
Korea	Guideline on transboundary movement	0.1%	Total concentration	
Switzerland	demolition and excavation material (unpolluted)	0.5mg/kg	Total concentration (dry matter)	

Country	Waste/media type	Value	Approach	Test method
Switzerland	demolition and excavation material (subject to further use in construction materials)	1mg/kg	Total concentration (dry matter)	
Switzerland	Use of waste as raw material and raw mix corrective in cement clinker production	1mg/kg	Total concentration (dry matter)	
Switzerland	Use of waste as alternative fuel in cement clinker production	1mg/kg	Total concentration (dry matter)	
Switzerland	Type B landfill (inert waste)	2mg/kg	Total concentration (dry matter)	
Switzerland	Type C landfill (solidified fly ashes of MSWI)	5mg/kg	Total concentration (dry matter)	
Switzerland	Type D landfill (slag of MSWI)	5mg/kg	Total concentration (dry matter)	
Switzerland	Type E landfill (other waste, slightly reactive)	5mg/kg	Total concentration (dry matter)	
Thailand	Hazardous waste (mercury-contaminated sewage or unused material)	20mg/kg	Total concentration	
Uganda	waste containing mercury or mercury compound	0.1%	Concentration of elemental mercury and/or certain mercury compounds	
Uganda	waste containing mercury or mercury compound	1%	Concentration of certain mercury compounds (e.g. mercury nucleate)	
United States	Hazardous waste (thermal treatment)	260mg/kg	Total concentration	
United States	Biosolids (concentration in sludge applied to land)	57mg/kg	Total concentration	
United States	Biosolids (cumulative loading)	17kg/hectare	Total concentration	
United States	Biosolids (monthly average concentration)	17mg/kg	Total concentration	
United States	Biosolids (annual loading rate)	0.85kg/hectar	Total concentration	
Thresholds based on leachate				
Brazil	Hazardous waste	0.1mg/L	Leachate	
Brazil	Standards for the test of solubilization	0.001mg/L	Leachate	
Canada (Federal)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)

Country	Waste/media type	Value	Approach	Test method
Canada (British Columbia)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Alberta)	Hazardous waste	0.2mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Saskatchewan)	Landfill acceptance	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Manitoba)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Ontario)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Quebec)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (New Foundland)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Northwest territories)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
Canada (Ninavut)	Hazardous waste	0.1mg/L	Leachate	USEPA method 1311 (TCLP)
China	Hazardous characteristic of leaching toxicity	0.1mg/L	Leachate	Extraction procedure for leaching toxicity- sulphuric acid and nitric acid method (HJ/T299-2007)
China	Municipal solid waste landfill	0.05mg/L	Leachate	Extraction procedure for leaching toxicity- sulphuric acid and nitric acid method (HJ/T299-2007)
Ethiopia	Sewage sludge	8mg/kg	Leachate?	
Ethiopia	Soil	1mg/kg	Leachate?	
Ethiopia	Landfill Class 0	0.001mg/L	Leachate?	
Indonesia	Soil - hazardous waste management caterogy 1	0.3mg/L	Leachate	TCLP
Indonesia	Soil - hazardous waste management caterogy 2	0.05mg/L	Leachate	TCLP
Indonesia	Soil - non-hazardous waste management	0.02mg/L	Leachate	TCLP
Japan	Specifically-controlled industrial waste (slag, soot and dust, sludge, treated substances or objects thereof and treated waste acid and waste alkali)	0.005mg/L	Leachate	Oficial leaching test (JLT-13)
Japan	Specifically-controlled industrial waste (waste acid and waste alkali)	0.05mg/L	Leachate	Oficial leaching test (JLT-13)
Korea	Mercury waste	0.005mg/L	Leachate	
Korea	Slag from the process of smelting metal or non-metal is used for cement manufacturing	0.003mg/L	Leachate	
Switzerland	Type B landfill (inert waste)	0.01mg/L	Leachate	
Thailand	Hazardous waste (extracted using wet extraction test)	0.2mg/L	Leacheate	
United States	Hazardous waste (landfill acceptance)	0.2mg/L	Leachate	USEPA method 1311 (TCLP)

Country	Waste/media type	Value	Approach	Test method
Thresholds for wastewater				
Botswana	Discharge to perennial environments	0.001mg/L	Water concentration	
Botswana	Discharge to ephemeral and other environments	0.02mg/L	Water concentration	
Cameroon	Discharge of treated water	0.03mg/L	Water concentration	
Cameroon	Treated wastewater from landfill	15mg/L	Water concentration?	
Cameroon	Discharge of treated water from pharmaceutical industry and health center	0.01mg/L	Water concentration	
DR Congo	Discharge from mining industry?	0.002mg/L	Water concentration?	
Egypt	Treated wastewater	0.001mg/L	Water concentration	
Egypt	Discharge from incineration of households and medical waste	0.1mg/L	Water concentration	
Egypt	Discharge from petrochemical industries	0.2mg/L	Water concentration	
Egypt	Discharge from hydrochloric acid and chlorine	0.2mg/L	Water concentration	
Egypt	Discharge from non-ferrous industries	0.02mg/L	Water concentration	
Egypt	Discharge from coal production	1mg/L	Water concentration	
Egypt	Discharge from cement industries	0.5mg/L	Water concentration	
Indonesia	Wastewater quality standard	0.005mg/L	Water concentration	
Korea	Liquid waste generated from food waste treatment as an organic carbon source	0.005/mg/L	Water concentration	
Uganda	Effluent discharge limit	0.01mg/L	Water concentration	
United States	Wastewater	0.15mg/L	?	?
Zambia	Wastewater	0.002 mg/L	Water concentration	