

Table 1 Water quality items and limits of discharge from the wafer and semiconductor manufacturing industry

Item			Limit	Remarks
Water temperature	Discharge into non-marine surface water bodies		Lower than 38°C (from May to September)	
			Lower than 35°C (from October to April of the following year)	
	Direct discharge into the ocean		Water temperature at discharge point ≤ 42°C; temperature difference of surface water 500m from discharge point ≤ 4°C	
Hydrogen ion concentration index			6.0—9.0	
Villiaumite			15	
Nitrate nitrogen			50	
Ammonia nitrogen	Discharged into tap water quality and volume protection area		10	
	Discharged into sites outside tap water quality and volume protection area	Constructed, under construction or tendering procedures completed before Dec. 1, 2011	30	
		Tendering procedures not completed before Dec. 1, 2011	20	
Orthophosphate (calculated based on trivalent phosphate ion)	Discharged into tap water quality and volume protection area		4.0	
Total phosphorus	Discharged into sites outside tap water quality and volume protection area	Constructed, under construction or tendering procedures completed before Dec.18, 2024	100	1. In effect from Jan. 1, 2027. 2. If there are technical difficulties or if a project or other improvement measure is involved, the enterprise shall submit an effluent pollutant reduction management plan by Mar. 31, 2026, and shall implement the content of said plan after approval by the special municipality, county, or city competent authority; enforced from Jan. 1, 2029.
			50	1. In effect from Jan. 1, 2029. 2. If there are technical difficulties or if a

				project or other improvement measure is involved, the enterprise shall submit an effluent pollutant reduction management plan by Mar. 31, 2028, and shall implement the content of said plan after approval by the special municipality, county, or city competent authority; enforced from Jan. 1, 2031.
			25	1. In effect from Jan. 1, 2031. 2. If there are technical difficulties or if a project or other improvement measure is involved, the enterprise shall submit an effluent pollutant reduction management plan by Mar. 31, 2030, and shall implement the content of said plan after approval by the special municipality, county, or city competent authority; enforced from Jan. 1, 2033.
		Tendering procedures not completed before Dec.18, 2024	25	
Phenols			1.0	
Anionic surfactant			10	
Cyanide			1.0	
Grease (Hexane extracts)			10	
Dissolved iron			10	
Dissolved manganese			10	
Cadmium	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	0.03		
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.02		
	Tendering procedures not completed before Dec. 25, 2017	0.02		
Lead	Constructed, under construction or tendering procedures	1.0		

	completed before Dec. 25, 2017		
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.5	
	Tendering procedures not completed before Dec. 25, 2017	0.5	
Total chromium	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	2.0	
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	1.5	
	Tendering procedures not completed before Dec. 25, 2017	1.5	
Hexavalent chromium	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	0.5	
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.35	
	Tendering procedures not completed before Dec. 25, 2017	0.35	
Copper	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of less than 500m ³ /day	3.0	
		2.0	In effect from Jan. 1, 2027.
	Tendering procedures not completed before Dec. 25, 2017 with an approved discharge volume of less than 500m ³ /day	1.5	
	Constructed, under construction or tendering procedures completed before Dec. 18, 2024 with an approved discharge volume of more than 500m ³ /day	1.5	
		1.0	In effect from Jan. 1, 2027.
	Tendering procedures not completed before Dec. 18, 2024 with an approved discharge volume of more than 500m ³ /day	1.0	
Zinc	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	5.0	

	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	3.5	
	Tendering procedures not completed before Dec. 25, 2017	3.5	
Nickel	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	1.0	
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.7	
	Tendering procedures not completed before Dec. 25, 2017	0.7	
Selenium	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	0.5	
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.35	
	Tendering procedures not completed before Dec. 25, 2017	0.35	
Arsenic	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	0.5	
	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	0.35	
	Tendering procedures not completed before Dec.25, 2017	0.35	
Tin	Constructed, under construction or tendering procedures completed before Dec. 25, 2017 with an approved discharge volume of more than 500m ³ /day	2.0	
	Tendering procedures not completed before Dec. 25, 2017	1.0	
Total mercury		0.005	
Silver		0.5	
Boron	Discharged into tap water quality and volume protection area	1.0	
	Discharged into sites outside tap water quality and volume protection area	5.0	
Molybdenum		0.6	
Sulfide		1.0	
Chemical oxygen demand		100	
Suspended solids		30	
Total toxic organics		1.37	

N-methylpyrrolidone	Approved discharge volume of more than 10,000 m ³ per day except for those only engaging in polishing, cutting, testing or packaging	1.0	
2-Methoxy-1-propano		0.1	
Dimethylacetamide		0.1	
Cobalt		1.0	
Antimony		1.0	