

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 (for May to September)	
		Lower than 35°C (for October to next April)	
	Direct discharge to the ocean	Water temperature at discharge point $\leq 42^{\circ}\text{C}$; temperature difference of surface water 500m from discharge point $\leq 4^{\circ}\text{C}$	
Hydrogen ion concentration index		6.0—9.0	
Villiaumite		15	
Nitrite nitrogen		50	
Ammonia nitrogen	Discharged into tap water quality and volume protection area		10
	Discharged into places 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
Phenols		1.0	
Anion 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 more than 500m ³ /day		0.02
	Tendering procedures not completed before Dec.25, 2017		0.02
Lead	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 more than 500m ³ /day		0.5

In effect from Jan. 1, 2021.

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	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 more than 500m ³ /day	1.5	In effect from Jan. 1, 2021.
	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 more than 500m ³ /day	0.35	In effect from Jan. 1, 2021.
	Tendering procedures not completed before Dec.25, 2017	0.35	
Copper	Constructed, under construction or tendering procedures completed before Dec.25, 2017	3.0	
	Constructed, under construction or tendering procedures completed before Dec.25, 2017 with an approved discharge volume more than 500m ³ /day	1.5	In effect from Jan. 1, 2021.
	Tendering procedures not completed before Dec.25, 2017	1.5	
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 more than 500m ³ /day	3.5	In effect from Jan. 1, 2021.
	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 more than 500m ³ /day	0.7	In effect from Jan. 1, 2021.
	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 more than 500m ³ /day	0.35	In effect from Jan. 1, 2021.
	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 more than 500m ³ /day	0.35	In effect from Jan. 1, 2021.
	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 more than 500m ³ /day	2.0	In effect from Jan. 1, 2021.
	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 places outside tap water quality and volume protection area	5.0	
Molybdenum	Constructed, under construction or tendering procedures completed before Dec.25, 2017	0.6	In effect from Jan. 1, 2021.
	Tendering procedures not completed before Dec.25, 2017	0.6	
Sulfide		1.0	
Chemical oxygen demand		100	
Suspended solids		30	
Total toxic organics		1.37	
N-methylpyrrolidone	Approved discharge volume more than 10,000 m ³ per day except for those only engaging in polishing, cutting, testing or packaging.	1.0	In effect from Jan. 1, 2021.
2-Methoxy-1-propano		0.1	
Dimethylacetamide		0.1	
Cobalt		1.0	
Antimony		1.0	