

Table 4 Water quality items and limits of discharge from the chemical engineering industry

Item			Limit	Remarks
Water temperature	Discharge into non-marine surface water bodies		Lower than 38℃ (for May to September)	
			Lower than 35℃ (for October to next April)	
	Direct discharge to the ocean		Water temperature at discharge point ≤ 42℃; temperature difference of surface water 500m from discharge point ≤ 4℃	
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	Manufacturers of non-high nitrogen processes constructed, under construction or finishing tendering procedures before Jan. 22, 2014	20	1. In effect from Jul. 1, 2014. 2. In effect from Dec. 31, 2017 for those involving construction and improvement measures, submitting discharge pollutant reduction management plan before Mar. 31, 2014, and acquiring the approval from the special municipality or county (city) competent authority to execute pursuant to the plan.
		Manufacturers of high nitrogen processes constructed, under construction or finishing tendering procedures before Jan. 22, 2014	150 60	1. In effect from Dec. 31, 2018.
		Tendering procedures not completed before Jan. 22, 2014	20	
Orthophosphate (calculated based on trivalent phosphateion)	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	In effect from Jan. 1, 2021.
	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.
	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	
Methyl mercury		0.0000002	
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	
Formaldehyde		3.0	
Polychlorinated biphenyl		0.00005	
Dioxin	Vinyl chloride manufacturer constructed, under construction or finishing tendering procedures before Oct. 12, 2012	10	
	Vinyl chloride manufacturer not finishing tendering procedures before Oct. 12, 2012	5	
Biochemical oxygen demand		30	
Chemical oxygen demand		100	
Suspended solids		30	
True color	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	550	
		400	In effect from Jan. 1, 2021.
	Tendering procedures not completed before Dec. 25, 2017	300	
Free available residual chlorine	Constructed, under construction or tendering procedures completed before Dec. 25, 2017	2.0	In effect from Jan. 1, 2021.
	Tendering procedures not completed before Dec. 25, 2017	2.0	
Cobalt	Basic chemicals, other chemical materials, coating materials, dyes and paints, other chemical products and battery manufacturing industries	1.0	
Barium	Basic chemicals, artificial fiber, synthetic resin, plastic and rubber, other chemical materials, coating materials, dyes and paints, cleaning products, cosmetic, other chemical products and battery manufacturing industries	2.0	
Methylene chloride		0.2	
Chloroform		0.6	
Benzene	Basic chemicals, synthetic resin, plastic and rubber, other chemical materials, coating materials, dyes and paints, cosmetic, other chemical products manufacturing industries	0.05	
Ethyl benzene		0.4	
1,2-dichloroethane		0.10	
Vinyl chloride		0.10	
Dimethyl phthalate (DMP)		0.2	
Diethyl phthalate (DEP)		0.4	
Dibutyl phthalate (DBP)		0.4	
Benzyl butyl phthalate (BBP)		0.4	
Di-n-octyl phthalate (DNOP)		0.6	
Bis(2-ethylhexyl) phthalate (DEHP)		0.2	

Nitrobenzene		0.4	
Trichloroethylene		0.3	
Acrylonitrile	Approved discharge volume more than 10,000 m ³ per day except for those only producing fertilizers or using lime or coal products for manufacture.	0.2	In effect from Jan. 1, 2021.
1,2-butadiene		0.1	