

Table 3 Water quality items and limits of discharge from the petrochemical 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   |                              |
| 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            | Non-high nitrogen processes constructed, under construction or finishing tendering procedures before Dec. 1, 2011.  | 20                           |
|  |  | High nitrogen processes constructed, under construction or finishing tendering procedures before Dec. 1, 2011   | 60                           |
|  |  | 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  |                              |
| Grease (Hexane extracts)                                     |  | 10  |                              |
| Sulfide  |  | 1.0   |                              |
| 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 procedure 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 procedure not completed before Dec. 25, 2017  | 2.0  |                              |
| Benzene                            |   | 0.05 |                              |
| Ethyl benzene                      |   | 0.4  |                              |
| Methylene chloride                 | Petrochemical basic chemicals manufacturing industry, petrochemical midstream products manufacturing industry, petrochemical downstream products manufacturing industry | 0.2  |                              |
| Chloroform                         |   | 0.6  |                              |
| 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  |                              |
| Acrylonitrile                      | Approved discharge volume more than 10,000 m <sup>3</sup> per day except for those only producing natural gas.  | 0.2  | In effect from Jan. 1, 2021. |
| 1,2-butadiene                      |   | 0.1  |                              |