

FY 2009 Monitoring Results of Hazardous Air Pollutants

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In compliance with the Air Pollution Control Law, local governments have been monitoring Hazardous Air Pollutants in the atmosphere. Results of these monitoring surveys in FY 2009 have been compiled together with those monitored by the Ministry of the Environment (MOE). The results are as attached file.

1. Substances for which environmental quality standards (EQSs) are established (four substances)

Measurements of benzene exceeded the EQS in 1 points (1 points in FY 2008) of all monitoring points. Measurements of the other 3 substances were below the EQSs at all monitoring points (Table 1).

Table 1 Monitoring Result of the Substances for Which Environmental Quality Standards (EQSs) Are Established

Substance	Number of monitoring points	monitoring points exceeding EQS	Annual average concentration	EQS (Annual average concentration)
Benzene	436(451)	1 (1)	1.3 (1.4) $\mu\text{g}/\text{m}^3$	$\leq 3 \mu\text{g}/\text{m}^3$
Trichloroethylene	404(399)	0 (0)	0.53(0.65) $\mu\text{g}/\text{m}^3$	$\leq 200 \mu\text{g}/\text{m}^3$
Tetrachloroethylene	388(399)	0 (0)	0.22(0.23) $\mu\text{g}/\text{m}^3$	$\leq 200 \mu\text{g}/\text{m}^3$
Dichloromethane	407(397)	0 (0)	1.7(2.3) $\mu\text{g}/\text{m}^3$	$\leq 150 \mu\text{g}/\text{m}^3$

Note: Figures in parentheses are those of FY 2008.

2. Substances for which guideline values are established as a guide to reduce health risks resulting from Hazardous Air Pollutants in the atmosphere (eight substances)

Measurements of 1,2-dichloroethane exceeded the guideline value in 3 points (1 points in FY 2008) of all monitoring points, and measurements of nickel compounds exceeded the guideline value in 1 points (1 points in FY 2008) of all monitoring points, and measurements of Arsenic and its compounds exceeded the guideline value in 4 points

of all monitoring points. Measurements of the other 5 substances were below the guideline values at all monitoring points (Table 2).

Table 2 Monitoring Result of the Substances for Which Guideline Values as Hazardous Air Pollutants Are Established

Substance	Number of monitoring points	monitoring points exceeding guideline value	Annual average concentration	Guideline value (Annual average concentration)
Acrylic nitrile	362(370)	0 (1)	0.079 (0.093) $\mu\text{g}/\text{m}^3$	$\leq 2 \mu\text{g}/\text{m}^3$
Vinyl chloride monomer	362(378)	0 (0)	0.066 (0.053) $\mu\text{g}/\text{m}^3$	$\leq 10 \mu\text{g}/\text{m}^3$
Chloroform	361(368)	0 (0)	0.21 (0.22) $\mu\text{g}/\text{m}^3$	$\leq 18 \mu\text{g}/\text{m}^3$
1,2-dichloroethane	363(377)	3 (1)	0.17 (0.16) $\mu\text{g}/\text{m}^3$	$\leq 1.6 \mu\text{g}/\text{m}^3$
Mercury and its compounds	294(293)	0 (0)	2.0 (2.1) ngHg/m^3	$\leq 40 \text{ngHg}/\text{m}^3$
Nickel compounds	300(302)	1 (1)	4.2 (4.9) ngNi/m^3	$\leq 25 \text{ngNi}/\text{m}^3$
Arsenic and its compounds	280 (-)	4 (-)	1.5 (-) ngAs/m^3	$\leq 6 \text{ngAs}/\text{m}^3$
1,3-butadiene	406(413)	0 (0)	0.16(0.18) $\mu\text{g}/\text{m}^3$	$\leq 2.5 \mu\text{g}/\text{m}^3$

Note: Figures in parentheses are those of FY 2008.