

FY 2010 Monitoring Results of Hazardous Air Pollutants

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In compliance with the Air Pollution Control Act, local governments have been monitoring Hazardous Air Pollutants in the atmosphere. Results of these monitoring surveys in FY 2010 have been compiled together with those monitored by the Ministry of the Environment (MOE).

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

The monitoring of all 4 substances satisfied the EQSs (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	425 (436)	0 (1)	1.1 (1.3) $\mu\text{g}/\text{m}^3$	$\leq 3 \mu\text{g}/\text{m}^3$
Trichloroethylene	392 (404)	0 (0)	0.44 (0.53) $\mu\text{g}/\text{m}^3$	$\leq 200 \mu\text{g}/\text{m}^3$
Tetrachloroethylene	379 (388)	0 (0)	0.17 (0.22) $\mu\text{g}/\text{m}^3$	$\leq 200 \mu\text{g}/\text{m}^3$
Dichloromethane	396 (406)	0 (0)	1.6 (1.7) $\mu\text{g}/\text{m}^3$	$\leq 150 \mu\text{g}/\text{m}^3$

Note: Figures in parentheses are those of FY 2009.

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

The monitoring of Arsenic and its compounds exceeded the guideline value in 3 points. The monitoring of the other 7 substances satisfied 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	339 (362)	0 (0)	0.073 (0.079) $\mu\text{g}/\text{m}^3$	$\leq 2 \mu\text{g}/\text{m}^3$
Vinyl chrolide monomer	352 (362)	0 (0)	0.055 (0.066) $\mu\text{g}/\text{m}^3$	$\leq 10 \mu\text{g}/\text{m}^3$
Chloroform	353 (361)	0 (0)	0.19 (0.21) $\mu\text{g}/\text{m}^3$	$\leq 18 \mu\text{g}/\text{m}^3$
1,2-dichloroethane	358 (363)	0 (3)	0.16 (0.17) $\mu\text{g}/\text{m}^3$	$\leq 1.6 \mu\text{g}/\text{m}^3$
Mercury and its compounds	280 (294)	0 (0)	2.0 (2.0) ngHg/m^3	$\leq 40 \text{ngHg}/\text{m}^3$
Nickel compounds	295 (300)	0 (1)	4.0 (4.2) ngNi/m^3	$\leq 25 \text{ngNi}/\text{m}^3$
Arsenic and its compounds	276 (280)	3 (4)	1.4 (1.5) ngAs/m^3	$\leq 6 \text{ngAs}/\text{m}^3$
1,3-butadiene	390 (406)	0 (0)	0.14 (0.16) $\mu\text{g}/\text{m}^3$	$\leq 2.5 \mu\text{g}/\text{m}^3$

Note: Figures in parentheses are those of FY 2009.