

(Garuda Emblem)
Notification of Ministry of Industry
Re: Emission standards of glass factory
B.E. 2555 (2012)

Whereas it deemed appropriate to specifically prescribe the air contaminant contents emitted from the glass factory to be conformed with characteristics of source of emission discharged from industrial furnaces of glass factory, by the virtue of the provisions in Article 16 of the Ministerial Regulation No. 2 (B.E. 2535 (1992)) issued pursuant to the Factory Act B.E. 2535 (1992), which contains some provisions concerning the limitation of the people rights and liberties that is permissible by the provisions of section 29 together with section 33, section 41 and section 43 of the Constitution of the Kingdom of Thailand, the Minister of Industry hereby issues the Ministerial Notification as follows:

Article 1 This Notification is entitled as “Notification of Ministry of Industry regarding emission standard of glass factory B.E. 2555 (2012).

Article 2 This Notification shall enter into force after it is published in the Government Gazette.

Article 3 In this Notification;

“Glass factory” means a factory producing glass, glass fiber, or glass products.

“Other fuels” means any other fuels that are not prescribed by this Notification.

“Closed system” means a combustion system of fuel and/or material that is designed to be able to control air ratio and combustion conditions.

“Open system” means a combustion system of fuel and/or material that is not designed to be able to control air ratio and combustion conditions.

“Emission” means air discharged from a factory stack regardless of whether it has passed a treatment system or not.

Article 4 Emission standards of glass factory shall be prescribed as follows:

Contaminant	Source	Quantity
Total Suspended Particulate (mg/m ³)	Melting furnace using - Heavy oil - Other fuels	240 320
Sulfur Dioxide (ppm)	A. Melting furnace using sulfate compounds as supplementing raw material and using - Heavy oil - Other fuels B. Melting furnace not using sulfate compounds as supplementing raw material and using - Heavy oil - Other fuels	950 300 950 60
Oxide of Nitrogen as NO ₂ (ppm)	Melting furnace	1,750
Carbon Monoxide (ppm)	Melting furnace	690
Hydrogen Chloride (ppm)	Melting furnace	40
Hydrogen Fluoride (ppm)	Melting furnace	70
Lead (mg/m ³)	Melting furnace	5
Arsenic (mg/m ³)	Melting furnace	1

Article 5 Reporting of measurement result of contaminant content specified in Article 4 shall be as follows:

(1) Closed system: it shall be reported at pressure of 1 atmosphere or at 760 millimeters of mercury, temperature of 25 degrees Celsius, on a dry basis, of 50% excess air and 7% oxygen in waste air.

(2) Open system: it shall be reported at pressure of 1 atmosphere or at 760 millimeters of mercury, temperature of 25 degrees Celsius, on a dry basis, and having volume of excess oxygen at actual condition.

Article 6 Measurement of air contaminants specified in Article 4 shall be as follows:

(1) Total Suspended Particulate
- Determination of Particulate Emission from Stationary Sources of U.S. EPA or other methods approved by Department of Industrial Works.

(2) Sulfur Dioxide

- Determination of Sulfur Dioxide Emissions from Stationary Sources, or Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources, of U.S. EPA; or other methods approved by Department of Industrial Works.

(3) Nitrogen Oxide as Nitrogen Dioxide

- Determination of Nitrogen Oxide Emissions from Stationary Sources, of U.S. EPA or other methods approved by Department of Industrial Works.

(4) Carbon Monoxide

- Determination of Carbon Monoxide Emissions from stationary Sources, of U.S. EPA or other methods approved by Department of Industrial Works.

(5) Hydrogen Chloride and Hydrogen Fluoride

- Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources Non-Isokinetic Method, or Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources Isokinetic Method, of U.S. EPA, or other methods approved by Department of Industrial Works.

(6) Lead and Arsenic

- Determination of Metals Emissions from Stationary Sources of U.S. EPA, or other methods approved by Department of Industrial Works.

Article 7 A factory starting its business operation before the enforcement of this Notification shall be given a one-year grace period since this Notification is published in the Government Gazette.

Announced on 8 May B.E. 2555

M.R. Pongsavas Svasti

Minister of Industry

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