

Notification of Department of Industrial Works

Subject: Type or category of factory required to prepare a report of type and quantity of pollutants discharged from a factory

B.E. 2553 (2010)

It is deemed appropriate for the amendment of the Notification of Department of Industrial Works regarding Type or category of factory required to prepare a report of type and quantity of pollutants discharged from a factory B.E. 2551 (2008) as for a clarification of preparing a report of type and quantity of pollutants discharged from a factory to be technical compliance.

By the virtue of 4.1.1 and 4.2.1 of the Article 2 of the Notification of Ministry of Industry regarding preparation of type and quantity of pollutants discharged from a factory B.E. 2550 (2007) dated 16 August B.E. 2550 (2007), issued under the Factory Act B.E. 2535 (1992), Director General of Department of Industrial Works hereby issues the notification as follows:

Article 1 The Notification of Department of Industrial Works regarding type or category of factory required to prepare a report of type and quantity of pollutants discharged from a factory B.E. 2551 (2008) dated 21 March B.E. 2551 (2008) shall be revoked.

Article 2 This notification shall enter into force on the day after its publication in the Government Gazette.

Article 3 In this notification, Volatile Organic Compounds: VOCs shall mean compounds containing organic carbon as main component, which have vapor pressure higher than 0.1 mmHg at temperature of 20 °C and at pressure of 760 mmHg. This excludes methane carbon monoxide, carbon monoxide, metal carbides or carbonates, ammonium carbonate, herbicides or pesticides, and organic acid.

Article 4 List of factory annexed with this notification shall prepare a report of type and quantity of pollutants discharged from a factory.

Article 5 Actual measured data of water pollution shall be reported in RoWo 2 Form and shall at least comprise the following parameters:

a) Biochemical Oxygen Demand (BOD) at temperature of 20 °C, 5 days; Chemical Oxygen Demand (COD); pH; suspended solids; or other parameters required by the Environmental Impact Assessment Report.

b) Heavy metals, according to characteristics of wastewater discharged from a factory that is contaminated with heavy metals; or other parameters required by the Environmental Impact Assessment Report.

Article 6 Actual measured data of air pollution shall be reported in RoWo 3 Form. In case of fugitive emission, data from calculation can be used in the Form. In case of a factory that is permitted before the enforcement of this notification, data equivalent to the actual measurement at the same conditions, if the actual measurement is not possible due to a technical problem; or data from international standard calculation method, may be used. Data shall at least comprise the following parameters:

a) A factory using natural gas as fuel shall at least report oxide of nitrogen as NO₂. A factory using other kinds of fuel shall at least report oxide of nitrogen as NO₂, sulfur dioxide, and total suspended solids, or other parameters required by the environmental impact assessment report.

b) VOCs, according to type or category of factory using or possessing them, shall be reported as Total VOCs or by each type of VOCs if it is required by any other related laws. This shall be reported when VOCs emission standard and measurement methods are entered into force.

Article 7 Measurement of pollutants shall be conducted by the government laboratory or private laboratory that is registered with Department of Industrial Works, according to a prescription of the Regulation of Department of Industrial Works regarding a registration of private laboratory.

Article 8 RoWo 1 Form, RoWo 2 Form and RoWo 3 Form shall be submitted via the electronic system as specified by Department of Industrial Works. The first reporting, covering data from January until June, shall be submitted by 31 July; the second reporting, covering data from July until December, shall be submitted by 31 January of the following year. Copy of the reports shall be signed by the factory's environmental manager or the factory operation licensee and kept for inspection by the authority.

If Department of Industrial Works considers that the aforementioned reports are not complete, the factory operation licensee shall have a duty to complete the reports within 45 days after the date feedbacked via electronic reporting system.

Announced on 16 July B.E. 2553

Prapat Vanapitaksa

Director General, Department of Industrial Works

List Annexed to the Notification of Department of Industrial Works

Subject: Type or category of factory required to prepare a report of type and quantity of pollutants discharged from a factory B.E. 2553 (2010)

No.	Type or Category of Factory	Condition	Water Pollution Report	Air Pollution Report
1	11 (3) and 11 (4) Producing raw sugar or granulated sugar or refined sugar	All sizes	Yes	Yes
	11 (6) Producing glucose, dextrose, fructose, or other similar products	Capacity \geq 20 ton/day	Yes	Yes
2	38 (1) and 38 (2) Producing pulp from wood or other materials; Producing paper, paperboard, or paper made from fiber for construction work, or fiberboard	Capacity \geq 50 ton/day	Yes	Yes
3	42 (1) Producing chemical products, chemical substances, or chemical materials	Capacity of each product or total \geq 100 ton/day	Yes	Yes
4	43 (2) Producing fertilizer, pesticide or herbicide	All sizes if having chemical processes	Yes	Yes
5	44 Factory engages in business related to production of synthetic resin, elastomer, plastics or synthetic fiber, excluding fiber optic	Capacity \geq 100 ton/day	Yes	Yes
6	49 Petroleum refinery	All sizes	Yes	Yes
7	57 (1) Producing cement, lime, plaster	All sizes	No	Yes

No.	Type or Category of Factory	Condition	Water Pollution Report	Air Pollution Report
8	59 Factory engages in business related to smelting, casting, rolling, drawing, or manufacturing of primary iron and steel	A factory of capacity \geq 100 ton/day having melting furnace or reheating furnace, or using acid or substances that may be harmful to environment	Yes	Yes
9	60 Factory engages in business related to smelting, mixing, refining, smelting, casting, rolling, drawing, or manufacturing of primary non-ferrous metal other than iron or steel	Capacity \geq 100 ton/day	Yes	Yes
10	88 Power plant	Capacity \geq 10 MW	Yes	Yes
11	89 Manufacturing, transmission or distribution gas, which is not natural gas	All sizes	Yes	Yes
12	101 Central waste treatment plant as follows: - central wastewater treatment plant - central waste incinerator - chemical physical treatment plant	All sizes All sizes All sizes	Yes No No	No Yes Yes
13	105 Factory engages in business related to sorting or landfill waste or unusable materials that have characteristics and properties as specified in the factory law	All sizes and covering only landfill of hazardous waste or hazardous unusable material	Yes	Yes

No.	Type or Category of Factory	Condition	Water Pollution Report	Air Pollution Report
14	106 Factory engages in business related to recycling of unusable industrial products or industrial wastes to be raw materials or new products	Capacity \geq 50 ton/day	Yes	Yes
15	1-107 Factory having wastewater	Influent quantity \geq 500 m ³ /day (including cooling water contaminated in a form of BOD or COD); Or BOD load of influent \geq 100 kg/day	Yes	No
16	1-107 Factory using the following substances or their compounds directly in production process: Zinc, Cadmium, Cyanide, Phosphorus as organic compounds, Lead, Copper, Barium, Selenium, Nickel, Manganese, Hexavalent chromium, Arsenic, Mercury	Influent quantity \geq 50 m ³ /day	Yes	No
17	1-107 Factory using industrial furnace or boiler	- Factory using industrial furnace of \geq 1,000 horse power - Factory using boiler with steam generation capacity \geq 10 ton/hr in case of solid or liquid fuel; or \geq 20 ton/hr in case of natural gas fuel	No No	Yes Yes
18	1-107 Factory using VOCs in production process	VOCs consumption \geq 36 ton/year	No	Yes