### **Notification of Ministry of Industry**

## Re: Preparation of report on type and amount of pollutants discharged from a factory

#### B.E. 2558

Whereas it deemed appropriate to amend the Notification of Ministry of Industry regarding Preparation of report on type and amount of pollutants discharged from factory B.E. 2550 (2007) as for the clarification of the type or kind of factory required to reporting as well as of the report format and the preparation method to be technical base that the reported data could be usefully utilized.

By the virtue of the provisions in Article 1 and 4 of the Ministerial Regulation No. 3 (B.E. 2535 (1992)) issued pursuant to the Factory Act B.E. 2535 (1992), the Minister of Industry hereby issues the Notification as fol5ows:

<u>Article 1</u> This Notification is entitled "Notification of Ministry of Industry regarding Preparation of report on type and amount of pollutants discharged from a factory B.E. 2558".

**<u>Article 2</u>** This Notification shall be effective from 1<sup>st</sup> January 2016 onwards.

<u>Article 3</u> The Notification of Ministry of Industry regarding Preparation of report on type and amount of pollutants discharged from a factory B.E. 2550 dated 16<sup>th</sup> August 2007 shall be revoked.

Article 4 In this Notification:

"Type and amount of pollutants" means type and amount of water and air pollutants as prescribed in the Ministerial Notification, which is issued under the Article 14 and Article 16 of the Ministerial Regulation No. 2 B.E. 2535 of the Factory Act B.E. 2535.

"Environmental Impact Assessment report" means a report of environmental impact assessment which is approved by the technical review committee according to the Enhancement and Conservation of National Environmental Quality law.

<u>Article 5</u> Types or kinds of factory required to prepare the report on type and amount of pollutants discharged from a factory are as follows:

5.1 Types or kinds of factory required to have the environmental personnel according to the Notification of Ministry of Industry.

5.2 Types or kinds of factory specified in the list annexed with this Notification.

Article 6 Data retrieval methods for preparing the report;

Type and amount of pollutants described in a reporting form shall be identified of their retrieval methods, which are prescribed in 2 following groups:

6.1 "Group M" (Measurement) is the data of type and amount of pollutants retrieved from measurements and analysis by the reference standard methods as prescribed in the Notification of Ministry of Industry.

6.2 "Group C" (Calculation) is the data of type and amount of pollutants retrieved by the calculation methods that are internationally-accepted, which are:

(a) Emission Factors of such pollutants; or

(b) Engineering Calculation; or

(c) Mass Balance

Article 7 Wastewater sampling shall be taken as follows:

7.1 Sample of wastewater before entering the wastewater treatment system shall be taken at least once every 3 months.

7.2 Sample of wastewater discharged from the wastewater treatment system shall be taken at least once every 3 months.

7.3 Sample of wastewater discharged out of the factory shall be taken at least once a

month.

7.4 In case wastewater is transferred for offsite treatment, sample of wastewater shall be taken from the last tank at least once every 3 month.

Sampling of air emission shall be taken at the factory emission stack at least once every Article 8 six months.

Article 9 Reporting of water pollutant data shall be carried out by the data retrieval methods for preparing the report as prescribed in Article 6.1 and shall comprise the following parameters:

9.1 BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), pH, and

**Suspended Solids** 

9.2 Heavy Metals, according to characteristics of wastewater discharged from the factory containing heavy metals.

9.3 Other parameters shall be in compliance with the prescription of the Department of Industrial Works, which is published in the Government Gazette.

Reporting of air pollutant data shall be carried out by the data retrieval methods for Article 10 preparing the report as prescribed in Article 6.1 or 6.2 and shall comprise the following parameters:

10.1 For the combustion process using liquid or solid fuel; reporting is required, as the least, for Oxide of Nitrogen as NO<sub>2</sub>, Sulfur Dioxide, and Total Suspended Particulate.

10.2 For the combustion process using biogas as fuel; reporting is required, as the least, for Oxide of Nitrogen as NO<sub>2</sub>, Sulfur Dioxide, and Carbon Monoxide.

10.3 For the combustion process using other gases that are not biogas as fuel; reporting is required, as the least, for Oxide of Nitrogen as  $NO_2$  and Carbon Monoxide.

10.4 For the production process or any other processes, reporting is required for the parameters prescribed by the Department of Industrial works that is published in the Government Gazette.

<u>Article 11</u> Type or kind of factory specified in Article 5 that is required to prepare the Environmental Impact Assessment Report shall also implement the environmental protection and mitigation measures and environmental impact monitoring measures.

<u>Article 12</u> Measurements of type and amount of pollutants shall be conducted by the government laboratories or private laboratories registered with the Department of Industrial Works.

<u>Article 13</u> Preparation of the report on type and amount of pollutants shall be carried out as follows:

13.1 Report on type and amount of pollutants shall be prepared according to the formats and forms prescribed by the Department of Industrial Works which is published in the Government Gazette.

13.2 The report on type and amount of pollutants shall be submitted to the Department of Industrial Works through the electronics system. The first report, comprising the data from January to June, shall be submitted by 1<sup>st</sup> September of the reporting year; and the second report, comprising the data from July to December, shall be submitted by 1<sup>st</sup> March of the following year.

13.3 The factory shall keep one copy of the report on type and amount of pollutants at the factory for three years and they shall be ready for the inspection by the official.

13.4 For the report on type and amount of pollutants of the factory mentioned in Article 5.1, it shall be certified by the factory operator or the attorney-in-fact and the environmental protection system supervisor. For the report on type and amount of pollutants of the factory mentioned in Article 5.2, it shall be certified by the factory operator or the attorney-in-fact.

Announced on 6<sup>th</sup> August B.E. 2558 (2015)

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Minister of Industry

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## List of Factory Annexed with the Notification of Ministry of Industry

# On the Preparation of the Report on Type and Amount of Pollutants Discharge from a Factory B.E. 2558

No.	Type and Size of Factory	Report
1	Factory related to the production of papers, paperboards, or papers made from fiber pulp or fiber paper for the construction works, having the production capacity from 50 tons/day.	- Report on Water Pollution - Report on Air Pollution
2	<ul> <li>Factory related to the production of iron or steel having each or total production capacity from 100 tons/day, as follows:</li> <li>1) Primary or secondary iron and steel having the smelting, melting, casting processes;</li> <li>2) Finished processes as follows: <ol> <li>Rolling, either hot or cold rolling, except cold roll forming and skin-pass or temper rolling</li> <li>Hot forging</li> <li>Surface coating (hot dipping, electroplating, chemical, or electrochemical plating)</li> <li>Ferrous metal foundries</li> </ol> </li> </ul>	- Report on Water Pollution - Report on Air Pollution
3	Factory related to the production of glasses, fiberglass, or glass products having melting furnace.	- Report on Air Pollution
4	<ul> <li>Factory using specific boilers as follows:</li> <li>1) Factory having a boiler with steam-producing capacity from 10 ton/hr per one boiler in case liquid or solid fuel is used.</li> <li>2) Factory having boiler with steam-producing capacity from 20 ton/hr per one boiler in case gas is used as fuel.</li> </ul>	- Report on Air Pollution
5	Factory having or using VOCs in production processes from 36 tons/year.	- Report on Air Pollution