Manual of the Permission Application for Transferring of Industrial Waste from the Factory, in accordance with the Factory Law

1. Introduction

This manual is prepared to transfer knowledge and understanding to the factory to be able to correctly comply with the law.

2. Concerned Law

2.1. The Notification of the Ministry of Industry, No. 6 (B.E. 2540)

This notification is concerning disposal of industrial waste considered as hazardous waste. It specifies characteristics and qualifications of industrial waste that is considered as hazardous waste, attached with appropriate disposal criteria and method of appropriate in the annexes.

Annex 1: Characteristics and qualifications of industrial waste Annex 2: Appropriate disposal criteria and method

Important issues of this notification:

1. If a factory possesses industrial waste as specified in Annex 1, a factory must take action as specified in the following 2. and 3.

2. A factory is prohibited from transferring industrial waste before getting a permission to dispose that material by the criteria and method specified in Annex 2.

3. A factory has to report details of industrial waste of both that is managed in a factory and that is transferred for disposal outside, using a report form of Ror Ngor 6 and submitted annually to DIW by 30 December.

2.2. The Notification of the Ministry of Industry, No. 1 (B.E. 2541)

This notification is concerning disposal of industrial waste considered as nonhazardous waste. It specifies characteristics and qualifications of industrial waste that is considered as non-hazardous waste, attached with appropriate disposal criteria and method of appropriate in the annexes.

Annex 1: Characteristics and qualifications of industrial waste Annex 2: Appropriate disposal criteria and method

Important issues of this notification:

1. A factory located in 14 provinces according to this notification that possesses industrial waste as specified in Annex 1 must take action as specified in 2.

2. A factory is prohibited from transferring industrial waste before getting a permission to dispose that material by the criteria and method specified in Annex 2.

2.3. The Notification on Disposal of Industrial Waste or Industrial waste (Additional) B.E. 2547

This notification is concerning disposal of industrial waste considered as nonhazardous waste, which has characteristics and qualifications; disposal criteria and method as specified in the Notification No. 1 (B.E. 2541)

The important notice is the extension of the authorized provinces to be nationwide.

2.4. The Notification of the Ministry of Industry on Characteristics of Processed Used Oil and Synthetic Fuel to be used as an Alternative Fuel of Bunker Oil in the Industrial Furnace, B.E. 2547

This notification is concerning characteristics of used oil that is able to be reused as an alternative fuel of bunker oil.

The important issues of this notification are as follows:

1. Define the meaning of used oil before processing (considered as raw material) and after processing until its quality is complied with the characteristics specified in this notification (considered as a product).

2. Prescribe that a producer of processed used oil or synthetic fuel to be used as an alternative fuel must be a licensee to operate a factory categorized in No. 106 only.

3. Prescribe where the used oil with the characteristics specified in this notification can be used.

2.5. The Notification of the Department of Industrial Works on Types and Kinds of the Industrial Furnace that can be used with Processed Used Oil or Synthetic Fuel, B.E. 2547

This notification is prescribing types and kinds of industrial furnace that can be used with processed used oil or synthetic fuel as follows:

1. Industrial furnace used in production process of a factory categorized in No. 59.

2. Industrial furnace used in production process of a factory categorized in No. 60.

3. Industrial furnace used in production process of a factory categorized in No. 88.

4. Heating device used in production process of a factory categorized in No. (57) 1

5. Boiler used in general production process

3. Industrial Waste needed to be Permitted for Transferring

3.1. Definition of "Industrial waste"

Industrial waste means any or many materials or anything that are born from factory operation as follows:

1. Waste or residue from the production or utilization that is not specified in other items.

2. Off-spec product

3. Expired product

4. Material or anything that is contaminated, spilled, damaged from accident or misuse

5. Material or anything that is contaminated or dirty from normal use such as cloth contaminated with oil or chemical from cleaning, chemical-contaminated container or package.

6. Material, part or product that is no longer be used such as damaged battery, spoiled catalyst.

7. Substance that no longer retains its original qualification because of usage such as contaminated acid or solvent, เกลี อเคมี used in deteriorated-iron surface coating

8. Sludge or residue from industrial production such as scale or distillation bottom

9. Sludge or residue from treatment process or pollution treatment such as baghouse, electrostatic precipitator, cyclone and scrubber wastes and used filter.

10. Sludge or residue from molding, polishing or finishing processes such as residue from metal turning, planing, boring, or rolling.

11. Sludge or residue from distillation, extraction of any raw material, extraction, beneficiation and processing of ores and minerals such as tailings, oil residue from drilling.

12. Material that is disqualified such as oil contaminated with polychlorinated bi-phenyl.

13. Material, substance or product that are prohibited from use by law.

14. Product that is no longer used.

15. Material, substance or product that are contaminated from pollution management in the factory such as soil remediation.

16. Material, substance or product that are specified by DIW.

In this respect, the above-mentioned industrial waste must be the waste that the factory's licensee intends to dispose, which are discarding, treatment, stabilization and disposal, selling, distributing, exchanging, or reusing in any forms, by himself/herself or by the third party. It includes the material that the factory's licensee collects or accumulates for any disposal methods afore mentioned.

3.2. Exemption

Industrial waste that is exempted from the DIW's permission procedure are:

1. General waste (Public Health Act B.E. 2535) such as waste from factory's office, canteen, worker's house.

2. Infectious waste (Public Health Act B.E. 2535) such as infectious waste from factory's laboratory, nursing room.

3. Radioactive waste (Atomic Energy for Peace Act B.E. 2504)

In this respect, if the factory is located in the authorized area of the Industrial Estate Authority of Thailand, the permission application for transferring industrial waste (as in 1.) must be done at the industrial estate office. However, the exempted waste from DIW's law shall be environmentally friendly treated in accordance with the other concerned law.

4. Who is controlled by the factory law regarding transferring of industrial waste?

Factory that is registered under the Factory Act B.E. 2535 and wants to transferred industrial waste out of the factory's area.

"The factory's area" means area of the factory that is specified in the factory's license.

5. Necessary Document for the Application

Application Form

The application form for the transferring of industrial waste under the Notification No. 1 and No. 6 is separated.

5.1. Necessary Document for Permission Application of Industrial Waste under the Notification of the Ministry of Industry No. 6 (B.E. 2540)

5.1.1. Document of the Waste Generator

1. A copy of a factory's license; or a copy of a certification paper from the provincial industrial office (in case of a factory located in the industrial zone); or a copy of a land use permission paper (in case of a factory located in IEAT's estate).

2. A copy of a juristic person certificate (a copy is not more than 6 month from the application date) and a copy of an identification card of an authorized person.

3. An original of an authorization paper, with a tax stamp (in case of an authorization to other person).

4. Flow chart of a production process and point of waste generating.

5. Other concerned details such as if the industrial waste is a contaminated material, it should be specified by what it is contaminated; if it is a chemical substance, a MSDS should be attached with.

5.1.2. Document of the Waste Processor

1. A copy of a factory's license; or a copy of a certification paper from the provincial industrial office (in case of a factory located in the industrial zone); or a copy of a land use permission paper (in case of a factory located in IEAT's estate).

2. A copy of a juristic person certificate (a copy is not more than 6 month from the application date) and a copy of an identification card of an authorized person.

3. An original of an authorization paper, with a tax stamp (in case of an authorization to other person).

4. A copy of a business registration certificate.

5. An original liability form (Sor Thor Kor 1, and Sor Thor Kor 2).

6. An appointment paper of a representative that is approved by DIW (in case it is specified in a factory's license of a waste processor).

5.2. Necessary Document for Permission Application of Industrial Waste under the Notification of the Ministry of Industry No. 1 (B.E. 2541)

5.2.1. Document of the Waste Generator

1. A copy of a factory's license; or a copy of a certification paper from the provincial industrial office (in case of a factory located in the industrial zone); or a copy of a land use permission paper (in case of a factory located in IEAT's estate).

2. A copy of a juristic person certificate (a copy is not more than 6 month from the application date) and a copy of an identification card of an authorized person.

3. An original authorization paper, with a tax stamp (in case of an authorization to other person).

4. Flow chart of a production process and point of waste generating.

5. A report of a sample's testing analysis by leachate extraction procedure (only in Annex 2, No. 3 of the Notification of the Ministry of Industry No. 1 (B.E. 2541)), not more than 1 year after the analysis date.

5.2.2. Document of the Waste Processor

1. A copy of a factory's license; or a copy of a certification paper from the provincial industrial office (in case of a factory located in the industrial zone); or a copy of a land use permission paper (in case of a factory located in IEAT's estate).

2. A copy of a juristic person certificate (a copy is not more than 6 month from the application date) and a copy of an identification card of an authorized person.

3. An original authorization paper, with a tax stamp (in case of an authorization to other person).

4. A copy of a business registration certificate or a copy of a license to do a business on used product.

5. A consent paper or a contract between waste generator and waste processor.

6. An appointment paper of a representative that is approved by DIW (in case it is specified in a factory's license of a waste processor).

6. Type of Disposal Method and Waste Processor

6.1. Type of Disposal Method

There are 18 methods specified in the back side of the application form, which are:

1. Sanitary Landfill (Code 01) : landfilling in a sanitary landfill only (for non-hazardous industrial waste only).

2. Sorting (Code 02) : transferring of industrial waste to second-hand shop, ordinary people or sorting factory (No.105) for sorting before further transferred.

3. Reutilization (Code 03) : reutilization of industrial waste by recycle, recovery or reuse.

4. Used as Alternative Fuel (Code 04) : used as an alternative fuel in a cement kiln or an industrial furnace.

5. Used as Alternative Raw Material (Code 05) : incinerating in a cement kiln as an alternative raw material.

6. Incineration (Code 06) : incinerating in an industrial waste incinerator.

7. Land Reclamation (Code 07) : land filling or used as substance to improve soil's quality (only non-hazardous industrial waste).

8. Composting (Code 08) : making compost or a mixture of compost (only non-hazardous industrial waste).

9. Making Animal Feed (Code 09) : used as animal feed or as raw material for animal feed (only non-hazardous industrial waste).

10. Secured Landfill (Code 10) : landfill of stabilized hazardous industrial waste in a Secure Landfill without stabilization procedure.

11. Stabilization and Secured Landfill (Code 11) : stabilizing and landfilling of hazardous industrial waste at a Secure Landfill.

12. Making Mixed Fuel (Code 12) : making synthetic fuel from industrial waste mixing or processing.

13. Chemical or Physical Wastewater Treatment (Code 13) : stabilization of liquid waste or aqueous waste or wastewater by chemical or physical treatment.

14. Treatment and Incineration in a Cement Kiln (Code 14) : industrial waste that needs to be stabilized before incinerated in a cement kiln.

15. Collection and Export to Other Countries (Code 15) : collection of industrial waste for further management in a foreign country.

16. Return to the Seller (Code 16) : industrial waste such as chemical container that is returned to a seller.

17. Refilling or Reuse (Code 17) : containers that are returned for refilling or reusing without washing procedure.

18. Others (Code 18) : other methods not specified above.

6.2. Types of Waste Processor

Factory in a category 101 : incinerator, wastewater treatment plant Factory in a category 105 : sorting and/or landfill Factory in a category 106 : recycling

Others are factories that are permitted to use industrial waste as raw materials (types of industrial waste must be the same as types of raw material being used such as wood, paper, plastic, etc.)

7. Application Place

 Industrial Waste Management Bureau, Department of Industrial Works 4th Floor, Room 408 (Applied for transferring of industrial waste as specified in the Notification

of the Ministry of Industry No. 1 (only factory in BMA); and No. 6

2. Provincial Industrial Office (only transferring of industrial waste specified in the Notification of the Ministry of Industry No. 1, Annex 1, No. 1).

8. Criteria for Permission

8.1. Overall Criteria

To be confident that industrial waste will be technically appropriately managed by the licensed processor or other parties that are able to manage that industrial waste appropriately.

8.2. Criteria for Disposal Method

1. Sell to a second-hand shop

Permit of only industrial waste specified in the Notification of the Ministry of Industry No. 1 (B.E. 2541), Annex 1, No. 1.

2. Sell or Donate to Ordinary Person

Permit of only industrial waste specified in the Notification of the Ministry of Industry No. 1 (B.E. 2541), Annex 1, No. 1., in limited amount.

3. Donate to Group of People, Housewife, Farmer, etc.

Permit of only industrial waste specified in the Notification of the Ministry of Industry No. 1 (B.E. 2541), Annex 1, No. 1., and must have a certify letter attached with.

4. Composting

Must have a certify letter from a government office such as the provincial agricultural office or agriculture department for a feasibility and safety of using compost.

5. Land Reclamation

Must have a certify letter from a land owner shown. However, it depends of the composition of those industrial wastes in terms of long-term contamination with soil.

6. Reutilization

In case of reutilization method is not well-known or accepted by the public, the concerned paper or proof have to be shown to the official. In some cases, the official must inspect the factory before considering.

7. Landfill

Oil-contaminated industrial waste is not allowed to be landfilled.

8. Incineration

In case of incinerating of some industrial wastes in a cement kiln, an analysis of those wastes' composition is needed to be complied with the incinerating criteria specified in EIA report.

9. Export

It must be considered if the industrial waste is hazardous or under the list of the Basel Convention or not. If hazardous, it must get permission before exporting according to the Hazardous Substances Act. If it is under the Basel Convention, it must be following the Basel Convention procedure.

10. Return to the seller

Most of the cases are containers, so a certify letter from the seller is needed.

9. Example Case of the Application and its Necessary Document

9.1. Sell or Donate to an Ordinary Person

Other necessary documents needed are:

1. A letter certified that an ordinary person receives the industrial waste.

2. It may need an explanation paper showing the originate point of waste generating to ensure that the industrial waste is not contaminate with hazardous waste.

9.2. Composting

Other necessary documents needed are:

1. A certify letter from concerned government agency such as the provincial agricultural office, the agriculture department.

2. Result of on waste analysis or total waste analysis.

9.3. Land Reclamation

Other necessary documents needed are:

- 1. Result of on waste analysis or total waste analysis.
- 2. A consent letter and a copy of land title deed from a land owner

9.4. Reutilization

Other necessary documents needed are:

1. Flow chart of reutilization process

2. Flow chart showing point of waste generating

9.5. Landfill

Other necessary documents needed are:

1. In case of a chemical substance, MSDS should be attached with.

2. Result of on waste analysis by leachate extracting procedure or total waste analysis

9.6. Incineration

Other necessary documents needed are:

1. Result of on waste analysis or total waste analysis

2. In case of a chemical substance, MSDS should be attached with.

9.7. Export

Other necessary documents needed are:

1. An exporting paper (if hazardous substance)

2. Concerned papers for waste processor in a foreign country (if not hazardous substance)

9.8. Return to a Seller

Other necessary document needed is:

1. A letter certified that a seller accepts a returned container.

10. For More Information, Please Contact:

Industrial Waste Management Bureau, Department of Industrial Works, 4^{th} Floor, Room 408

Tel. 0 2202 4165 0 2202 4167 0 2202 4168 0 2354 3182

Fax. 0 2202 4167

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