Content

Title：	Standards for Defining Hazardous Industrial Waste Ch
Date：	2020.02.21
Legislative：	Original 9 articles promulgated by Environmental Protection Administration order on March 7, 2001 Revisions to Articles 4 through 6 and 8 promulgated by Environmental Protection Administration order on January 9, 2002 Amended on December 27, 2005 Revisions promulgated by EPA Order Huan-Shu-Fei-Tzu No. 0950098457 on December 14, 2006 Revisions to Article 3, Attached Table 1 and Attached Table 2 promulgated by EPA Order Huan-Shu-Fei-Tzu No. 0960049171 on July 4, 2007. Revisions to Article 5 promulgated by EPA Order Huan-Shu-Fei-Tzu No. 0980047074 on June 5, 2009. Revisions to Article 1 promulgated by EPA Order Huan-Shu-Fei-Tzu No. 1060034615 on May 12, 2017. Revisions to Article 4 promulgated by EPA Order Huan-Shu-Fei-Tzu No. 1090012064 on February 21, 2020.
Content：	Article 1 These Standards are determined pursuant to Article 2, Paragraph 3 of the Waste Disposal Act (herein referred to as this Act). Article 2 Hazardous industrial waste is determined by the following methods, in that order. Ⅰ Substances listed as regulated hazardous industrial waste. Ⅱ Hazardous industrial waste determined by hazardous characteristics. Ⅲ Other waste officially announced by the central competent authority.

Article 3	Hazardous industrial waste types subject to regulatory listing includes the following categories. Ⅰ "Manufactured hazardous industrial waste" is defined as process-derived wastes as listed in Table 1. Ⅱ "Scrap metal" is defined by, depending on the hazardous characteristic determined at the sorting stages of storage, clearance, processing, and transportation in and out, verification methods as stated in Table 2. Ⅲ "Biomedical and infectious waste" refers to waste, as listed in Table 3, which is produced in the course of medical treatment, medical testing, autopsies, quarantine inspections, research, or the manufacture of chemical agents or biological materials by medical treatment organizations, medical testing institutions, medical laboratories, industrial and research organization laboratories of biological safety grade two or above, or laboratories engaged in genetic or bio-technological research.
Article 4	Hazardous industrial waste types determined by hazardous characteristics includes the following categories. Ⅰ Toxic hazardous industrial waste: A. Waste containing Category 1, Category 2, and or Category 3 toxic chemical substances announced in the Toxic and Concerned Chemical Substances Control Act. B. Waste containers in direct contract with said chemical substances. Ⅱ "Toxicity characteristic leaching" refers to industrial waste selected for analysis in accordance with the relationship between raw materials usage, manufacturing processes and waste ingredient characteristics, directly determined by Toxicity Characteristic Leaching Procedure (herein referred to as TCLP), or from extracted fluid determined as such after prior extraction and processing, and the density of whose ingredients exceeds the standards stated in Table 4. Ⅲ "Dioxinous hazardous industrial waste" refers to industrial waste containing 17 chemical compounds of the same source as chloride dioxin 2,3,7,8 and furan, etc., with overall toxic equivalent concentration exceeding 1.0 ng I-TEQ/g. Ⅳ "(PCB) hazardous industrial waste" refers to waste capacitors with a PCB content of over 50 per million (calculated by weight of insulating oil), waste transformers (calculated by weight of transformer oil), or other industrial waste. Ⅴ "Corrosive industrial waste" refers to industrial waste possessing the following properties: A. Waste liquid hydrogen ion concentration index (pH value) greater than or equal to 12.5 or less than or equal to 2.0; or items whose corrosion rate against steel (Republic of China national standard steel S20C) at 55°C exceeds 6.35mm per year. B. Solid waste in a soluble state whose liquid hydrogen ion concentration index (pH value) is greater than or equal to 12.5 or less than or equal to 2.0; or items whose corrosion rate

against steel (Republic of China national standard steel S20C) at 55°C exceeds 6.35mm per year.

Ⅵ" Inflammable industrial waste" refers to industrial waste possessing the following properties:

A. Waste liquid which sparkles at less than 60°C. This does not include alcoholic beverage waste in which ethanol concentration is less than 24% by volume.

B. Solid waste that can ignite and burn at a temperature of 25±2°C at atmospheric pressure (herein referred to as ambient conditions) due to friction, absorption of water, or spontaneous chemical reaction.

C. Waste strong oxidizing agents that may directly release oxygen and induce the combustion of other materials.

Ⅶ "Reactive industrial waste" refers to industrial waste possessing the following properties:

A. Prone to cause an explosion at normal atmospheric temperature and pressure.

B. Forms violently reactive or explosive substances or their mixtures when mixed with water.

C. Containing cyanides and having a hydrogen ion concentration index (pH value) between 2.0 and 12.5 and capable of producing toxic entities of 250 mg HCN/kg or above.

D. Containing sulfides and having a hydrogen ion concentration index (pH value) between 2.0 and 12.5 and capable of producing toxic entities of 500 mg H_2S/kg or above.

Ⅷ "Asbestos and asbestos product waste" refers to industrial waste possessing the following properties:

A. Materials used for rubbing, such as fire prevention, heat insulation and thermal insulation material and brake pads, etc, whose manufacture involves asbestos and which, in the finishing processes of grinding, polishing and drilling, produce highly dispersible waste.

B. Waste produced by the emission of asbestos in the course of construction.

C. Highly dispersible waste produced in the course of renovating or removing fire prevention, heat insulation or thermal insulation materials containing asbestos.

D. Containerized bag of which asbestos is a raw material.

E. Other waste containing one percent or more asbestos and of a highly dispersible nature.

Article 5	Hazardous industrial waste meeting the following conditions may be delisted and designated as general industrial waste. Ⅰ In the case of hazardous industrial waste listed in Table 1 designated in Article 3, Subparagraph 1, an enterprise may submit the following documents to the local competent authority in application for delisting. The waste may be listed as general industrial waste after approval of delisting. The central competent authority shall officially announce the determined process and standard values for delisting. A. Certificate of company registration or certificate of business registration. B. Hazardous industrial waste delisting application form. C. Waste sampling plan. D. Test report stating waste characteristics, composition, and constituent analysis. E. Other documents designated by the central competent authority. Ⅱ Hazardous industrial waste as referred to in Article Three and in the foregoing article whose hazardous characteristics have been eliminated in accordance with the intermediate handling procedures of the Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste must be determined to be general industrial waste. Ⅲ Waste liquid as referred to in Subparagraph 6, Item 1, of the foregoing article which does not possess any of the following characteristics and is subjected either to incineration or thermal treatment must be determined to be general industrial waste. However, storage and clearance prior to treatment shall comply with relevant hazardous industrial waste regulations: A. Manufactured hazardous industrial waste. B. Toxic hazardous industrial waste. C. TCLP waste. D. Dioxinous hazardous industrial waste. E. PCB hazardous industrial waste. F. Corrosive industrial waste. G. Reactive industrial waste. H. Other waste designated by the central competent authority.
Article 6	Prior to revision of these Standards, any changes or modifications to industrial waste disposal plans or permits for the expulsion, processing, arrangement or reuse of industrial waste obtained in accordance with this Act, and reviewed and approved in accordance with these Standards, must be made within one year of promulgation of these Standards. Installation of additional facilities necessitated by revision of these Standards must be completed within one year of their promulgation.
Article 7	These Standards shall take effect from the date of promulgation.

Attachments：	Table 1 Manufactured Hazardous Industrial Waste.pdf Table 2 Mixed Hardware Waste Identification at Different Disposal Stages .pdf Table 3 Biomedical and infectious waste.pdf Table 4 Leaching Standards for Toxicity Characteristic Leaching Procedure (TCLP).pdf

Data Source：Ministry of Environment Laws and Regulations Retrieving System