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DENR ADMINISTRATIVE ORDER
NO. 2019 - 21

SUBJECT: GUIDELINES GOVERNING WASTE-TO-ENERGY (WtE) FACILITIES FOR THE INTEGRATED MANAGEMENT OF MUNICIPAL SOLID WASTES

Pursuant to Section 8 (f) of Republic Act (RA) 9003, otherwise known as the Ecological Solid Waste Management Act of 2000, NSWMC Resolution No.669, Series of 2016, Adopting the Guidelines Governing the Establishment and Operation of Waste to Energy Technologies for Municipal Solid Wastes (MSW), Executive Order 192 (Providing the Reorganization of the Department of Environment, Energy and Natural Resources; Renaming it as the Department of Environment and Natural Resources) dated 10 June 1987, the Department of Environment and Natural Resources (DENR) hereby adopts and promulgates these guidelines on the establishment and operation of Waste-to-Energy (WtE) facilities for municipal solid wastes.

These guidelines also adhere to the policy of the government to promote compliance with Presidential Decree (PD) 1586 (Establishing an Environmental Impact Statement System), RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Act of 1990), RA 8749 (Philippine Clean Air Act of 1999); and RA 9275 (Philippine Clean Water Act of 2004).

SECTION 1. DECLARATION OF POLICY

It is hereby declared the policy of the State to adopt a systematic, comprehensive and ecological solid waste management program which shall ensure the protection of public health and environment and set guidelines and targets for solid waste avoidance and volume reduction through source reduction and waste minimization measures, including composting, recycling, re-use, recovery, green charcoal process, and other schemes, before collection, treatment and disposal in appropriate and environmentally-sound solid waste management facilities in accordance with ecologically sustainable development practices.

SECTION 2. OBJECTIVE

This Order is issued to provide guidelines on the evaluation, establishment, operation and de-commissioning of waste-to-energy (WtE) facilities for the integrated management of municipal solid wastes.

SECTION 3. SCOPE AND COVERAGE

These guidelines cover the requirements, and procedures on the establishment and operation of WtE facilities utilizing municipal solid wastes.

SECTION 4. DEFINITION OF TERMS

- a) **Biodegradable Waste** shall refer to solid wastes that can be decomposed by microorganism into humus-like product.
- b) **Bottom Ash** shall refer to the agglomerate ash formed that are too large to be carried in the flue gases and fall through open grates to an ash hopper at the bottom of the furnace.
- c) **Bureau** shall refer to the Environmental Management Bureau.
- d) **Clustering** is a strategy of pooling available resources of neighboring cities, municipalities or barangays for the establishment of a common solid waste management facility or service.
- e) **Continuous Emissions Monitoring System (CEMS)** shall refer to the total equipment used to sample, analyze and provide a permanent record of emissions or process parameters.
- f) **Decommissioning** is a process in which the WtE facility is placed in a safe and environmentally acceptable condition prior to cessation of operation.
- g) **Department** shall refer to the Department of Environment and Natural Resources.
- h) **Environmental Permits and Clearances** shall refer to the Environmental Compliance Certificate (ECC), Permit to Operate (PTO) and other legal requirements that must be secured prior to construction, set-up and operation of a WtE facility.
- i) **Dioxins and Furans** shall refer to the polychlorinated organic compounds namely polychlorinated dibenzo p-dioxins (PCDDs) and polychlorinated dibenzo-furans (PCDFs) that are generated unintentionally from waste incinerators and other industrial processes, and 17 of which are toxic in nature. The 17 toxic congeners include seven (7) 2,3,7,8 - substituted PCDDs and ten (10) 2,3,7,8- substituted PCDFs.
- j) **Effluent Standard** shall refer to any legal restriction on quantities, rates, and/or concentrations or any combination thereof, of physical, chemical or biological parameters of effluent which a person or point source is allowed to discharge into a body of water or land.
- k) **Emission** shall refer to any air contaminant, pollutant, gas stream or unwanted sound from a known source which is passed into the atmosphere.
- l) **Fly Ash** shall refer to the ash formed that are too small and light and are carried in the flue gases.
- m) **Feedstock** refers to the segregated biodegradable or residual waste materials supplied to the WtE facility to generate heat or electricity.
- n) **Hazardous wastes** shall refer to by-products, side-products, process residues, spent reaction media, contaminated plant or equipment or other substances from manufacturing operations and as consumer discards of