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Review the legislation status of solid waste management in the industrial park of Vietnam

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Contents

- Legal regulations for industrial solid waste management
- Current situation of solid waste management in the industrial parks in Viet Nam



Classification of ordinary industrial solid waste

- LEP 2020, Article 81: Ordinary industrial solid wastes are classified into the following groups: (1) Group of ordinary industrial solid waste can be reused and recycled as raw materials for production; (2) Group of ordinary industrial solid waste meeting the standards, technical regulations and guidelines for using in production of building materials and ground leveling; (3) Group of ordinary industrial solid waste to be treated
- Note: (1) Unclassified ordinary industrial solid waste must be managed like a group of ordinary industrial solid waste to be treated; (2) Ordinary industrial solid waste mixed with hazardous waste that are unsorted or cannot be classified, shall be managed in accordance with regulations on hazardous waste management
- Circular 02/2022, Appendix III, Form No. 1: List of hazardous waste, industrial waste to be controlled and ordinary industrial solid waste

Storage ordinary industrial solid waste

- LEP 2020, Article 81: Ordinary industrial solid waste must be kept separately according to the classified type; do not mixed with hazardous waste; stored with appropriate equipment, tools and storage areas according to regulations of the MONRE in order to do not disperse dust, leak waste water into the environment
- Circular 02/2022, Article 33. Technical requirements on environmental protection for ordinary industrial solid waste storage: (1) Storage equipment and tools; (2) Warehouse or storage area





Transportation of ordinary industrial solid waste

- LEP 2020, Article 81: (a) Must be contained in equipment and tools to ensure that they do not drop, leak or spread to the environment during transportation; (b) Must be transported proper to the type after being classified according to regulations; (c) Means of transporting industrial ordinary solid waste subject to related must have a positioning device that meets the technical requirements and operates according to the route and time prescribed by the Provincial People's Committee
- Circular 02/2022. Article 34. Technical requirements on environmental protection for ordinary industrial solid waste transport vehicles and the minutes of ordinary industrial solid waste handover: (1) Means of transport; (2) Storage devices during transtation; (3) Form of handover minutes in Appendix III, Form No. 03

Treatment of ordinary industrial solid waste

- LEP 2020, Article 82: Production, business, service establishments, concentrated production, business and service zones, industrial clusters, agencies and organizations that generate ordinary industrial solid waste must reuse, recycle, recover energy and treat ordinary industrial solid waste or transfer them to the following entities: (a) Production facilities that use them directly as raw materials for production, production of building materials or ground leveling is allowed to operate in accordance with the law; (b) Production facilities have appropriate waste co-processing function; (c) Ordinary industrial solid waste treatment facilities with appropriate functions; (d) Ordinary industrial solid waste transport facilities have transfer contract with the subjects specified at points a, b or c above
- Facilities providing ordinary industrial solid waste treatment services must meet the requirements on environmental protection as prescribed
- Organizations and individuals generating ordinary industrial solid waste to be treated, are allowed to recycle, treat, co-treat and recover energy by themselves when meeting the following requirements: (a) Using technology, environmental protection works and production equipment available on site of the enterprise generating the ordinary industrial solid waste and to satisfy the requirements of environmental protection as prescribed; (b) Being consistent with the decision on appraisal of the environmental impact assessment report and the environmental permit; (c) Not investing in new incinerators and landfills to treat ordinary industrial solid waste, unless it is consistent with the contents of solid waste management in relevant plans



Recycling, reuse of ordinary industrial solid waste (1)

- LEP 2020, Article 72: The owners of hazardous waste and ordinary industrial solid waste are responsible for reusing, recycling, treating and recovering energy from the waste, or for transferring them to facilities with appropriate function and granted environmental permits
- Decree 08/2022, Article 47: Encourage reuse of waste, application of cleaner production technology, energy saving, implementation of industrial symbiosis and circular economy
- Decree 08/2022, Article 65. Reuse, direct use, treatment of ordinary industrial solid waste:
(1) Ordinary industrial solid wastes recovered, classified, selected for reuse, use directly as raw materials, fuels and materials for production activities, are managed such as products and goods; (2) Ash, slag, and gypsum classified as ordinary industrial solid waste, and other common industrial solid wastes, that are met the standards, technical regulations and technical guidelines on use as raw materials for production of building and leveling materials issued by competent authorities, shall be managed as products and goods of construction materials. In case there are no standards, technical regulations or technical guidelines, the standards of one of the countries in the Group of industrialized countries shall apply

Recycling, reuse of ordinary industrial solid waste (2)

- Luật BVMT 2020, Điều 54: Tổ chức, cá nhân sản xuất, nhập khẩu sản phẩm, bao bì có giá trị tái chế phải thực hiện tái chế theo tỷ lệ và quy cách tái chế bắt buộc
- Decree 08/2022, Article 77: Organizations and individuals manufacture and/or import into the Vietnamese market any products and packages specified in Column 3, Appendix XXII attached to this Decree, must carry out the responsibility to recycle these products and packages according to the compulsory recycling rates and recycling specifications specified in Column 4, Appendix XXII
- Decree 08/2022, Article 138: Owners of investment projects, production and service establishments, based on action plans, take one or more measures in the following priority to achieve circular economy criteria: (a) Limit the use of environmentally unfriendly products; optimize the use of equipment and products; increase production efficiency, effectively use resources, raw materials and materials; (b) Extend the life cycle of products and their components, including: reuse; repair; refurbishment; remanufacturing; change the purpose of use ; (c) Reducing generated waste includes: waste recycling; energy recovery through waste incineration

Sanctions for administrative violations in ordinary industrial solid waste management



Decree 45/2022, Article 26. Penalties for violations of regulations on classification, collection, transportation, landfill, burial, dumping, burning and treatment of ordinary solid waste: Clause 2. Violations by agencies, organizations and owners of production, business and service establishments that generate ordinary industrial solid waste; Clause 4. Penalties for violations in the collection and transportation of ordinary industrial solid waste; Clause 7. Penalties for violations in ordinary industrial solid waste treatment activities

Responsibilities of stakeholders for waste management in industrial parks

Enterprises



Carry out inventory of all generated waste and waste storage at the facility to hire units with collection and treatment functions; report to the Industrial Park Management Board on the situation of generation, collection and measures of waste management and treatment at the facility every 3 months

DONRE



receive waste information from the Industrial Park Management Board; establish periodic inspection teams on the implementation of waste management of enterprises; grant permits for waste management activities or issue waste source owner books to enterprises; develop mechanisms and policies on management, prevention, recycling, reuse and reduction of waste applied to industrial zones; guide the implementation of measures on waste collection and management; synthesize and send information and data on waste management in the Industrial Park to report to the MONRE



Industrial Park Management Board

receive information about waste management provided by enterprises; inspect and supervise waste management status at enterprises; periodically report and provide information and data on waste to the DONRE

MONRE



is the highest management authority to supervise and inspect the compliance with environmental protection of industrial parks; grant license to operate and directly manage interprovincial hazardous industrial solid waste collection, transportation, recycling and treatment enterprises

Current status of solid waste recycling and reuse in industrial parks



Domestic waste

is classified into recyclable/reusable waste and non-recyclable/non-reusable waste: (1) Recyclable/reusable domestic waste (paper, metal, plastic, undigested leftovers,...) are used as feed for livestock and poultry or sold as scrap; (2) Domestic waste that cannot be recycled/reused (rubber, stone, gravel, etc.) is contracted with collection and treatment facilities in the locality or neighboring provinces



Ordinary industrial waste

is classified into recyclable-reusable waste and non-recyclable/non-reusable waste : (1) Ordinary industrial waste can be recycled/reusable (paper, metal, waste ash, ...) are contracted with purchasing facilities; (2) Ordinary industrial waste that cannot be recycled/reused is contracted with collection and treatment facilities in the locality or neighboring provinces



Hazardous wastes

That cannot be treated by enterprise itself are contracted with hazardous waste collection and treatment facilities in the locality or neighboring provinces

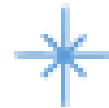
Some difficulties and inadequacies of solid waste recycling and reuse in industrial parks



Waste recycling and reuse in Vietnam is done mainly through private collection and transportation to craft villages for recycling; where this amount of waste can only be recycled 10-20%, mainly paper and plastic, by process with manual technology, polluting the environment



Awareness of waste segregation at source is low and regulations related to industrial waste have not been effectively communicated to the facilities; in many places, ordinary industrial solid waste still even is mixed with domestic solid waste



Ordinary industrial solid waste that can be recycled/reused is not enough or has too many impurities, making it impossible to serve as input materials and fuel for factories in the same industrial park, together with incurring additional costs for waste processing



Lack of synchronous solutions providing chain of activities of collection, transportation, reuse, recycling and treatment of industrial solid waste to apply in large scale

Solutions to promote recycling and reuse of solid waste in industrial parks



Developing a list of reusable/recyclable solid waste in industrial parks



Elaborate and complete national standards and technical regulations on solid waste reuse, focusing on industrial solid waste



Develop and circulate technical guidelines on solid waste reuse in industrial parks



Establish solid waste exchange center in industrial parks to provide information on industrial solid wastes that can be exchanged between enterprises, and at the same time to receive and preliminarily process wastes before transferring to businesses in need outside the industrial park



Communicate and raise awareness of enterprises on industrial solid waste reuse and industrial symbiosis





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Thank you for your attention!



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