## THE GOVERNMENT

THE SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness

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Hanoi, August 6, 2014

### DECREE

#### On water drainage and wastewater treatment<sup>(\*)</sup>

Pursuant to the December 25, 2001 Law on Organization of the Government;
Pursuant to the June 18, 2014 Construction Law;
Pursuant to the June 17, 2009 Law on Urban Planning;
Pursuant to the June 23, 2014 Law on Environmental Protection;
Pursuant to the June 21, 2012 Law on Water Resources;
At the proposal of the Minister of Construction,
The Government promulgates the Decree on water drainage and wastewater treatment.

## Chapter I GENERAL PROVISIONS

Article 1. Scope of regulation and subjects of application

1. This Decree provides for water drainage and wastewater treatment activities in urban areas, industrial parks, economic zones, export-processing zones and hi-tech parks (below referred to as industrial parks), and concentrated rural residential areas; and rights and obligations of organizations, individuals and households engaged in water drainage and wastewater treatment in the Vietnamese territory.

2. This Decree applies to domestic organizations, individuals and households; and foreign organizations and individuals engaged in water drainage and wastewater treatment in the Vietnamese territory.

Article 2. Interpretation of terms

1. Water drainage and wastewater treatment activities means activities of planning, designing, building, managing and operating water drainage systems.

2. Water drainage and wastewater treatment services (below referred to as water drainage services) means activities of managing and operating water drainage systems in order to meet requirements of rainwater and wastewater drainage and wastewater treatment in accordance with law.

3. Expenses for water drainage and wastewater treatment services (below referred to as water drainage expenses) means expenses for rainwater collection and drainage and wastewater collection and treatment in areas where water drainage services are available.

<sup>(\*)</sup> Công Báo Nos 775-776 (20/8/2014)

4. Water drainage and wastewater treatment service charge rate (below referred to as water drainage charge rate) means the correctly and fully calculated cost of water drainage and wastewater treatment plus a reasonable profit for one cubic meter  $(1 \text{ m}^3)$  of wastewater.

5. Water drainage unit means an organization providing the service of managing and operating water drainage systems under a management and operation contract.

6. Discharging entity means a domestic or foreign organization, individual or household that operates or resides in the Vietnamese territory and discharges wastewater into water drainage systems.

7. Wastewater means water whose properties and characteristics have changed after being used or as a result of human activities and which is discharged into water drainage systems or the environment.

8. Domestic wastewater means wastewater generated from such human activities of daily living as eating, drinking, bathing, washing, toileting, etc.

9. Other wastewater means used water other than domestic wastewater.

10. Water drainage systems include water drainage networks (pipelines, sluices, channels, retention reservoirs, etc.), rainwater and wastewater pumping stations, wastewater treatment works and other supporting works designed to collect, conduct and drain rainwater and wastewater, control inundation and treat wastewater. Water drainage systems are classified into the following types:

- Combined water drainage system means a system in which wastewater and rainwater are concurrently collected;

- Separate water drainage system means a system in which rainwater and wastewater are drained separately;

- Semi-separate water drainage system means a combined water drainage system with culverts designed to separate and conduct wastewater to treatment plants.

11. Rainwater drainage system includes rainwater-collecting and -conducting sluices and channels, retention reservoirs, rainwater pumping stations, rainwater intake ports and chambers, discharge gates and other supporting works designed for rainwater collection and drainage.

12. Wastewater drainage system includes sluices, combined sewer overflows, wastewatercollecting and -conducting pipelines, wastewater pumping stations, wastewater treatment plants, discharge gates and other supporting works designed for wastewater collection, drainage and treatment.

13. Culvert means a sewer system conducting wastewater from wastewater separation chambers, which is designed to collect wastewater in dry days or mixed wastewater in rainy days in the combined water drainage system from different basins and conduct it to a wastewater pumping station or wastewater treatment plant.

14. Retention reservoir means a natural or artificial lake which detains rainwater and regulates and drains water for water drainage systems.

15. Connection point means a point where a discharging entity discharges water into a water drainage system.

16. Discharge point means a place where water is discharged from a water drainage system into receiving waters.

17. Drainage basin means a certain area where rainwater or wastewater is collected into a water drainage network before being conducted to a wastewater treatment plant or discharged into receiving waters.

18. Receiving waters means permanent or periodical watercourses such as rivers, streams, canals, channels, ponds, lakes, lagoons, seas and aquifers.

19. Water drainage and wastewater treatment planning (below referred to as water drainage planning) means the determination of drainage basins (for rainwater and wastewater) and wastewater drainage areas; estimation of the total volume of rainwater and wastewater; determination of receiving waters; determination of the location and size of water drainage networks, key water drainage and wastewater treatment works (such as pump stations, wastewater treatment plants, discharge gates).

20. Chemical oxygen demand (COD) means the amount of oxygen necessary for the oxidization of both inorganic and organic chemical compounds in water.

21. Sludge means organic or inorganic mud dredged and collected from septic tanks, rainwater and wastewater-collecting and -conducting systems, retention reservoirs, channels, rainwater intake ports and chambers, rainwater and wastewater pumping stations, discharge gates and wastewater treatment plants.

Article 3. General principles of management of water drainage and wastewater treatment

1. The State regards water drainage services in urban areas and concentrated rural residential areas as public-utility services, paying attention to, prioritizing and encouraging investment in such services so as to meet water drainage and wastewater treatment requirements and ensure sustainable development.

2. Polluters shall pay pollution treatment expenses; revenues from water drainage services must step by step sufficiently cover water drainage expenses.

3. Rainwater and wastewater shall be collected; wastewater shall be treated up to technical regulations as prescribed.

4. Hazardous wastewater shall be managed according to regulations on management of hazardous wastes and other relevant laws.

5. Water drainage systems shall be comprehensively built and maintained. To prioritize eco-friendly wastewater treatment technologies which are suitable to local socio-economic

conditions. To ensure safety in water drainage and wastewater treatment activities according to current standards and technical regulations.

6. Investment projects to build water drainage systems concerning road infrastructure systems must include plans for traffic safety and safety for road works and maintenance or restoration of the original state of traffic works if damaging such works.

7. Investment projects to build technical infrastructure works concerning water drainage systems must include plans to ensure normal and stable operation of water drainage systems.

8. To mobilize community participation in the investment in, and management and operation of water drainage systems.

Article 4. Provisions on technical regulations on wastewater

1. Wastewater discharged from water drainage systems of urban areas, industrial parks and concentrated rural residential areas into receiving waters must comply with environmental technical regulations promulgated by the Ministry of Natural Resources and Environment.

2. Wastewater discharged from plants in an industrial park into the centralized water drainage system of the industrial park must comply with current regulations on environmental management of industrial parks and regulations of the agency in charge of water drainage in the industrial park.

3. Wastewater discharged from discharging entities in a concentrated rural residential area into the water drainage system of such area must comply with current regulations on environmental protection in concentrated rural residential areas and local regulations on management of water drainage systems.

4. Wastewater discharged from discharging entities and industrial parks into urban water drainage systems must comply with competent state agencies' technical regulations on wastewater discharged into water drainage systems. The Ministry of Construction shall promulgate technical regulations on wastewater discharged into urban water drainage systems.

5. In case of decentralized wastewater treatment, based on absorptive capacity and use purposes of receiving waters, the Ministry of Natural Resources and Environment shall promulgate technical regulations on wastewater discharged from decentralized treatment systems into receiving waters applicable to small-scale and simple-technology wastewater treatment solutions with easy-to-manage, -operate and -maintain equipment to clean wastewater at the required level.

6. Wastewater discharged from water drainage systems in urban areas, industrial parks and concentrated rural residential areas into irrigation systems must comply with competent state agencies' regulations on discharge of wastewater into irrigation systems. The Ministry of Agriculture and Rural Development shall promulgate technical regulations on wastewater discharged into irrigation systems.

Article 5. Water drainage planning

1. Urban water drainage planning constitutes a content of general urban planning, zoning-off planning and detailed planning. For a centrally run city, water drainage planning

constitutes specialized planning which shall be elaborated separately to concretize water drainage planning contents included in the approved general urban planning. For a provincial city (of grade 3 or higher grades), if water drainage planning contents included in the approved general urban planning are not sufficient for elaborating, and calling investment in, water drainage system construction projects, the provincial-level People's Committee shall consider and decide to elaborate a specialized water drainage master plan as a basis for such projects. A specialized water drainage master plan must clearly determine the scope and boundary of planning; applicable economic and technical norms and technical regulations; drainage basins and areas; receiving waters; total estimated volume of drained water; water drainage networks and location and size of water drainage works.

2. Water drainage planning for industrial parks constitutes a content of the general industrial park construction planning. An industrial park's water drainage master plan must have the following principal contents: general evaluation of the current state of rainwater drainage and wastewater collection in the industrial park; estimation of the total volume of rainwater and wastewater; determination of water drainage networks, receiving waters, degree of environmental pollution, location and size of the wastewater treatment plant, and wastewater treatment technologies relevant to particular characteristics of the industrial park.

3. Water drainage planning for concentrated rural residential areas constitutes a content of rural construction planning. A concentrated rural residential area's water drainage master plan must have the following principal contents: estimation of the total volume of rainwater and wastewater; determination of water drainage networks, location and size of pump stations and wastewater treatment stations, prioritized projects and investment phasing in each planning period.

4. The elaboration, appraisal and approval of water drainage planning tasks must comply with the Law on Urban Planning, the Construction Law and other relevant laws.

Article 6. Management of elevation concerning water drainage

1. Management of urban elevation

a/ The urban elevation determined in a construction planning design according to the national standard elevation system must meet rainwater and wastewater drainage requirements and be approved by competent authorities;

b/ Decentralized construction planning management agencies shall manage and provide information on urban elevation to interested organizations and persons;

c/ Organizations, individuals and households that invest in work construction shall comply with the required urban elevation;

d/ Agencies competent to appraise basic designs and grant construction permits shall check the conformity of construction works' designed elevation with urban elevation.

2. Management of water drainage system elevation:

Water drainage units shall:

a/ Determine and manage water levels of retention reservoirs and water drainage canals

and channels so as to ensure optimal capacity for rainwater drainage and regulation, inundation control and environmental protection;

b/ Manage elevations of main sluices and rainwater and wastewater collection sluices;

c/ Provide information on elevations of water drainage systems to organizations and individuals at their request.

3. Organizations and units assigned to manage rivers, lakes, canals and channels which are also used for urban water drainage shall coordinate with water drainage units in assuring urban water drainage and inundation control.

Article 7. Local regulations on management of water drainage activities

1. Local regulations on management of water drainage activities must comply with current regulations on management of water drainage and wastewater treatment and, at the same time, suit practical conditions of each locality.

2. A local regulation on management of water drainage activities has the following principal contents:

a/ Scope of regulation and subjects of application;

b/ Water drainage systems of the locality;

c/ Determination of owners of water drainage systems;

d/ Provisions on service standards, connection and exemption from connection; responsibilities and rights of investors and discharging entities; connection-related financial obligations; policies on local support for investment in the construction, management and operation of water drainage systems;

dd/ Provisions on applicable conditions for, and technical regulations on, wastewater discharge;

e/ Provisions on management of sludge from water drainage systems and septic tanks;

g/ Provisions on centralized and decentralized wastewater treatment;

 $h\!/$  Provisions on investment in, construction, management and operation of water drainage systems;

i/ Provisions on management and operation contracts;

 $k\!/$  Provisions on the responsibility for elaborating, managing, exploiting and using databases on local water drainage systems;

l/ Provisions on the responsibility to report on water drainage activities and investment projects to build water drainage and wastewater treatment systems;

m/ Provisions on responsibilities, rights and obligations of involved parties.

3. Provincial-level People's Committees shall elaborate and approve local regulations on management of water drainage activities.

Article 8. Community participation

1. To perform the function of supervising the construction, management and operation of water drainage systems in accordance with law.

2. To make connection to water drainage systems according to regulations.

3. To detect, prevent, and propose competent agencies to handle, violations of law in water drainage activities.

Article 9. Public information, dissemination and education of the law on water drainage

1. Ministries, ministerial-level agencies, government-attached agencies, provincial-level People's Committees and water drainage units shall, within the scope of their responsibilities, coordinate with mass media agencies, mass organizations, associations, communities and schools in disseminating and educating, and guiding people in protecting water drainage works and observing, regulations on water drainage.

2. Political organizations, socio-political organizations and socio-political-professional organizations shall, within the scope of their responsibilities, coordinate with state management agencies in charge of water drainage in, organizing public information on, and mobilize people to observe, regulations on water drainage.

## Chapter II

## INVESTMENT IN DEVELOPMENT OF WATER DRAINAGE SYSTEMS

## Article 10. Owners of water drainage works

1. The provincial-level People's Committee shall be the owner, or authorize or delegate the district- or commune-level People's Committee to be the owner of water drainage systems which are:

a/ Invested with state budget funds;

b/ Transferred from new urban center developers;

c/ Transferred from investors of water drainage works which are under commercial operation for a definite term.

2. New urban center and industrial park developers shall be the owners of water drainage systems in new urban centers or industrial parks under their management until transferring them according to regulations.

3. Investors of water drainage works shall be the owners of such works permanently or until transferring them to provincial-level People's Committees.

Article 11. Investors of water drainage works

1. People's Committees, as decentralized, or assigned water drainage units shall be the investors of state budget-funded water drainage works in the localities under their management.

2. Communal rural construction management boards shall act as the investors of state budget-funded water drainage systems of concentrated rural residential areas as decided by commune-level People's Committees. For works requiring hi-tech or professional qualifications which fall beyond the capacity of communal rural construction management boards, districtlevel People's Committees shall assign capable units to act as the investors in coordination with commune-level People's Committees. 3. Units assigned to act as new urban center and industrial park infrastructure investors shall act as the investors of water drainage works in the areas under their management.

4. Organizations and individuals investing in water drainage works shall be the investors of such works.

5. For water drainage works built with community contributions, the investor's representative shall be decided by the community.

Article 12. Water drainage development investment plans

1. A water drainage development investment plan must include investment solutions and planning and specific jobs to assure rainwater drainage and wastewater collection and treatment, service coverage expansion and service quality improvement.

2. A water drainage development investment plan must conform with the approved construction and water drainage planning and involve coordination of related localities.

3. Responsibilities to elaborate, appraise and approve water drainage development investment plans:

a/ Provincial-level Construction Departments shall assume the prime responsibility for, and coordinate with related agencies in, elaborating local water drainage development investment plans;

b/ Provincial-level Planning and Investment Departments shall assume the prime responsibility for, and coordinate with provincial-level Finance Departments in, appraising local water drainage development investment plans for submission to provincial-level People's Committees for approval.

## Article 13. Investment capital sources

Funds for the investment in water drainage systems of urban areas, industrial parks and concentrated rural residential areas come from the state budget and other lawful sources. The State encourages and creates conditions for all economic sectors to invest in part or the whole of water drainage systems in conformity with approved construction master plans and water drainage master plans.

Article 14. Investment projects on construction of water drainage works

1. The elaboration, appraisal, approval and implementation of investment projects on construction of water drainage works must comply with this Decree and other relevant provisions of the law on work construction investment.

2. When studying the elaboration of investment projects on construction of centralized water drainage works aiming to basically settle matters on rainwater drainage and wastewater collection and treatment in urban centers, consultancy organizations, depending on the characteristics and size of each project, shall:

a/ Conduct sociological surveys and public consultation to assess local people's actual living standards and their capacity and readiness for connection to water drainage systems and for performance of the obligation to pay for water drainage services; and at the same time, provide local people with information on projects and quality of services after

project completion and let them participate in the decision-making process and supervise the implementation;

b/ Consider selecting technical and technological plans, determining capacity and total investment capital of projects in conformity with management and operation expenses so as to ensure economic efficiency of the projects;

c/ Ensure the comprehensive implementation of water drainage work construction projects, covering the construction of wastewater treatment plants and networks collecting and conducting wastewater to connection boxes in the entire service areas of water drainage systems.

Article 15. Investment incentive and support policies

Investors of projects on water drainage and wastewater treatment in urban areas and concentrated rural residential areas are entitled to:

1. Land use levy and land rental incentives as prescribed by law.

2. Local budget supports for construction of outside-fence technical infrastructure facilities.

3. Other incentives and supports according to current regulations.

Article 16. Criteria for selection of wastewater treatment technologies

1. Wastewater treatment effectiveness: To meet the required degree of cleaning wastewater, taking into account the self-cleaning capacity of receiving waters.

2. Construction land saving.

3. Management, operation and maintenance requirements corresponding to local management and operation capacity and qualifications.

4. Reasonability of investment expenses, taking into account the reliance on imported technologies.

5. Suitability with climatic, terrain, geological and hydrological conditions of the areas and capacity of receiving waters.

6. Safety and environmental friendliness.

7. Possibility for future capacity increase or treatment effectiveness improvement.

8. Capacity for stable operation upon abnormal changes in the quality of input water and weather and climate change.

9. Generation and treatment of sludge.

10. Energy conservation and re-use of treated wastewater and sludge.

Based on specific local conditions, provincial-level People's Committees shall decide to select applicable criteria as appropriate.

## Chapter III

## MANAGEMENT AND OPERATION OF WATER DRAINAGE SYSTEMS

Article 17. Selection of water drainage units

1. For state-invested water drainage systems in urban areas and concentrated rural residential areas, the selection of water drainage units must comply with the current law on provision of public-utility products and services.

2. Organizations and individuals dealing in and developing new urban centers and industrial parks shall organize the management and operation of their invested water drainage systems until these systems are handed over to provincial-level People's Committees according to regulations.

3. Water drainage units must have necessary human resources and equipment and technical facilities to meet requirements of, and perform, the management and operation of rainwater and wastewater drainage systems.

4. Water drainage system owners shall select water drainage units in areas under their management.

Article 18. Rights and obligations of water drainage units

1. A water drainage unit has the following rights:

a/ To conduct business under regulations, to be paid properly and fully for water drainage service expenses under signed water drainage system management and operation contracts;

b/ To propose competent state agencies to consider and revise legal documents, technical regulations and economic and technical norms related to water drainage and wastewater treatment activities;

c/ To give opinions on the planning of water drainage in the area;

d/ To receive compensation for damage caused by involved parties as prescribed by law; dd/ Other rights as prescribed by law.

2. A water drainage unit has the following obligations and responsibilities:

a/ To manage assets invested with capital of the owner of the water drainage and wastewater treatment work under the signed water drainage system management and operation contract;

b/ To develop and implement a process of managing and operating the water drainage system;

c/ To tackle incidents and restore water drainage and wastewater treatment;

d/ To develop a database on and manage discharging entities connected to the water drainage system under its management; to coordinate with the water supply unit in collecting or directly collect water drainage service charges under regulations;

dd/ To comply with the law on environmental protection;

e/ To provide information on the connection agreement for interested parties;

g/ To ensure safe, effective and economical management and operation of the water drainage and wastewater treatment system under regulations;

h/ To ensure stable provision of water drainage services under regulations;

i/ To send periodic reports under regulations to the owner and central and local state management agencies of water drainage;

k/ To pay compensation for damage caused to users in accordance with law;

l/ Other obligations as prescribed by law.

Article 19. Water drainage system management and operation contracts

1. A water drainage system management and operation contract means a legally recognized document signed between the owner of a water drainage system and the unit assigned to manage and operate this system.

2. Basic contents of a water drainage system management and operation contract:

a/ The contracting parties;

b/ The contracting objects;

 $c\!/\,Dossier$  of assets (list and value of assets) handed over by the owner to the management and operation unit;

d/ Scope and contents of jobs;

dd/ Dossier of management of water drainage networks and facilities, process of managing and operating water drainage systems and technical requirements;

e/ Service standards;

g/ Contract value; adjustment of contract value;

h/ Contents and method of payment;

i/ Obligations and rights of involved parties.

3. Term of a water drainage system management and operation contract:

A water drainage system management and operation contract has a term of 5 years at least and 10 years at most. If wishing to extend a contract, at least 1 year before the contract expires, contracting parties shall negotiate and sign the contract extension.

4. Termination of a water drainage system management and operation contract:

a/ A contracting party breaches terms of the contract;

b/ The contract expires and either party does not wish to extend the contract;

c/ In *force majeure* events or for other reasons provided in the contract;

d/ Other cases of contract termination as prescribed by current law.

5. Pre-acceptance inspection and payment under water drainage system management and operation contracts:

a/ Payments for a water drainage system management and operation contract shall be made periodically as agreed;

b/ The method of payment shall be agreed upon by the two parties;

c/ In case payment is made 15 days later than the schedule agreed under the water drainage system management and operation contract, the water drainage unit is entitled to an interest on the late paid amount at the highest interest rate applied at the time of payment by the bank where the transaction account is opened;

d/ The water drainage work owner shall organize the supervision, pre-acceptance inspection and payment for the water drainage unit under the water drainage system management and operation contract;

dd/ A water drainage system management and operation contract shall be paid from collected water drainage service charges and the annual budget of the water drainage work owner and from other sources.

6. Transfer of water drainage system management and operation contracts:

A water drainage unit may transfer some or all of its obligations and benefits under the water drainage system management and operation contract to a third party when so agreed by the water drainage work owner.

7. The Ministry of Construction shall promulgate the model water drainage system management and operation contract.

Article 20. Management of rainwater drainage systems and re-use of rainwater

1. Management of rainwater drainage systems:

a/ The management of rainwater drainage systems covers management of rainwatercollecting gates, rainwater-conducting culverts, main water drainage canals, retention reservoirs, anti-flooding pump stations, regulating gates and tide-preventing sluices (if any) and points of discharge;

b/ Culverts, canals and soakage pits shall be periodically dredged and maintained in order to ensure their designed flows. Soakage pit lids and rainwater-collecting and drainage gates shall be regularly checked and maintained. The quality of culverts and works within the network shall be periodically inspected and assessed to propose replacement or repair plans;

c/ To establish a process to manage rainwater drainage systems, which must satisfy prescribed technical requirements of management and operation;

d/ To propose plans to develop basin-based water drainage networks.

2. Re-use of rainwater:

a/ To encourage the re-use of rainwater to meet various needs, contributing to reducing flooding, saving water resources and reducing the exploitation and use of ground and surface water;

b/ Investors in rainwater treatment and re-use equipment and technologies are entitled to concessional loans and other incentives as prescribed by law;

c/ The re-use of rainwater for different purposes must conform with relevant standards and technical regulations on water quality.

## Article 21. Management of retention reservoir systems

1. The management of retention reservoirs in water drainage systems aims to store rainwater and concurrently create eco-environment landscapes for entertainment, recreation, aquaculture and tourism.

2. The use and exploitation of retention reservoirs for entertainment, recreation, aquaculture, tourism and other services are subject to competent authorities' permission; the building, exploitation and use of retention reservoirs shall be examined and supervised in accordance with law.

3. Discharging wastewater from production, business, service, domestic or other activities into retention reservoirs shall be strictly controlled under regulations.

4. To maintain stable water levels of retention reservoirs to properly regulate rainwater.

5. To periodically dredge retention reservoirs and clean their beds and banks.

6. To develop processes of management and regulations on exploitation and use of retention reservoirs.

Article 22. Management and operation of wastewater drainage systems

1. The management and operation of wastewater drainage systems, which include wastewater treatment plants, pump stations, pressure pipelines, key works, connection points, culverts collecting and conducting wastewater to wastewater treatment plants and points of discharge, etc., must comply with approved management and operation processes.

2. The management and operation of water drainage cover:

a/ Periodically inspecting and assessing the quality of key works and works in the water drainage network; the tightness, sediments at connection points, soakage pits and culverts in order to ensure uninterrupted operation of the system and work out replacement, repair, dredging and maintenance measures and water drainage system development plans;

b/ Periodically observing the quality of wastewater in the water drainage system in accordance with the law on environmental protection;

c/ Establishing processes to manage and operate wastewater drainage systems, which meet technical requirements of management and operation according to regulations;

d/ Proposing plans to develop basin-based wastewater drainage networks.

3. The management of combined water drainage systems must comply with Article 20 and Clause 1 of this Article.

## Article 23. Provisions on decentralized wastewater treatment

1. The decentralized wastewater treatment solution is applicable to residential complexes or clusters, new urban centers, households, production, business, service and cottage industry production establishments, craft villages, markets, schools, tourist resorts or areas which cannot or have not been connected to centralized water drainage systems due to geographical and terrain difficulties. 2. The application of the decentralized wastewater treatment solution must ensure economic efficiency and environmental protection and reduce polluting wastewater sources and direct impacts of wastewater on the environment.

3. The application of the decentralized wastewater treatment solution must take into account the possibility for future connection to centralized wastewater treatment systems and conform with approved planning.

4. The Ministry of Construction shall guide the management of decentralized wastewater treatment.

Article 24. Management and use of treated wastewater

1. The use of treated wastewater must meet the following requirements:

a/ The quality of treated wastewater conforms with standards and technical regulations on use of water for different purposes, does not harm people's health and ensures environmental sanitation and safety;

b/ Upon use, treated wastewater is distributed to points of consumption in a separate system without infiltrating and affecting the clean water supply system in the same locality or area.

2. The Ministry of Natural Resources and Environment shall assume the prime responsibility for, and coordinate with related ministries and sectors in, promulgating standards and technical regulations on use of treated wastewater.

Article 25. Management of sludge

1. Sludge shall be classified for management and selection of appropriate disposal technology, contributing to reducing transportation and disposal costs and ensuring convenient management and operation of landfills.

2. Sludge shall be classified as follows:

a/ By origin: Sludge from water drainage systems (water drainage networks and wastewater treatment plants) and sludge from septic tanks;

b/ By severity of pollution of each type of sludge;

c/ By the threshold of harm of sludge from the water treatment process and as prescribed by current relevant laws.

3. Bases for selecting sludge disposal technologies:

a/ Centralized, local or on-site treatment;

b/ Volume of generated sludge;

c/ Properties of sludge;

d/ Stability of disposal technologies;

dd/ Environmental protection requirements; economic and technical effectiveness;

e/ Operation and maintenance requirements;

g/ To encourage the application of sludge re-use, environment-friendly, energy-efficient and heat recovery technologies.

4. Collection, transportation and disposal of sludge in water drainage systems:

a/ Sludge shall be collected, kept and transported to planned disposal places or licensed sites for hygienic disposal under regulations. Discharge of untreated sludge into the environment is prohibited. Sludge with hazardous constituents shall be managed according to regulations on management of hazardous waste;

b/ The treatment and re-use of sludge must comply with regulations on sludge management and use promulgated by competent state agencies and environmental protection regulations;

c/ Investment in building wastewater treatment plants must take into account appropriate sludge collection and disposal solutions.

5. Pumping, transportation and disposal of septic tank sludge:

a/ Sludge from households, administrative agencies and production, business and service establishments shall be pumped periodically;

b/ Septic tank sludge shall be pumped and transported with special-use equipment and vehicles meeting technical and environmental protection requirements;

c/ Septic tank sludge collected and stored shall be transported to licensed places for disposal. Discharge of septic tank sludge directly into water drainage systems or the environment is prohibited;

d/ The disposal and re-use of septic tank sludge must comply with regulations on environmental protection;

dd/ Expenses for pumping, transportation and disposal of septic tank sludge shall be paid by household owners, administrative agencies and production, business and service establishments under contracts with service providers.

6. The Ministry of Construction shall guide methods of setting and managing service charges for the collection, transportation and disposal of sludge from water drainage systems and septic tanks.

Article 26. Management of points of discharge into receiving waters

1. The discharge of wastewater into receiving waters must comply with the laws on environmental protection, water resources, and exploitation and protection of irrigation facilities, and other relevant legal documents.

2. The design and construction of discharge points must prevent re-infiltration from receiving waters and effects of urban inundation.

3. The discharge of wastewater into receiving waters shall be uniformly managed by basin. Provincial-level People's Committees shall prescribe the decentralized and unified management of discharge points, supervise the quality of wastewater discharged directly into receiving waters from water drainage systems and discharging entities in their localities; and coordinate with related localities in organizing the basin-based management of discharge points, quality of wastewater discharged into receiving waters in accordance with the laws on water resources and environmental protection and other relevant legal documents.

Article 27. Water drainage service contracts

1. A water drainage service contract means a legally recognized document concluded between a water drainage unit and a discharging entity (other than households) for discharge of wastewater into a water drainage system.

2. A water drainage service contract has the following principal contents:

a/ The contracting parties;

b/ The connection point;

c/ Volume and quality of wastewater discharged into the system;

d/ Service quality;

dd/ Rights and obligations of the contracting parties;

e/ Water drainage charge rates, method of payment;

g/ Handling of contract breaches;

h/ Other contents agreed upon by the two parties.

3. The Ministry of Construction shall promulgate the model water drainage service contract.

Article 28. Suspension of water drainage services

1. Households that violate water drainage regulations shall be handled in accordance with law. Water drainage units may not suspend providing water drainage services in any circumstance, unless such is specified under management and operation contracts.

2. For other discharging entities that violate water drainage regulations, water drainage units shall send written notices of their violations and request violators to redress the problems. If a discharging entity fails to abide by such request, the water drainage unit may suspend providing water drainage services under provisions and terms of the water drainage service contract and in accordance with relevant laws.

3. Water drainage services shall be resumed after discharging entities completely remedy the consequences of their violations and fulfill the obligations according to regulations.

4. In case of suspending water drainage services for repair, renovation or upgrading of water drainage systems, water drainage units shall notify affected discharging entities in writing of the reasons for and duration of such suspension and at the same time take temporary water drainage measures to limit impacts on production, business and domestic activities of discharging entities and reduce environmental pollution.

Article 29. Rights and obligations of organizations, individuals and households using water drainage services

1. An organization or individual or a household that uses water drainage services has the following rights:

a/ To be provided with water drainage services as prescribed by law;

b/ To request the water drainage unit to tackle incidents when they occur;

c/ To be provided with or introduced about information on water drainage activities;

 $d\!$  To receive compensation for damage caused by the water drainage unit under the water drainage service contract;

dd/ To complain or denounce acts of violating the law on water drainage committed by the water drainage unit or involved parties;

e/ Other rights as prescribed by law.

2. An organization or individual or a household that uses water drainage services has the following obligations:

a/ To fully pay water drainage service charges on time;

b/ To discharge wastewater into water drainage systems according to regulations and technical regulations promulgated by competent state agencies;

c/ To promptly notify the water drainage unit of unusual phenomena which can cause incidents to the water drainage system;

d/ To connect works' water drainage systems to the combined water drainage system according to the connection agreement;

dd/ To pay compensation for damage caused to involved parties in accordance with law; e/ Other obligations as prescribed by law.

## Chapter IV

## CONNECTION OF WATER DRAINAGE SYSTEMS

Article 30. Connection of water drainage systems

1. The connection of water drainage systems must ensure that:

a/Wastewater is collected and treated up to prescribed standards and technical regulations before being discharged into the environment;

b/ The volume of wastewater infiltrating into the earth or flowing into other receiving waters is limited to the utmost.

2. All discharging entities located within a network of rainwater-and wastewatercollecting pipelines and culverts shall be connected to water drainage systems except the case of connection exemption prescribed in Article 35 of this Decree.

3. A concentrated rural residential area or an industrial park that is connected to an urban water drainage system is regarded as an entity using urban water drainage services and shall comply with connection regulations of the water drainage system.

Article 31. Water drainage system connection requirements

1. Connection boxes are determined as lying on water-collecting lines of the water drainage system at the positions of connection points and on the public land adjacent to private land of each discharging entity.

2. All discharging entities shall build water drainage pipelines within their private land areas and connect them to connection boxes.

3. The construction and installation of water drainage systems within the premises of construction works and houses of discharging entities must comply with current technical regulations, prescribed connection requirements and connection agreements.

4. Water drainage system owners shall invest in the construction of water drainage systems which include networks of collecting and conducting water from connection boxes to culverts of grades 3, 2 and 1.

Article 32. Provisions on wastewater discharge at connection points

1. For domestic wastewater: Discharging entities may discharge directly into water drainage systems at connection points.

2. For other wastewater: Discharging entities must have their own systems to collect and preliminarily treat wastewater according to technical regulations, connection regulations and connection agreements before discharging it into connection points.

Article 33. Contents of connection regulations

1. Connection regulations aim to ensure that connection is made upon implementation of investment projects to build new water drainage systems or expand the coverage of existing water drainage services.

2. Connection regulations include:

a/ Regulations on connection points;

b/ Requirements on elevations of connection points;

c/ Regulations on connection boxes;

d/ Connection time;

dd/ Quality and volume of wastewater discharged into connection points;

e/ Funds for and policies to support and promote connection;

g/ Connection-related financial obligations of water drainage system owners and discharging entities;

h/ Rights and responsibilities of involved parties and coordination mechanism.

3. Regulations on water drainage system connection shall be notified to residential communities within the concerned area.

4. Connection regulations are a content of local water drainage regulations promulgated by provincial-level People's Committees.

Article 34. Support for connection to water drainage systems

1. Support for connection aims to promote the connection of wastewater from discharging entities to collecting networks of water drainage systems; ensure thorough collection of wastewater and operation of wastewater treatment plants according to their design capacity; and ensure efficiency of the investment in water drainage system construction.

2. Beneficiaries of support: Households with merits and poor families meeting criteria prescribed by the Prime Minister; and households making connection immediately upon request. Provincial-level People's Committees shall consider and decide on identification of households entitled to support.

3. Modes of support:

a/ To support some or all expenses for installation from connection boxes to water drainage pipelines within the private land of households;

b/Funds for support come from local budgets, investment projects or water drainage units.

4. Based on specific local conditions, owners shall decide on the mode and level of connection support for specific beneficiaries.

Article 35. Connection agreement and connection exemption

1. Connection agreement means a written agreement between a water drainage unit and a discharging entity on the connection position, technical requirements of the connection point, connection time, and quality and volume of water discharged into the connection point.

2. Cases exempt from connection into water drainage systems:

a/ The receiving waters is near while the wastewater quality satisfies environmental sanitation requirements and connection to a combined water drainage system may result in a unreasonable financial burden for the discharging entity;

b/ In the area, there is no collecting network of centralized water drainage systems.

## Chapter V

## WATER DRAINAGE CHARGE RATES

Article 36. Expenses for water drainage services

1. Expenses for water drainage services serve as the basis for determining water drainage charge rates and a ground for determining the value of a management and operation contract signed between a water drainage unit and water drainage system owner.

2. Expenses for water drainage services means production costs which are calculated correctly and fully for one cubic meter  $(1m^3)$  of wastewater to drain water and treat wastewater in the serviced area, including:

a/ Expenses for operation, maintenance and repair of the water drainage system;

b/ Expenses for depreciation of vehicles, machines, equipment, workshops and facilities invested to drain water and treat wastewater up to current standards and technical regulations;

c/ Other expenses, taxes and charges as prescribed by law.

Article 37. Principles of determination of water drainage service expenses

1. Expenses for water drainage services shall be determined on the principle of correctly and fully calculating expenses actually incurred for water drainage and wastewater treatment up to prescribed standards and technical regulations.

2. Expenses for water drainage services shall be determined for each type of water drainage system, including:

a/ Combined water drainage systems;

b/ Separate water drainage systems;

c/ Semi-separate water drainage systems.

Article 38. Principles and methods of determining water drainage charge rates

1. Water drainage charge rates shall be associated with the quality of water drainage

services regardless of whether users are domestic or foreign organizations or individuals and must conform with the State's policies.

2. In case provincial-level People's Committees set water drainage charge rates lower than correctly and fully calculated expenses for water drainage and wastewater treatment services plus a reasonable profit, they shall use local budgets to offset the difference to ensure the lawful rights and interests of water drainage units.

3. Water drainage charge rates shall be determined based on wastewater volumes and contents of pollutants in wastewater.

4. The Ministry of Construction shall guide the methods of determining water drainage charge rates.

Article 39. Determination of wastewater volumes

1. For residential wastewater:

a/For a discharging entity using clean water from a centralized water supply system, the wastewater volume equals the consumed clean water volume stated in the water supply bill;

b/ For a discharging entity not using clean water from a centralized water supply system, the wastewater volume shall be determined based on the average clean water consumption rate per capita set by the provincial-level People's Committee.

2. For other types of wastewater:

a/ For a discharging entity using clean water from a centralized water supply system, the wastewater volume equals 80% of the consumed clean water volume stated in the water supply bill;

b/ For a discharging entity not using clean water from a centralized water supply system, the wastewater volume shall be determined based on wastewater meters. In case a meter is not installed, the water drainage unit and discharging entity shall, based on the water drainage service contract prescribed in Article 27 of this Decree, reach agreement on the wastewater volume accordingly.

Article 40. Determination of pollutant content in wastewater

1. The content of pollutants in wastewater (other than residential wastewater) shall be determined based on the average COD indicator of each type of wastewater, the nature of usage or the type of wastewater-discharging activities or each specific subject. The COD content shall be determined based on analysis results of qualified laboratories.

2. A water drainage unit shall determine the COD content of wastewater (other than wastewater from households) as the basis for determining water drainage charge rates and biannually or irregularly conduct inspection, when necessary, to determine the COD content. A discharging entity that does not accept the COD content indicator calculated by the water drainage system management and operation unit may enter into a contract with another laboratory to sample and determine the COD indicator for comparison. Expenses for sampling and analysis shall be paid by the discharging entity.

Article 41. Responsibility to set and competence to appraise and approve water drainage charge rates

1. For state-invested water drainage systems: Provincial-level Construction Departments shall assume the prime responsibility for, and coordinate with related agencies in, elaborating water drainage charge rate plans for provincial-level Finance Departments to appraise and submit them to provincial-level People's Committees for decision.

2. For water drainage systems invested with other funds: Water drainage system owners shall elaborate and propose water drainage charge rates to provincial-level Finance Departments which shall assume the prime responsibility for, and coordinate with provincial-level Construction Departments in, appraising and submitting them to provincial-level People's Committees for approval.

3. For industrial parks: Investors dealing in and developing industrial park infrastructure shall reach agreement with investors in industrial parks and decide on charge rates after obtaining approval from the local state management agency of water drainage and price management agency.

Article 42. Adjustment of water drainage charge rates

1. Water drainage charge rates shall be adjusted in the following cases:

a/ When investment is made to substantially change wastewater treatment technology and service quality;

b/ When state mechanisms and policies or economic and technical norms change;

c/ National and regional socio-economic development conditions and people's incomes change.

2. The competence to adjust water drainage charge rates must comply with Article 41 of this Decree.

3. For urban areas with ODA-funded wastewater collection and treatment systems, water drainage charge rates and their adjustment roadmap must comply with agreements signed between donors and the Vietnamese Government.

Article 43. Modes of water drainage charge collection and payment

1. For discharging entities:

a/ Providers of water supply services shall organize the collection of water drainage charges based on water supply bills for discharging entities using clean water from centralized water supply systems, and enjoy charge collection service expenses;

b/ Water drainage units shall directly collect water drainage charges from discharging entities not using clean water from centralized water supply systems;

c/ Discharging entities that have paid water drainage charges are not required to pay environmental protection charges as prescribed by current regulations on environmental protection charges for wastewater.

2. For water drainage units:

Water drainage system owners shall pay contract prices under management and operation contracts signed by them and water drainage units.

Article 44. Management and use of collected water drainage charges

1. Collected water drainage charges shall be managed and used by water drainage system owners for the following purposes:

a/ Payment for charge collection, assessment, sampling, analysis and determination of COD content;

b/ Payment for water drainage and wastewater treatment services;

c/ Water drainage system maintenance and development;

d/ Other lawful expenses under current regulations.

2. The Ministry of Finance shall assume the prime responsibility for, and coordinate with the Ministry of Construction in, providing specific guidance on the management and use of revenues from water drainage services.

## Chapter VI

# STATE MANAGEMENT RESPONSIBILITIES FOR WATER DRAINAGE AND WASTEWATER TREATMENT

## Article 45. Responsibilities of ministries and sectors

1. The Ministry of Construction shall perform the state management of water drainage and wastewater treatment in urban areas, concentrated rural residential areas and industrial parks nationwide.

2. The Ministry of Natural Resources and Environment shall perform the state management of environmental protection, water resources, river basin management and pollution control in water drainage and discharge of wastewater into the environment nationwide; and coordinate with ministries and sectors in managing waste in accordance with law.

3. The Ministry of Agriculture and Rural Development shall perform the state management of discharge of wastewater into irrigation systems.

4. Ministries and ministerial-level agencies shall, within the ambit of their tasks and powers, coordinate with the Ministry of Construction, the Ministry of Agriculture and Rural Development and the Ministry of Natural Resources and Environment in performing the state management of water drainage and wastewater treatment in urban areas, industrial parks and concentrated rural residential areas.

Article 46. Responsibilities of provincial-level People's Committees

1. Within the ambit of their tasks and powers, to perform the state management of water drainage and wastewater treatment operations in localities under their management;

2. To assign responsibilities to specialized agencies and decentralize management to People's Committees of lower levels related to water drainage and wastewater treatment in localities under their management.

3. To promulgate specific regulations on management of local water drainage operations; incentive and support mechanisms and policies to encourage investment in water drainage and wastewater treatment suitable to local socio-economic development conditions.

4. To direct the planning of, and approve local development investment plans on, water drainage and allocate funds for implementation in accordance with local socio-economic development programs and plans.

5. To guide the creation of databases on water drainage and wastewater treatment.

6. To direct the reporting on local water drainage, covering the actual state of construction and development; the elaboration, appraisal, approval and implementation of master plans; the construction investment and implementation of construction investment projects; and management of water drainage charge rates.

7. To direct the inspection, examination and handling of violations of the law on management of water drainage and wastewater treatment in their localities.

#### Chapter VII

## IMPLEMENTATION PROVISIONS

#### Article 47. Transitional handling

1. For water drainage master plans for which the design tasks have been approved and which have been elaborated before the effective date of this Decree, they shall be appraised and approved under the Government's Decree No. 88/2007/ND-CP of May 28, 2007, on water drainage in urban areas and industrial parks. Water drainage master plans for which the design tasks have not yet been approved, they shall be appraised and approved under this Decree.

2. In localities where provincial-level People's Committees are collecting water drainage charges under water drainage charge adjustment roadmaps prescribed in the Government's Decree No. 88/2007/ND-CP of May 28, 2007, on water drainage in urban areas and industrial parks, they may continue to collect these charges until the subsequent adjustment of water drainage charges. The subsequent adjustment of water drainage charges must comply with this Decree's provisions on water drainage charge rates.

#### Article 48. Effect

This Decree takes effect on January 1, 2015, and replaces the Government's Decree No. 88/2007/ND-CP of May 28, 2007, on water drainage in urban areas and industrial parks in Vietnam.

#### Article 49. Organization of implementation

1. The Minister of Construction shall coordinate with related ministries and sectors in guiding the implementation of this Decree.

2. Ministers, heads of ministerial-level agencies, heads of government-attached agencies, chairpersons of provincial-level People's Committees and related organizations and persons shall implement this Decree.-

On behalf of the Government Prime Minister NGUYEN TAN DUNG