



MINISTRY OF CONSTRUCTION
ADMINISTRATIVE FOR TECHNICAL INFRASTRUCTURE

KEYNOTE

Decentralized Wastewater management for Vietnamese Cities


Hanoi, 25 / 9 / 2019

Main Contents

- I. Legal framework on Decentralized Wastewater management**
- I. Decentralized Wastewater Treatment**
- I. Recommendations on legal framework for Decentralized Wastewater Treatment and Management**
- I. Conclusions**




I. Legal framework on Decentralized Wastewater management






Decentralized wastewater management issues is clearly stated in the legal documents below:

- Decree No. 80/2014 / ND-CP dated 06/8/2014 of the Government on Wastewater treatment and drainage (Article 23).
 - Circular No. 04/2015 / TT-BXD dated 03/4/2015 of the Ministry of Construction on instructions to implement a number of updated articles of Decree No. 80/2014 / ND-CP dated 06/8/2014 of the Government on Wastewater treatment and drainage (Article 1).
 - Decision 589 / QD-TTg dated 06/4/2016 of Prime Minister on the approval of adjustments of the Vietnam urban and industrial areas drainage plan to 2025 and vision to 2050 (Article 1, Article 3).
- 



II. Overview of Decentralized wastewater treatment






- Currently, the nationwide ratio of treated wastewater only about 13% of total wastewater discharged.

- In urban areas, the isolated population clusters, military barracks, markets, schools, hospitals, restaurants, services, small production units, ... discharge wastewater that is different from the characteristic of domestic wastewater and has no conditions for connecting to the sewer system should apply the decentralized treatment.

- Decentralized treatment has pros and cons:

+ Pros: Ability to handle wastewater at site; big reduction for capital cost (primary collection system); can be re-used for agricultural production at the urban fringe; easy operation and management with community participation; suitable for suburban and rural areas; low cost.

Cons: can not treat all the wastewater discharged; decentralized treatment technology is suitable for each type of wastewater; high operation cost.






III. Recommendations to improve the framework for decentralized wastewater management and treatment






Decentralized wastewater management

- Wastewater and drainage planning: Decentralized treatment content shall be mentioned from the planning of wastewater and drainage plans and projects. This should give opportunities for investments to protect the environment and public health.
 - Details on the selection criteria and application: Decentralized wastewater treatment should be integrated with centralized system to ensure the highest efficiency of environmental protection, limit the untreated wastewater to the open water bodies and prevent environmental pollution.
 - Condition for design and investment in decentralized treatment plant
- 



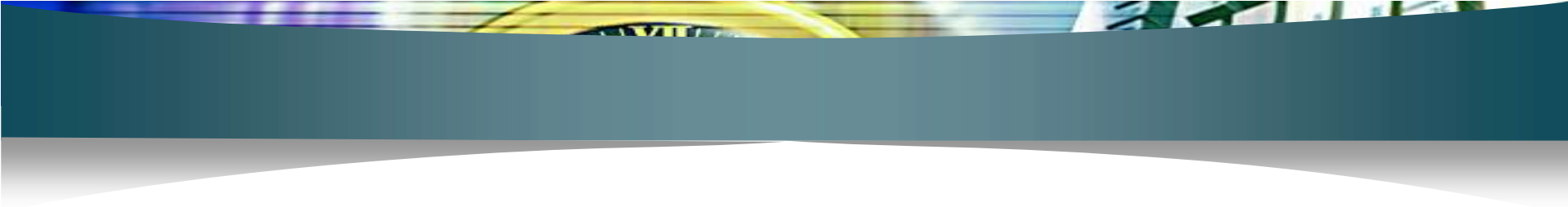

Decentralized wastewater treatment management

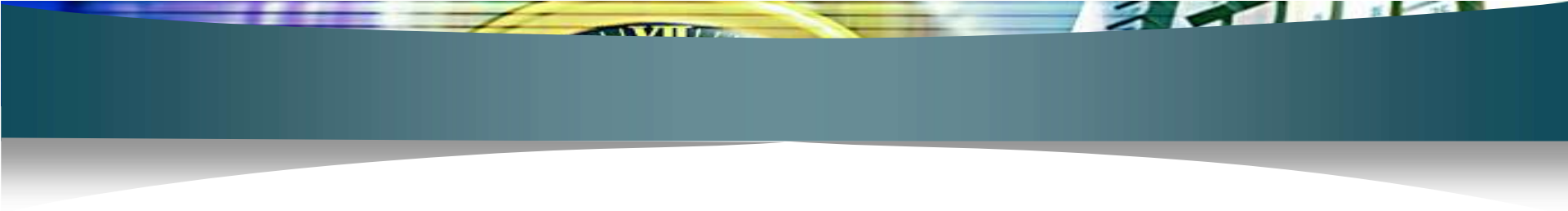

- Selection of decentralized treatment technology : Depends on characteristic of wastewater and socio- economic conditions, environmental landscape, ...
 - Assessment of wastewater influent and effluent
 - Standards and technical regulations
 - Organization and management of Decentralized systems: Owners, investor; operator; Source of financing
 - Scale up, future connection to centralized system, future technology
- 



IV. Conclusions and recommendations



- 
- There should be policy for management and support, instructions and support to Implement decentralized wastewater treatment.
 - Vietnam is a developing country should encourage investment in the construction and application of technology of wastewater treatment decentralization is very consistent with economic conditions which still restrict the discharge of wastewater directly into the environment polluting natural environment
 - Ministries, agencies and localities to focus on study, support and create incentives for investing activities to build decentralized wastewater treatment plants. Meanwhile to develop policy support to the decentralized system to connect to the centralized system, or to discharge wastewater directly to receiving water bodies when meet current regulation standards
- 

- 
- Financial support, capacity building for investment and construction of decentralized wastewater treatment.
 - Propose a number of solutions in technology, economic- technical norms, in line with the investment system for decentralized wastewater treatment in Vietnam in general and at localities.
 - To implement ICT activities for the implementation of construction of collection systems, decentralized wastewater treatment and replicated with high efficiency.
 - Raising the awareness of the people in the operation of decentralized wastewater treatment.
- 



MINISTRY OF CONSTRUCTION
ADMINISTRATIVE FOR TECHNICAL INFRASTRUCTURE

THANK YOU!