



Administration of Technical Infrastructure,
Ministry of Construction, Vietnam




Compliance with Water Supply and Sanitation Laws: Insights and Best Practices

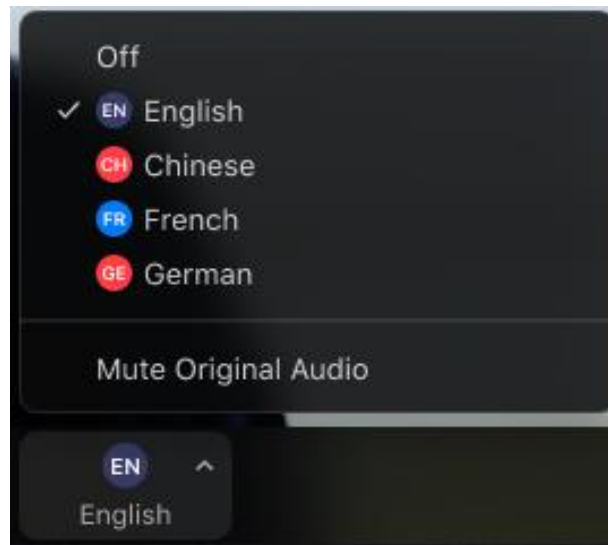
11/07/2023

inspiring change



WEBINAR INFORMATION

- This webinar is available in **Vietnamese** and **English**. Please, pick the language that you would like to hear.
- In your meeting/webinar controls, click **Interpretation** .
- Click the language that you would like to hear.



- (Optional) To hear the interpreted language only, click Mute Original Audio.
- Please, select French for **Vietnamese**.

WEBINAR INFORMATION



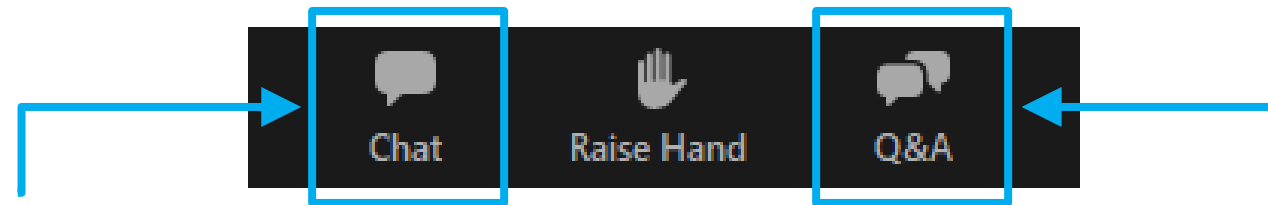
- This webinar will be **recorded and made available “on-demand”** on the [IWA Connect Plus](#) platform, with presentation slides, and other information.
- The **speakers** are responsible for **securing copyright permissions** for any work that they will present of which they are not the legal copyright holder.
- The opinions, hypothesis, conclusions or recommendations contained in the presentations and other materials are the **sole responsibility of the speaker(s)** and do not necessarily reflect IWA opinion.

WEBINAR INFORMATION



- In case the webinar suddenly ends due to unexpected reasons, please, use the same link to access the event.
- The **'Chat' box** can be used for network. Feel free to introduce yourselves there.
- Use the **'Q&A' box** to submit questions for the speakers and panelists.

WEBINAR INFORMATION



- **‘Chat’ box:** please use this for general requests and for interactive activities.
- **‘Q&A’ box:** please use this to send questions to the panelists.
(We will answer these during the discussions and in post-webinar materials.)

Please Note: Attendees’ microphones are muted. We cannot respond to ‘Raise Hand’.

AGENDA



General Opening and Introduction

Presenter

Robert Bos

Opening and Introduction from Vietnamese side

Viet-Anh Nguyen

Water and Sanitation Law in Context – International Perspectives

Tom Mollenkopf

Water and sanitation law: Case studies from countries in the region - 2

Joselito Riego de Dios

Water and sanitation law: Case studies from countries in the region - 3

David Cunliffe

Vietnamese perspectives on Water and Sanitation law

Nguyen Minh Duc

Interactive panel discussion

All speakers, moderators and participants

Conclusion and closing

Robert Bos & Viet-Anh Nguyen

MODERATORS & SPEAKERS



Tom Mollenkopf
International Water
Association



Robert Bos
International Water
Association



David Cunliffe
SA Health



Viet-Anh Nguyen
VWSA



Nguyen Minh Duc
ATI - Management Division



Joselito Riego de Rios
Philippines Department of
Health

Water and Sanitation Law in Context – International Perspectives

TOM MOLLENKOPF, INTERNATIONAL WATER ASSOCIATION





Water and Sanitation Law in Context – International Perspectives

IWA – VWSA Joint Webinar, 11 July 2023

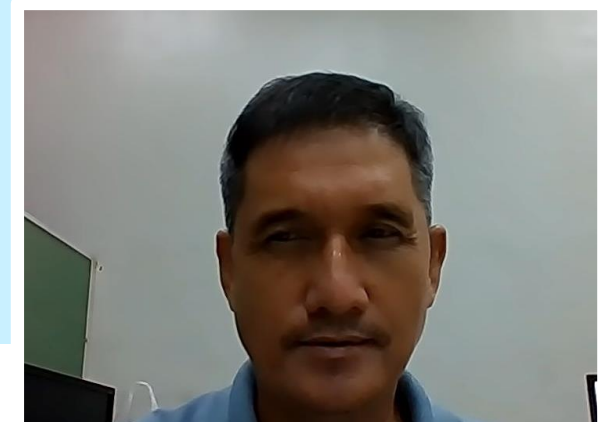
TOM MOLLENKOPF, PRESIDENT, INTERNATIONAL WATER ASSOCIATION AND SENIOR
ASSOCIATE, AITHER



inspiring change

WATER AND SANITATION LAWS – PHILIPPINE PERSPECTIVE

ENGR. JOSELITO M. RIEGO DE DIOS. MPH
CHIEF, HEALTHY ENVIRONMENT AND SANITATION DIVISION
PHILIPPINE DEPARTMENT OF HEALTH



PHILIPPINES DRINKING WATER AND SANITATION LEGAL AND REGULATORY FRAMEWORK

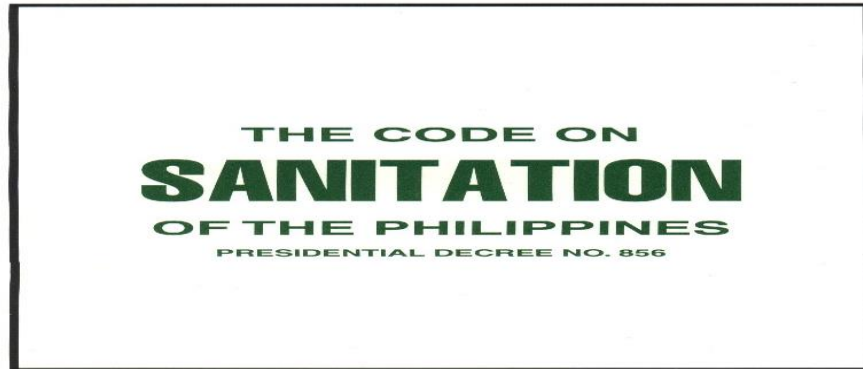


Statute	Title	Areas of Regulation	Responsible Agency
Presidential Decree 1067	Water Code	Resource and Economic Regulation	National Water Resources Board (NWRB)
Presidential Decree 856	Code on Sanitation	Drinking water quality regulation Sanitation regulation	Department of Health (DOH) Local Government Unit (LGU)
Republic Act 1378	Plumbing Code	Design and Construction of water and sanitation plumbing systems	Department of Public Works and Highways (DPWH) LGU

DRINKING WATER QUALITY REGULATIONS



DEPARTMENT OF HEALTH
Manila, Philippines
1976



Implementing Rules and Regulations of the Code on Sanitation
 a) Source development – site clearance, initial and operational permits, certificate of potability
 b) Sanitary permit requirements for water vendors

Chapter II – Water Supply

- Drinking water quality shall conform to the criteria set by the National Drinking Water Standards.
- Treatment of water shall be in accordance with the prescribed procedures of the DOH
- Initial and periodic examinations shall be required to all water sources
- The examination of drinking water shall be performed only in laboratories duly accredited by the Department.

Administrative Order No. 2006-0024 – Rules and Regulations Governing Accreditation of Laboratories for Drinking Water Analysis

Administrative Order No. 2017 – 0010 entitled the Philippine National Standards for Drinking Water

Administrative Order No. 2014-0027 - National Policy on the Water Safety Plan (WSP) for All Drinking Water Service Providers

Administrative Order No. 2017-0006 – Guidelines for the Review and Approval of the Water Safety Plans for Drinking water Service Providers

DRINKING WATER QUALITY MONITORING SURVEILLANCE PROGRAM



- The Committee shall oversee the operation of the water systems and the quality of water produced and distributed by the system

- Members of the Committee
 - Municipal/City Health Authority – Chairperson
 - Rural Health Unit/City Health Officer
 - Water Districts/Private Water Suppliers
 - Sangguniang Panlalawigan/Panlungsod/Bayan
 - Municipal/City Engineer’s Office
 - Municipal/City Environment and Natural Resources Officer
 - NGOs and Professional Groups related to health and sanitation
 - DOH representative to the local health board
 - Provincial Health Office (Provincial Sanitary Engineer)

Improved Framework for Drinking-Water Safety

- Health outcome targets
- Water quality targets
- Performance targets
- Specified technology targets

Health-based targets

Public health context and health outcome

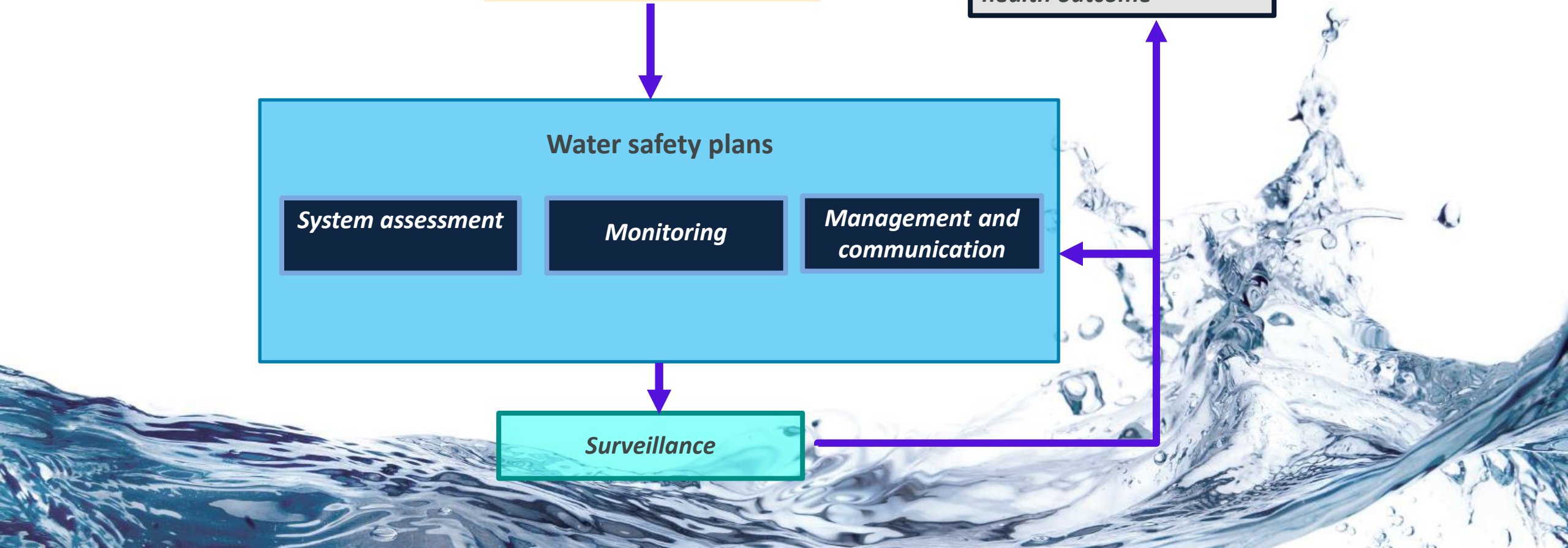
Water safety plans

System assessment

Monitoring

Management and communication

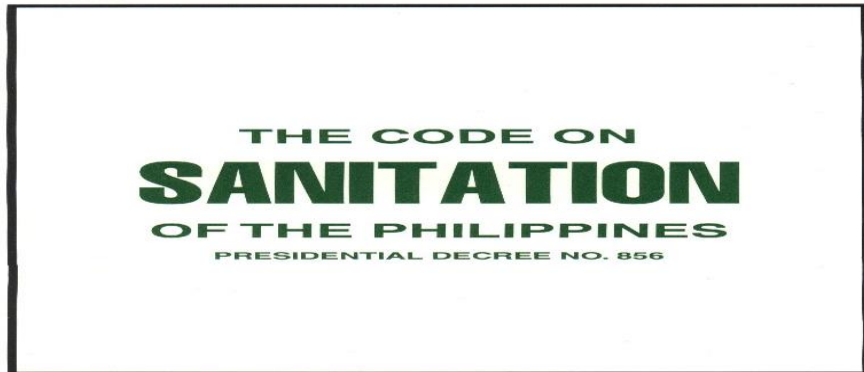
Surveillance



SANITATION REGULATIONS



DEPARTMENT OF HEALTH
Manila, Philippines
1976



Implementing Rules and Regulations of the Code on Sanitation

- Onsite sanitation
- Offsite sanitation – sewage management and septage/fecal sludge management
- Permits/clearances
 - Environmental clearance for sewage, septage and fecal sludge management
 - Operational Permit
 - Sanitation technology verification clearance

Administrative Order No. 2019 – 0047 dated Oct 29, 2019 - National Standard on the Design, Construction, Operation and Maintenance of Septic Tank Systems.

CHAPTER XVII - Sewage Collection and Disposal, Excreta Disposal and Drainage -

The approval of the Secretary or his duly authorized representative is required in the following matters:

- Construction of any approved type of toilet for every house including community toilet which may be allowed for a group of small houses of light materials or temporary in nature;
- Plans of individual sewage disposal system and the sub-surface absorption system, or other treatment device;
- Location of any toilet or sewage disposal system in relation to a source of water supply;
- Manufacture of septic tanks; and
- Method of disposal of sludge from septic tanks or other treatment plants.

- Plans, design data and specifications of a new or existing sewerage system or sewage treatment plant;
- The discharge of untreated effluent of septic tanks and/or sewage treatment plants to bodies of water;

Challenges

1. Outdated law - incoherent provisions and low penalty provision.
2. Overlap of functions among government offices,
3. Rapid turnover of sanitation personnel at the local government units.
4. Lack or inadequate number of qualified or trained sanitation personnel. Poor understanding on existing laws.
5. No standard educational requirement for Sanitation Inspector position.
6. Lack of police power among the Sanitation Inspector and Sanitary Engineer.
7. Inadequate access to water laboratory facilities.
8. Lack of appropriate sanitation technologies for differently located areas.

THANK YOU FOR LISTENING!!!

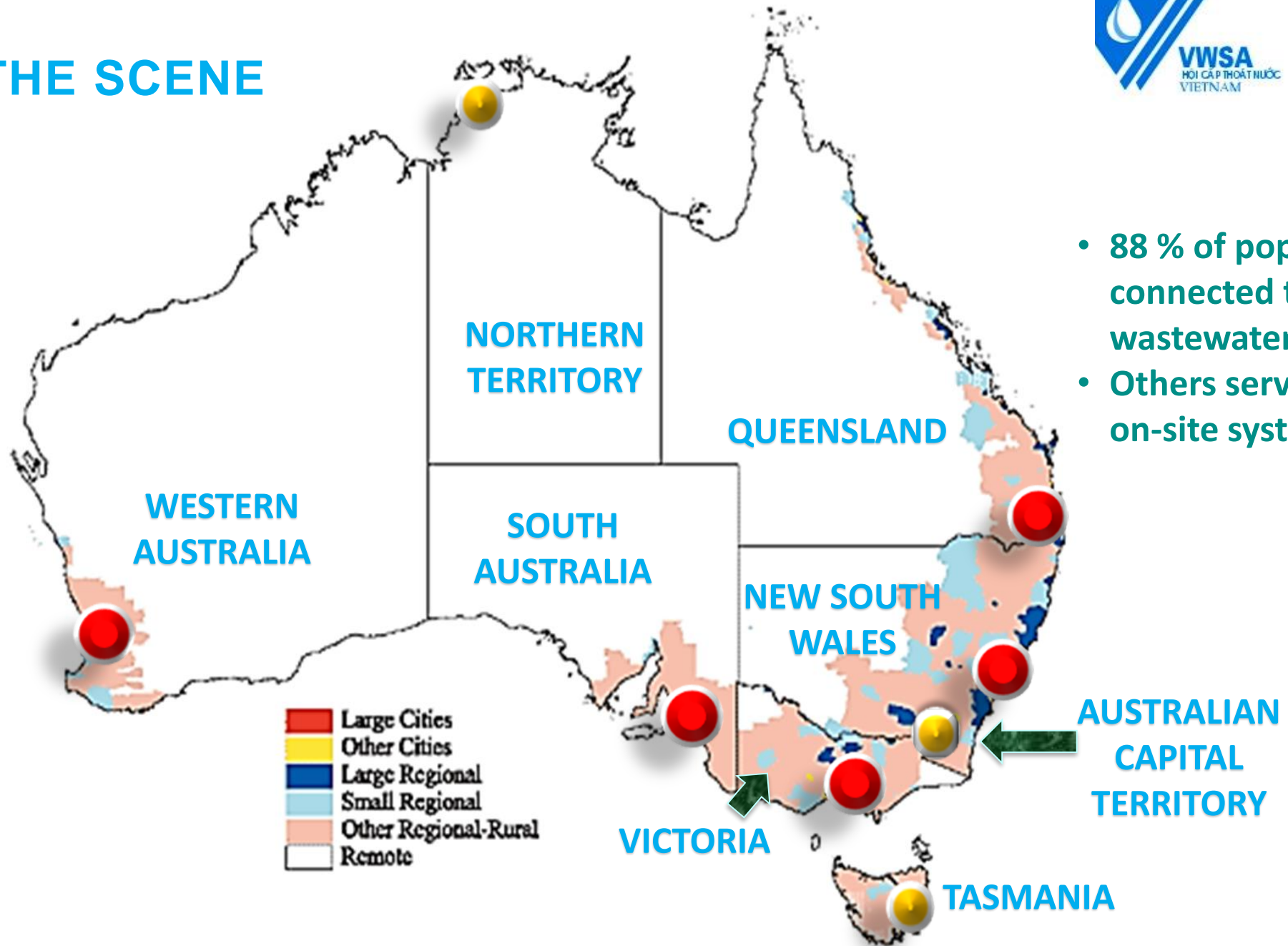
Case Study from Australia

DR DAVID CUNLIFFE, PUBLIC HEALTH DIVISION, SA HEALTH (SOUTH AUSTRALIA)



SETTING THE SCENE

- 93 % of population use mains water
- 10% of water supplied from rainwater tanks



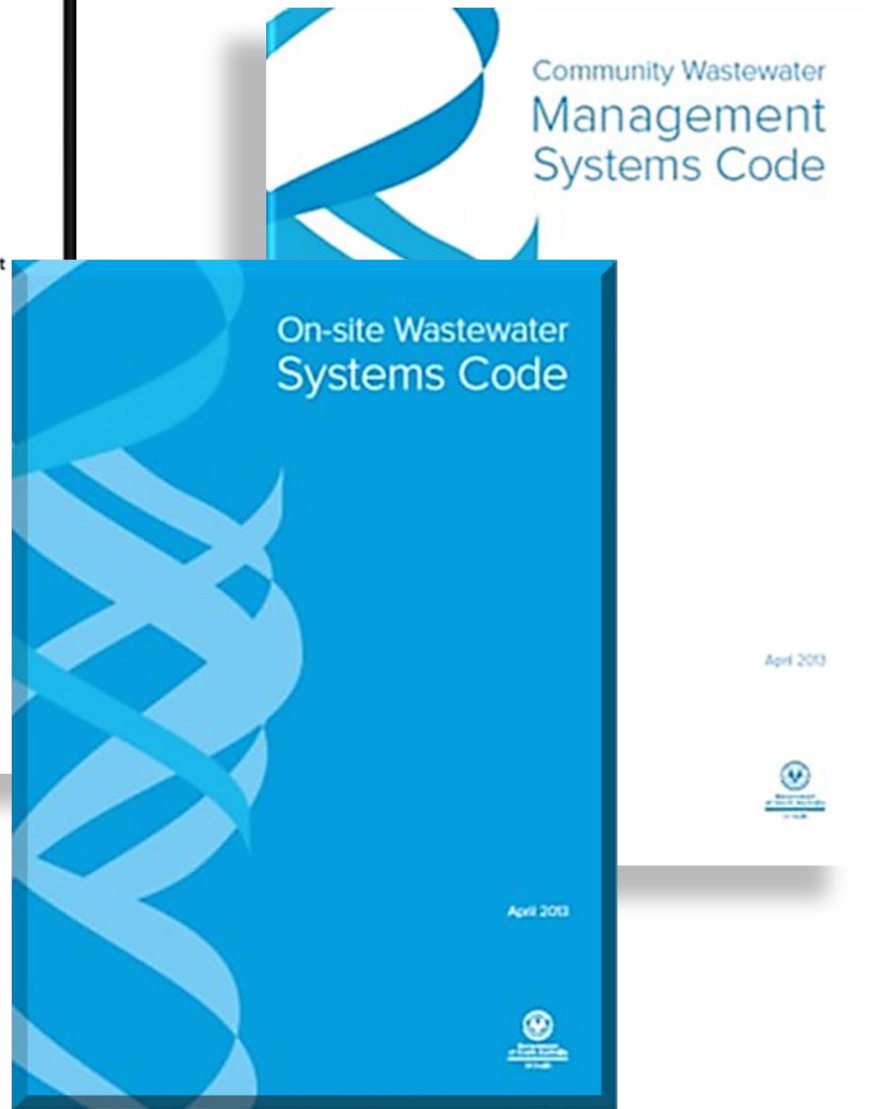
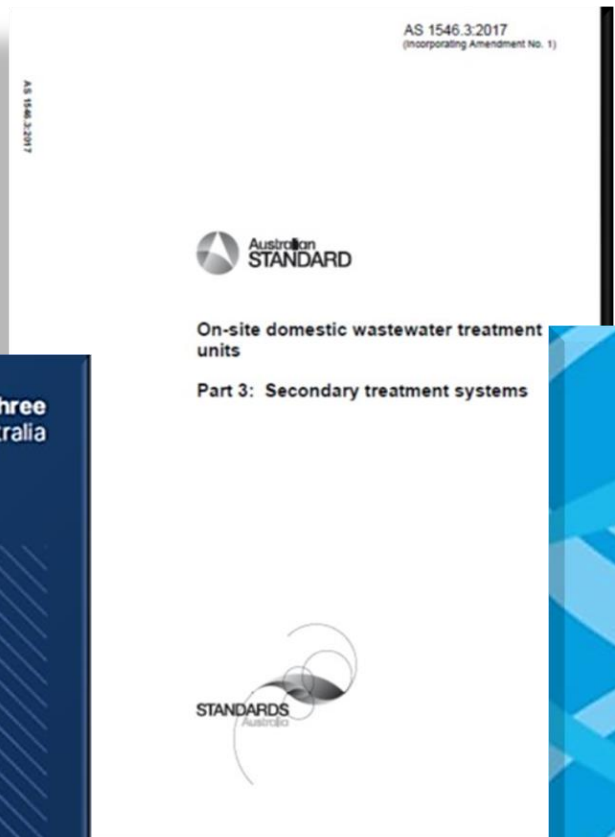
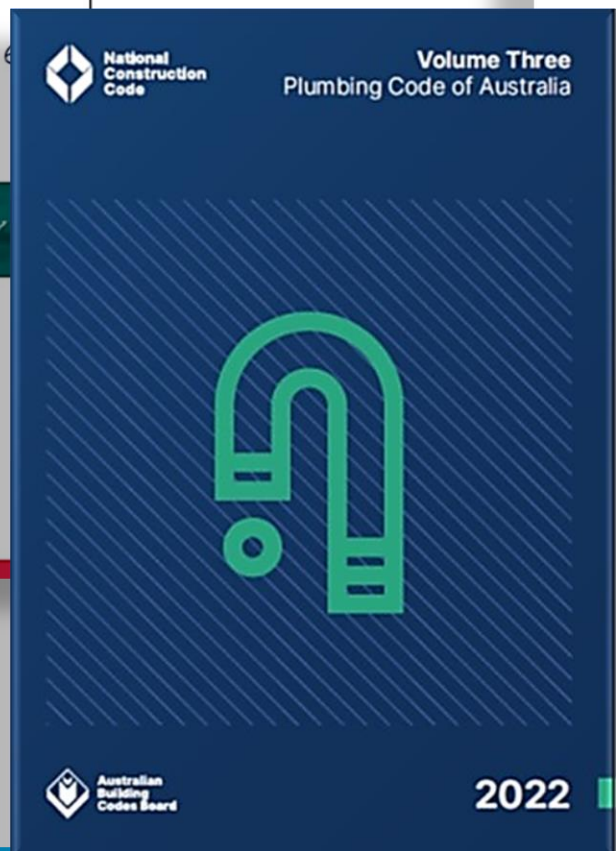
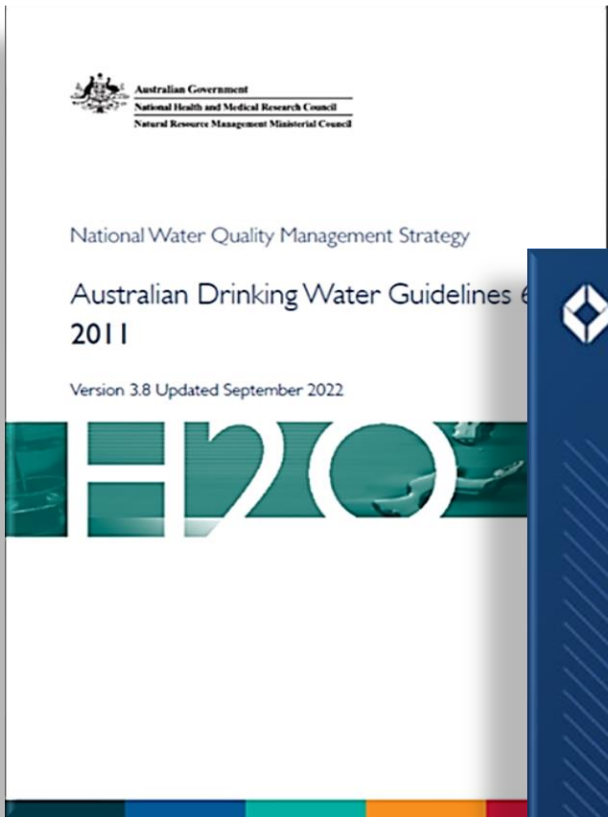
- 88 % of population connected to public wastewater systems
- Others served by on-site systems

REGULATION IN AUSTRALIA



- Regulation of water and sanitation is a State and Territory Issue
- Regulation supported by a range of national guidelines (e.g. Australian Drinking Water Guidelines) policies and standards (e.g. national construction and plumbing codes). These are developed in consultation with the States and Territories
- Consistency of approaches supported by endorsement and application of national guidelines and standards e.g. safety of drinking water is defined in terms of compliance with the Australian Drinking Water Guidelines
- Further support from national organizations and bodies such as the Water Quality Expert Reference Panel which included representatives from States and Territory public health agencies

GUIDELINES, STANDARDS AND CODES



DRINKING WATER REGULATIONS



- Relatively new in Australia with legislation first introduced in 2003
- South Australia, Victoria, New South Wales and Queensland have legislation that apply to drinking water safety. Other jurisdictions have policies and agreements between health agencies and drinking water suppliers
- In most cases the Health Department is the lead regulator
- The scope of the legislation varies. SA and NSW regulate all public water supplies including urban centres, community water supplies, indigenous communities, water carters, schools, tourist facilities etc

FEATURES OF DRINKING WATER REGULATION



- Common features of regulations, policies and agreements
 - Recognition of the Australian Drinking Water Guidelines
 - Requirement for RMPs (WSPs)
 - Auditing and Inspecting
 - Testing and Reporting
 - Incident notification procedures

- Regulations **do not** take a standard based approach

SANITATION



- There is a general requirement that all development incorporating residential/community use requires installation and operation of appropriate sanitation facilities

- Sanitation takes three basic forms:
 - Large wastewater treatment plants operated by government owned water utilities/local government in capital cities and urban centres (include sewerage systems).
 - Community wastewater treatment plants typically operated by Local Government (include sewerage systems)
 - On-site wastewater systems operated by businesses, tourist facilities and householders

WASTEWATER REGULATION



- Administration of regulations varies between jurisdictions. Can include Health Departments (plus Local Government) and Environment Protection Agencies (EPAs) or Housing Departments
- Detailed attention applied to on-site systems in all jurisdictions. Processes for approval of treatment devices (issued to manufacturers) and installation of treatment systems (issued to landholders). Australian Standards describe treatment requirements. Most jurisdictions have codes of practice.
- Larger treatment plants typically licensed by EPAs with controls applied to effluent discharges. Health Departments can also apply discharge limits and require reporting of non-compliance.
- Increasing beneficial use of treated wastewater (recycling). Subject to compliance with the Australian Guidelines for Water Recycling. Recycled water schemes require regulatory approval

SUMMARY



- Regulation of drinking water quality and sanitation in Australia achieved by a combination of State and Territory based legislation and codes of practice. National guidelines and standards support consistency.
- Regulation of drinking water relatively recent with the first State legislation developed 20 years ago
- Broad range of wastewater legislation ranging from a prescriptive approach for on-site systems to licensing systems for large wastewater treatment plants. Stronger involvement of Environment Protection Agencies
- Challenges remain particularly in remote areas but progress being made



Thank You



Administration of Technical Infrastructure,
Ministry of Construction, Vietnam



The points of building Vietnam's law on water supply and sewerage

NGUYEN MINH DUC, ATI - MANAGEMENT DIVISION

inspiring change



CONTENT



1. Summary of legal enforcement in water supply and sewerage field
2. Objectives, viewpoints and requirements for building policy
3. Policies in the proposal to build the Law on Water supply and sewerage

*sewerage includes drainage, sewerage and wastewater treatment



SUMMARY OF LEGAL ENFORCEMENT IN WATER SUPPLY AND SEWERAGE FIELD



I. SUMMARY OF LEGAL ENFORCEMENT IN WATER SUPPLY AND SEWERAGE FIELD



1. Results of the administration of legal provisions enforcement in water supply and sewerage field

a) Results of policy implementation in water supply field

- About 250 urban water supply enterprises are operating about 750 water supply plants in urban and surrounding rural areas.
- Total capacity of urban water supply plants: 11.6 million m³/day.
- Percentage of urban population that are provided with clean water: 94.2%.
- Non revenue water (NRW): 16.5%.

b) Results of the administration of legal provisions enforcement in the water sewerage field

- The rate of connection, collection and wastewater treatment of the current sewerage system is still low, the average coverage rate is 64%.
- The rate of collection and treatment of urban domestic wastewater is only about 15%.
- About 82 concentrated wastewater treatment plants have been put into operation with total designed capacity of about 1.47 million m³/day.

I. SUMMARY OF THE LEGAL ENFORCEMENT IN WATER SUPPLY AND SEWERAGE FIELD (CONT.)



2. Results of reviewing Vietnam's legal provisions

- There is no Law on Water Supply and sewerage in the current Vietnam's Legal provisions (*legal void*).
- + Management of raw water exploitation, water treatment, water transmission and consumption of clean water, clean water supply services.
- + Discharging wastewater, collecting rainwater and wastewater; wastewater treatment; wastewater collection and treatment services; a number of regulations to ensure effective management of regulating reservoirs, anti-flood drainage, and sludge treatment.
- Current Laws have a number of contents related to water supply and sewerage (*in the process of building the Law on water supply and sewerage, continue to review and evaluate to ensure uniformity*).



OBJECTIVES, VIEWPOINTS AND REQUIREMENTS FOR BUILDING POLICY



II. REQUIREMENTS FOR BUILDING LAW



1. Requirements for building policy

Inheriting and developing regulations from Decree No. 117 and Decree No. 80 (Legalization).

Regulations on missing contents of water supply and sewerage that is voided in current Legal provisions.

Supplementing specialized regulations to ensure synchronization with other laws; meet the requirements and contents of water supply and sewerage management by Law.

2. Proposing 05 policies

- (1) Develop a synchronous, unified and efficient water supply and sewerage system;
- (2) Management and operation of water supply and sewerage works;
- (3) Management of water supply and sewerage services;
- (4) Finance in water supply and sewerage activities;
- (5) State management of water supply and sewerage.



BASIC POLICIES IN THE PROPOSAL TO BUILD THE LAW ON WATER SUPPLY AND SEWERAGE



III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE



Policy group No. 01: Develop synchronous, unified and efficient water supply and sewerage systems

Regulations in Chapter II on Basic investigation, orientation and planning from Article 13 to Article 19; and Chapter III on Construction investment from Article 20 to Article 30. Specifically:

a) Carry out basic investigation on water supply, drainage, sewerage and wastewater treatment

Conduct surveys every 5 years, combine reports, build databases.

b) Planning of water supply and sewerage system

- Regulations on the content of water supply planning in regional planning project, provincial planning project and construction planning project
- Specialized water supply planning is made specifically for provinces and cities under the central government.
- Specialized sewerage planning for urban areas of grade III or higher.

III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE (CONT.)



Policy group No. 01: Develop synchronous, unified and efficient water supply and sewerage systems (cont.)

- Regulations on water supply zoning.
- Regulations on drainage zoning according to topographical conditions of urban areas, residential areas, irrigation drainage and river basins.
- Regulations on formulation and implementation of plans on development of water supply, drainage, sewerage and wastewater treatment in provinces and cities under the central government.

c) Invest in water supply and sewerage works

- Regulations on supporting investment in water supply works in poor residential area through supporting investment in water sources and raw or clean transmission pipelines.
- Regulations on supporting necessary capital from the central government for local sewerage and wastewater treatment works.
- Regulations on investment in sludge treatment works from the sewerage system.
- Regulations on investment in distributed rural water supply works.
- Regulations on investment in distributed wastewater treatment works.
- Regulations on mobilizing private sector to participate in investment and operation of water supply, drainage and wastewater treatment projects.

III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE (CONT.)



Policy group No.02: Management and operation of water supply and sewerage works

Regulations in Chapter IV on operation of water supply and sewerage works from Article 31 to Article 44.

a) Select investors, water supply and sewerage units, and investors of water supply and sewerage projects

- Regulations on principles for selecting investors, water supply and sewerage units to participate in the management and operation of water supply, drainage, sewerage and wastewater treatment works.
- Regulations on water supply service areas, requirements for water supply service areas; adjust the water supply service area when the service quality is not satisfied and safe water supply is not ensured.

b) Manage and operate water supply and sewerage works to meet requirements of sustainability and economic efficiency

- Regulations on application of information technology, new technologies.
- Regulations on management and operation of water supply works.
- Regulations on management and operation of wastewater collection and treatment.
- Regulations on management and operation of regulating reservoirs, rainwater drainage and flood control.
- Regulations on reuse of rainwater and wastewater after treatment.

III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE (CONT.)



Policy group No. 03: Management of water supply and sewerage services

Regulations in Chapter V on Management of water supply and sewerage services from Article 45 to Article 56.

a) Manage water supply and sewerage services, ensure lawful rights and obligations of water supply and sewerage units and service users

- Regulations on quality of water supply and sewerage services.
- Regulations on rights and obligations of water supply and sewerage units.
- Regulations on rights and responsibilities of customers using water and discharging wastewater.

b) Improve responsibilities of water supply and sewerage units and management role of local authorities in management of water supply and sewerage services

- Regulations on economic contracts: Contract for provision of water supply services between provincial People's Committee and water supply enterprise; Contract for provision of water supply services between a wholesale water supply enterprise and a retail water supply enterprise.
- Regulations on contract for sewerage services; Contract for hiring management and operation of sewerage works.

c) Management of safe water supply and wastewater

- Regulations on making and organizing implementation of plans for safe water supply.
- Regulations on safe wastewater management and flood control.
- Regulations on clean water trading conditions.

III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE (CONT.)



Policy group No. 04: Finance in water supply and sewerage activities

Regulations in Chapter VI on Financial management of water supply and sewerage from Article 57 to 62.

- Each province, city under the central government establishes a council to appraise the price of clean water service and wastewater service.
- Develop a mechanism for cross-compensating water prices between industrially produced water and domestic water, and between urban and rural areas through the establishment of inter-district, inter-urban and rural water supply service areas.
- Wastewater dischargers must pay for cost of wastewater collection and treatment. Service prices for drainage, sewerage and wastewater treatment must ensure adequate management and operation costs; have a roadmap to recover the cost of equipment investment and part of the work investment. Service prices for industrial drainage sewerage and wastewater treatment must ensure recovery all cost of the work investment and operation.
- Regulations on allocation of state capital and other capital sources for investment projects in drainage, sewerage and wastewater treatment works.

III. BASIC POLICIES IN DRAFT LAW ON WATER SUPPLY AND SEWERAGE (CONT.)



Policy group No. 05: State management of water supply and sewerage

Regulations in Chapter VII on State management of water supply and sewerage from Article 63 to 66 and Chapter VIII on Implementation provisions.

- Regulations on unified management of water supply and sewerage, assignment of responsibilities of the Government and Ministries on management of water supply and sewerage sector.
- Strengthening decentralization, creating initiative for localities.
- Regulations on management and assurance of security for clean water supply, drainage, sewerage and wastewater treatment.
- Responsibilities of the Government and local authorities when there are risks and incidents related to water supply and sewerage services.
- Regulations on responsibilities for management, supervision, inspection and handling of violations in water supply and sewerage activities.

SOME ISSUES TO EXCHANGE AND REFER TO INTERNATIONAL EXPERIENCE



1. Build separate Law on water supply, Law on sewerage or combine in one Law on Water supply and sewerage. The scope and subjects of the Law (basic investigation, planning, investment, operation, management of the Government, local authorities, etc.).
2. Experience in mobilizing investment resources for water supply, drainage, sewerage and wastewater treatment (Government, local authorities, private sector...). Experience in asset management of water supply and sewerage works.
3. Experience in managing and developing large-scale water supply (according to water supply zones in planning) in combination with small-scale and odd-scale water supply in scattered residential areas. Sewerage management according to population distribution and river basin.
4. International experience on clean water prices, wastewater treatment prices; ability to recover enough costs and reinvest, improve service quality.
5. Model of organization and management of water supply, drainage and water treatment enterprises; Management roles of the Government, local authorities for water supply and sewerage that are stipulated in laws around the world.
6. Proposing the International Water Association (IWA) to provide documents of the Laws related to management of water supply, drainage and sewerage of countries that have Water Supply and Sewerage Associations is a member of IWA.



Q&A DISCUSSIONS

MODERATOR: ROBERT BOS & VIET-ANH NGUYEN

PANELISTS



David Cunliffe
SA Health



Ton Tuan Nghia
WHO Representative
Office



Nguyen Ngoc Diep
VWSA



Tran Anh Tuan
VWSA



Joselito Riego de Rios
Philippines Department of
Health



Ha Thanh Hang
VWSA



Ta Quang Vinh
ATI - Ministry of
Construction



Nguyen Minh Duc
ATI - Management Division



Luong Ngoc Khanh
ATI - Sewerage and
Wastewater Treatment
Division



Suraya Hussain
Suruhanjaya Perkhidmatan
Air Negara

UPCOMING IWA WEBINARS & EVENTS



WEBINAR

Advanced control systems for nitrogen removal in full-scale water facilities

26 JULY 2023
15.00-16:30 BST

REGISTER NOW
www.iwa-network.org/webinars

Speakers
Pau Juan-García, Atkins - UK
Alexandria (Ali) Gagnon, HRSD - USA
Jeff Sparks, HRSD - USA
Victoria Ruano, Valencia University - Spain
Stephanie Klaus, HRSD - USA

WEBINAR

Embracing indigenous perspectives to achieve Sustainable Development Goals

9 AUGUST 2023
13:00-14:30 BST

REGISTER NOW
www.iwa-network.org/webinars

International Day of the World's Indigenous Peoples

Learn more about future online events at <http://www.iwa-network.org/iwa-learn/>

UPCOMING IWA WEBINARS & EVENTS



IWA
the international water association

WATER AND DEVELOPMENT CONGRESS & EXHIBITION

WATER, SANITATION, AND CLIMATE RESILIENCE – KEYS TO A WATER-WISE FUTURE

10-14 DECEMBER 2023 KIGALI RWANDA
WWW.WATERDEVELOPMENTCONGRESS.ORG

Learn more about future online events at
<http://www.iwa-network.org/iwa-learn/>

JOIN OUR NETWORK OF WATER PROFESSIONALS!



IWA brings professionals from many disciplines together to accelerate the science, innovation and practice that can make a difference in addressing water challenges.

Use code **WEB23RECRUIT**

for a **20% discount off**
new membership.

Join before 31 December 2023 at:

www.iwa-network.org/join/

inspiring change

