Testing System for Decentralized Wastewater Treatment Plants in Thailand

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Asian Institute of Technology

- Founded in 1959
- An international English-speaking postgraduate institution
- Provides engineering, environment, and management education and research, focusing on Sustainability and Social Impact issues







Global Water & Sanitation Center

An Impact Accelerating Platform

 A Center of Excellence in transforming water and sanitation system through innovation, capacity building, collaborative partnerships, ensuring universal access to safe, inclusive, and sustainable WASH services for all in Asia and beyond.



How do standards support SDGs?





Environmental Pillar

6 CLEAN WATER AND SANITATION

12 RESPONSIBLE CONSUMPTION

AND PRODUCTIO

LIFE BELOW Water

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AFFORDABLE AND CLEAN ENERGY

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13 CLIMATE ACTION

15 LIFE ON LAND

4 QUALITY EDUCATION	5 GENDER EQUALITY
10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTINERSHIPS FOR THE GOALS

Social Pillar

Current Domestic Wastewater Management: Challenges and Opportunities



Standards – Many ways to support public policies



Standards & Testing Lab Establishment: One step at a time



Standards Development



AIT Testing Laboratory



LABORATORY CERTIFIED by ISO/IEC 17025:2017

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

> TESTING No.0276

AIT Testing Laboratory



Treatment efficiency test

Vertical loading test

Vacuum test

Way forward

Common standard for ASEAN member countries

- Acceleration Engaging with national standard bodies, technical ministries, and other relevant ministries to advocate the importance of, not only standard for performance test for decentralised wastewater treatment products but also standards that support the development of sanitation.
- **Sustainability** the presence of multi-stakeholders in the dialogue to establish a standard is crucial. Developers are the ones purchasing and installing the prefabricated wastewater treatment products in their real estate projects and they are the client or the main beneficiaries of application of the standard. Engaging with manufacturers and developers is a key factor in the successful implementation of a standard.
- The desire for sustainability points to a need to **develop the capacity of standard bodies and relevant ministries for managing or preparing standards at regional and national level**. Experiences regarding the development of international standard exist in the network and knowledge can be transferred to standard bodies and relevant ministries.

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