環境省 Ministry of the Environment

13th International Workshop on Decentralized Domestic Wastewater Treatment in Asia

Organized by Ministry of the Environment, Government of Japan (MOEJ)

Operation & Maintenance and Associated Capacity Development of High-Performance Decentralized Wastewater Treatment Facilities

Language : English & Japanese | Venue : JECES (Hybrid via Zoom Webinar)

13:00 – 17:00 11th November 2025 (Japan Standard Time)

Please register from the website link below
https://zoom.us/webinar/register/WN_QGUjrymSRZicnkOSL5Z6dg

To comply with stricter restriction effluent standards and environment regulations in Asian countries , the adoption of high-performance decentralized wastewater treatment facilities that meet these standards has been progressing in Special Economic Zones, factories, or large-scale facilities, etc. As these high-performance decentralized wastewater treatment plants become more widespread, attention is being paid to the importance of operation and maintenance (O&M), as well as the development of the human resources required to carry out the O&M.

In this workshop, we will share information on the current situation of O&M of decentralized wastewater treatment plants around the world, including Asia, as well as trends in developing the human resources required for such O&M. We will also discuss related challenges and necessary actions.

PROGRAM

Moderator **Dr. Pierre Flamand**, Manager - International Affairs, Japan Sanitation Consortium (JSC)

Opening Remarks **Mr. Masaki Numata,** Director, Office for Promotion of Johkasou, Waste Management Division, Environmental Regeneration and Material Cycles Bureau, MOEJ

Keynote **O&M of Johkasou and system of qualified person in Japan**
Mr. Shuichiro Nakayama , Section Chief, Office for Promotion of Johkasou, Waste Management Division, Environmental Regeneration and Material Cycles Bureau, MOEJ
Dr. Yurie Shirakawa, Japan Education Center of Environmental Sanitation (JECES)

Presentation

1 **Current status of O&M of decentralized wastewater treatment plants in developing countries and human resource development**
Dr. Roshan Raj Shrestha, Deputy Director, Water, Sanitation & Hygiene, Gates Foundation

2 **The contents of O&M for decentralized wastewater treatment plants in the United States, the qualification system, and human resource development**
Mr. Chris LeClair, R.E.H.S, Director of Otter Tail County Land & Resource Management, and President of National Onsite Wastewater Recycling Association

3 **Human resource development for the O&M of the high-performance decentralized wastewater treatment systems in rural areas in China (case study from Zhejiang Province and Jiangsu Province)**
Dr. Min Yang, Professor, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

4 **O&M for the high-performance decentralized wastewater treatment plants and human resource development in India**
Dr. Absar Ahmad Kazmi, Professor, Environmental Engineering, Department of Civil Engineering, Indian Institute of Technology Roorkee

5 **O&M of Johkasou installed in residential areas in Vietnam and training of technicians**
Mr. Yoshihisa Tahara, Chairman and Representative Director of Showa Eisei Center Co. Ltd.
Mr. Nguyen Duc Son, Vice president, Hoshi Densetsu Viet Nam Limted Company

6 **Challenges regarding the O&M of high-performance decentralized wastewater treatment plants in Indonesia**
Mr. Akhmad Rivai, Overseas Business Division Manager of Earth Creative., Co., Ltd, and General Manager of PT. Earth Creative Indonesia

Panel Discussion / Theme: - How should human resources for O&M be developed? - What are the key factors for making the O&M business an attractive market?

Panelists: Speakers of Presentation Session, Officials from MOEJ
Moderators: **Dr. Kiyoshi Kawamura**, Former Professor of Graduate School of Science and Engineering, Saitama University, and, **Dr. Pierre Flamand,** Manager - International Affairs, JSC

Closing Remarks **Mr. Shuichiro Nakayama,** Section Chief, Office for Promotion of Johkasou, Waste Management Division, Environmental Regeneration and Material Cycles Bureau, MOEJ

KEY PERSONS

Dr. Roshan Raj Shrestha is Deputy Director of the Water, Sanitation, and Hygiene (WSH) Division at the Gates Foundation, with over 35 years of experience advancing inclusive sanitation across Asia and Africa. He has led global efforts to scale non-sewered sanitation, fecal sludge management, and citywide inclusive sanitation, establishing transformative platforms such as the Sanitation Trust Fund at the Asian Development Bank, the Global Sanitation Graduate School, and the Global Water and Sanitation Center at AIT. Previously with UN-Habitat and founder of ENPHO in Nepal, he is recognized for pioneering household water treatment solutions and decentralized wastewater innovations. He serves on the Board of Trustees of AIT and chairs the Advisory Board of GWSC, and was honored with the Bill Gates Sr. Award in 2023.

Mr. Chris LeClair has been a professional regulator in the environmental health field since 1993. He completed his Bachelor of Science in Natural Resources & Environmental Studies at the University of Minnesota. In 1996, Chris joined Washington County as an Environmental Health Specialist, a role in which he served for 22 years. He was assigned to the septic system regulation program at Washington County in 2002. In 2018, Chris relocated to Otter Tail County, Minnesota, where he assumed the position of Director of the Land & Resource Management Department. This department is responsible for regulating septic systems, wetland conservation, and shoreland development. He joined the Minnesota Pollution Control Agency's SSTS Advisory Committee and was elected to the Minnesota Onsite Wastewater Association in 2009. By 2019, he was on the National Onsite Wastewater Recycling Association's Board of Directors and in 2022, he became President-Elect of NOWRA. As of 2024, Chris also oversees the County's environmental health specialists.

Dr. Min Yang is a world's leading scientist in drinking water research. He has been involved as a vice team leader of the expert team responsible for the national drinking water research program more until 2020, and made a great contributions to the modification of national drinking water standard. He has also been leading the drinking water taste and odor research, and has established the methods for the identification and detection of taste and odor compounds, and developed technologies for the on-site control . These methods and technologies have been applied widely in the drinking water industry. He has also devoted a lot of energy to the identification and control of AMR risks in antibiotic manufacturing wastewater, and has contributed as a lead expert to WHO WASH-AMR Policy Brief (Water, sanitation and hygiene, and Antimicrobial Resistance : Preventing Infection and Preparing for a Post-Antibiotic World).

Dr. Absar Ahmad Kazmi is currently a Professor in the Department of Civil Engineering at IIT Roorkee. His major research and technological development interests are in advanced wastewater treatment, reuse and solid waste management. He has published over 200 papers in peer-reviewed journals > with an index of 45 and ~7,560 citations. He is a member of several technical committees in various states, ministries, and the National Green Tribunal. He is one of the key committee members of CPHEEO Manuals on Sewerage and Sewage Treatment and Technical Options for Solid and Liquid Waste Management, published by the Ministry of Drinking Water Supply and Sanitation. He has also authored a book on O&M of Sewerage Works jointly published by the Governments of India and Japan. He has been involved with several research and consultancy projects sponsored by the Government of India and international agencies.

Mr. Yoshihisa Tahara joined Showa Sanitation Center Co., Ltd., a company in Fukushima Prefecture that provides O&M and desludging for Johkasou in 1989, and has over 35 years of experience. He established a water quality analysis department specializing in Johkasou within the company, and worked to ensure the accuracy of water quality analysis, including BOD. He became a chairman of his company in April 2025. In addition, from 2018, he participated in the JICA project "Verification Survey with the Private Sector for Disseminating Japanese Technologies for Improvement of Domestic Wastewater Treatment through Introducing Johkasou in Hung Yen" for five years, collaborating with Hung Yen Provincial People's Committee and Provincial Department of Natural Resources and Environment in Hung Yen, Vietnam. This project aimed to establish Johkasou O&M service, desludging, and water quality inspection in Vietnam.

Mr. Nguyen Duc Son has worked as a technical intern trainee at Hoshi Densetsu Co., Ltd. in Japan from 2015 for three years. After the intern, he returned to Vietnam and used his experience and knowhow gained in Japan to work at HOSHI DENSETSU VIETNAM Co., Ltd., where he is engaged in the construction and maintenance of electrical equipment and water supply and drainage equipment. He currently serves as the company's vice president. Since 2018, he has been cooperating with the JICA project "Verification Survey with the Private Sector for Disseminating Japanese Technologies for Improvement of Domestic Wastewater Treatment through Introducing Johkasou in Hung Yen", and receiving the technical instruction from Mr. Tahara and his colleagues on whole system of Johkasou from installation to O&M of Johkasou. He is currently engaged in the O&M work of Johkasou in Hanoi.

Mr. Akhmad Rivai is the General Manager for PT. Earth Creative Indonesia, overseas affiliate of Earth Creative., Co. Ltd. a waste and wastewater management company located in Ube, Yamaguchi Prefecture in Japan. Since 2019, his company has been actively involved in in the construction and Operational & Maintenance of small, medium and large scale of Sewage Treatment Plant (STP) and Wastewater Treatment Plant (WWTP) in Bali, Indonesia. Currently, His company's main costumer include hotel, hospital and public building. His company also contributed to industrial and domestic wastewater regulation control for river and lake in Bali island.

Dr. Kiyoshi Kawamura was formerly a Professor, Graduate School of Science and Engineering, Saitama University. Prior to that, he served as a section chief of the waste management division in a research institute of the Ministry of Health and Welfare (now the Ministry of Health, Labor and Welfare) , and then as the director of a research institute for the environment in Saitama Prefecture. In these institutes, he had conducted research and teaching, and also contributed to many committee activities at the national and local governments, and the related agencies. Through these experiences, he had made many efforts on the improvement of domestic wastewater management and supporting for the dissemination of johkasou technology world wide. He is one of the pioneers in Japan to contribute to the promotion of the healthy water environment and sanitation system.

Dr. Flamand Pierre is the Manager of International Affairs at the Japan Sanitation Consortium (JSC). He has over 20 years of experience in sanitation, with particular focus on fecal sludge management. Since joining JSC in 2009, he has been involved in sanitation projects in Viet Nam, Malaysia and Bhutan. He is the co-author of 'Sanitation and Sustainable Development in Japan' (ADB 2016) and 'Accountability Mechanisms for Inclusive City-Level Public Services in Asia' (ADBI 2023). Since 2015, he has been involved in several Working Groups of ISO/TC 224 as an expert representing Japan for the development of international standards. Pierre holds a doctoral degree in regional development studies and is also a visiting researcher at Toyo University in Japan.

SECRETARIAT CONTACT

Japan Education Center of Environmental Sanitation (JECES) is a secretariat of this Workshop. If you have any questions in advance, please contact Secretariat (shirakawa@jeces.or.jp) via email.