



Job Description: Senior Wastewater Expert

About WASH Institute

Water, Sanitation and Hygiene Institute (WASH Institute), established in 2008, is a non-profit organization, dedicated to providing practical solutions to tackle a wide range of water, sanitation, hygiene and environmental issues in India and the neighbouring countries. WASH Institute aims to build the capacities of the sector through programs that provide a) training and academic courses, b) technical advisory and consultancy services, and c) grass roots community WASH programs.

WASH Institute has been conducting extensive training programs for government functionaries, private sector professionals, NGOs, and other practitioners with the objective of effective WASH implementation across the country under its WASH Academy vertical. In addition, our academic campus offers Diploma and Master level courses in sanitation, under affiliation to a leading university.

As part of our WASH Advisory vertical, we provide technical support services to central, state, and local governments in both urban and rural areas to support implementation of Swachh Bharat Mission (SBM) and Jal Jeevan Mission (JJM). Our community WASH vertical is executing WASH infrastructure for underserved communities in 15 locations across 8 states and 1 Union Territory in India.

We are a multi-disciplinary team that tackle complex multi-faceted problems of behaviour change, quality of service, and sustainability of WASH interventions. We are looking for experienced professionals to work with us towards our vision of “a world where all the communities have access to safe, protected and sustainable drinking water and sanitation services, with improved hygiene practices”. We are looking for experienced professionals to join our vibrant team.

About Project

WASH Institute has been providing technical assistance (TA) to Ministry of Housing and Urban Development (MoHUA) since 2015 for the implementation of Swachh Bharat Mission-Urban (SBM-U). With the funding support from Bill & Melinda Gates Foundation, in its third phase of the TA support, WASH Institute is assisting the ministry to implement SBM 2.0. The objective of SBM 2.0 is to enable 4000+ cities in India to become ODF++ through three key components: a) Toilet 2.0; b) Manhole to Machine hole; and c) Used Water Management. The SBM 2.0 seeks to take urban India to the next level of ‘Swachhta’.

In collaboration with MoHUA and the foundation, WASH Institute is executing a workplan for 2023-24 on the three components to accelerate implementation of SBM 2.0. The workplan will design and implement the three components in ten towns and lessons learnt will inform policy/strategy changes for the implementation of SBM 2.0 for 4000+ cities in India. The project will develop sets of documents (guidelines, tenders, etc.) to propel other cities in the path of safe and sustainable sanitation.

Position	Senior Wastewater Expert (SWE)
Number of vacancies	01
Location	Delhi, with willingness to travel across India
Desired Qualification and Experience	Degree in Civil Engineering / urban planning with 7-9 years of experience
Type of employment	Contract
Duration of contract	Project specific or one year, whichever is higher with possibility of extension

Key Roles and Responsibilities:

As a Senior Wastewater Expert, you will be responsible for all technical aspects of urban wastewater treatment systems. You will provide technical expertise, strategic guidance, and leadership in the planning and design of sewerage and faecal sludge management system for different small and medium towns. This includes mainly sewer network design (city level and cluster level), design of wastewater and faecal sludge treatment system. S/he shall report to the Senior Project Manager and Director, WASH Institute and support the Project Team on project related activities and any other operations and development across the Institute's focus areas. The detail roles and responsibilities are:

Sewer network design and STP planning

- Lead the design and development of wastewater treatment projects for the town, including planning, process design, DPR preparation while ensuring compliance with relevant regulations and industry standards.
- Carry out wastewater Quality and Quantity assessments at town scale.
- Carryout topographical and geo technical investigations for planning of urban wastewater management systems
- Identify the existing wastewater treatment infrastructure, access the performance and suggest the improvement measures required
- Develop sewerage system plans, layouts, and designs based on project requirements, local regulations, and industry standards. This includes design of sewer network, manholes, pumping stations, and other related components.
- Provide technical guidance and expertise in selection and design of most appropriate wastewater treatment technologies applicable for small and medium towns including developing technology selection matrix.
- Prepare/develop detailed engineering drawings, technical specifications for preparation of Detailed Project Report and other technical reports as per CPHEEO guidelines and required by various statutory bodies
- Provide guidance, mentorship, and technical training to the project team. This also includes supporting the capacity building team with developing and delivering training modules

- Coordinate and collaborate with other engineering organisations to carry out various tasks as listed above
- Collaborate with government agencies, NGOs, and community representatives to gather input, align priorities, and promote participatory planning processes
- Prepare reports, presentations, and documentation to communicate findings, recommendations, and progress to project teams, clients, and funding agencies.

Faecal Sludge Management

- Lead the design and development of faecal sludge treatment/management projects for the town, including planning, process design, DPR preparation while ensuring compliance with relevant regulations and industry standards.
- Carry out wastewater Quality and Quantity assessments at town scale.
- Conduct detailed assessments of existing faecal sludge management systems, including collection, transportation, treatment, and disposal methods. Analyse data to identify gaps, challenges, and opportunities for improvement.
- Provide technical guidance and expertise in selection and design of most appropriate faecal sludge treatment technologies applicable for small and medium towns including developing technology selection matrix.
- Prepare/develop detailed engineering drawings, technical specifications for preparation of Detailed Project Report and other technical reports as per CPHEEO guidelines and required by various statutory bodies
- Provide guidance, mentorship, and technical training to the project team. This also includes supporting the capacity building team with developing and delivering training modules
- Coordinate and collaborate with other engineering organisations to carry out various tasks as listed above
- Collaborate with government agencies, NGOs, and community representatives to gather input, align priorities, and promote participatory planning processes.
- Prepare reports, presentations, and documentation to communicate findings, recommendations, and progress to project teams, clients, and funding agencies.

Preferred Qualification and Experience

- Master's degree in civil or environmental Engineering, Chemical Engineering, or a related field.
- Extensive experience (7-10 years) in the design of Sewerage systems and STP Design, operation, and management of wastewater treatment systems.
- In-depth knowledge of wastewater and faecal sludge treatment processes, regulations, and environmental standards.
- Excellent analytical and problem-solving abilities, with a focus on continuous improvement and optimization.



- Strong communication and interpersonal skills, with the ability to collaborate effectively with diverse stakeholders.
- Familiarity with relevant regulations and standards governing wastewater management.
- Leadership qualities and the ability to mentor and inspire junior team members.

How to Apply?

Please share your response to <https://forms.gle/oiEg1HX4ipZHntMq7> on or before June 18th, 2023. Only shortlisted candidates will be contacted.

WASH Institute is an equal opportunity employer and encourages women candidates to apply. WASH Institute does not discriminate candidates based on age, caste, class, sex, gender, religion, nationality, ethnicity, disability, and health.