





SEPTAGE MANAGEMENT CHALLENGES AND OPPORTUNITIES IN UTTARAKHAND:

State consultation meet on Co-treatment at Sewage Treatment Plant (STP) and Technology Options for Faecal Sludge Treatment Plant (FSTP)

 29th November, 2019

 Hotel Four Point by Sheraton, Dehradun

Swachh Bharat Mission has successfully addressed open defecation in India and has paved the way for addressing the second generation urban sanitation challenges of managing septage and waste water.

Majority of Indian cities are still without sewerage systems. Treating septage waste through decentralised and non-sewered sanitation systems remains a high priority for Indian cities. Our towns are growing, and not all can be connected to centralised STPs. Hence every town needs both non-sewered Septage Treatment Plants as well as Sewage Treatment Plants – to ensure 100% treatment of faecal waste generated.

Uttarakhand is a hilly state comprising 90 Urban Local Bodies. The state generates 288 MLD of waste water out of which only 116 MLD is treated by current STPs. Under the National Mission for Clean Ganga (NMCG), Uttarakhand has committed to set up more STPs to address the urban sanitation challenges of 11 towns.

Constructing sewerage systems in Uttarakhand is challenging due to hilly terrain and high ground water table (Terai region). Moreover, high capital cost is associated with laying of sewer pipelines and it takes many years to complete, connecting households to sewer lines is a major constraint as old households

have existing septic tanks and toilets are located in remote corners which are inaccessible. Hence STPs are seldom fully operational nor fully utilised.

As per the current estimates (2018 population), Uttarakhand generates a total of 722 KLD of Septage (based on per capita daily estimates) and only 22% is currently treated through the STPs.

National Institute of Urban Affairs (NIUA) is supporting the Urban Development Department and Pey Jal Nigam of Uttarakhand for addressing septage management challenges. Scientific and appropriate Co-Treatment of Septage at 13 STPs in the state can lead to a 25% increase in treatment of septage generated. An additional 20% of septage can be treated through setting up of Septage Treatment Plants.

NIUA is anchoring a national level Sanitation Capacity Building Platform (SCBP) for promoting decentralised and non-sewered sanitation solutions. NIUA the apex research body working for the Ministry of Housing and Urban Affairs (MoHUA), Government of India. In February, 2019, NIUA has signed an MoU with Urban Development Directorate, Uttarakhand for supporting Septage Management through technical assistance, capacity building and advocacy.

Purpose of Workshop:

The one day State consultation meet is organised with a thematic learning focus on co-treatment of septage at existing STPs in the state of Uttarakhand. IIT Roorkee has recently completed a research on exploring the co-treatment potential of treating septage at 9 STPs in Uttarakhand. The results of this study will be shared along with successful experience from other states/cities that have been undertaking co treatment of septage with sewage at their STPs. The afternoon session will be in an exhibition cum presentation format where vendors will present different technology options for setting up Faecal Sludge Treatment Plants.

Participants: Urban Local Bodies, Pey Jal Nigam, Jal Sansthan, Universities and State Nodal Training Institutes of Uttarakhand

AGENDA

Registration 09:30 – 10:00

Welcome Address: Shri Hitesh Vaidya, Director, NIUA 10:00 – 10:30

Inaugural Address: Shri A.S. Hayanki IAS, Secretary, Peyjal Uttarakhand

Launch: (i) Orientation Training Module on FSSM
(ii) Flyer on Status and Opportunities in Septage Management: Urban Uttarakhand

SESSION I 10.30 – 11:30

What is Co-treatment?

Presenter: National Institute of Urban Affairs (NIUA)

Study Findings: Co-treatment of septage at STPs in Uttarakhand

Presenter: Dr. Ankur Rajpal, IIT Roorkee

Concluding Remarks: Shri Uday Raj, Project Director, SPMG, Uttarakhand

Tea Break 11:30 – 12:00

SESSION II – Successful Sewage- Septage Co-treatment Experiences in India 12:00 – 13:30

Odisha

Presenter: Shri Binod Kumar Sahoo, Project Director, OWSSB, Odisha

Telangana and Andhra Pradesh

Presenter: Shri G. Bala Subramanyam ASCI, Hyderabad

Tamil Nadu

Presenter: Shri Senthil Kumar G, IIHS, Tamil Nadu

Uttarakhand: Context and Priorities for Septage Management

Presenter: Shri Ravi Kumar Pandey, Superintendent Engineer, Urban Development Directorate, Govt. of Uttarakhand

Panel Discussion Chair: Shri Depinder Singh Kapur, NIUA

Lunch 13:30 – 14:30

SESSION III – Faecal Sludge Treatment Technology Options 14:30 – 15:30

Pyrolysis and Non-thermal semi-mechanized treatment

Presenter: Tide Technocrats

Mechanised Treatment

Presenter: WAM India Pvt. Ltd.

Omni Processor

Presenter: Ankur Omni Scientific

Tea Break 15:30 – 16:00

SESSION III CONTINUED 16:00 – 17:00

Small Cesspool trucks with double booster pump

Presenter: Maniar & Co.

Hybrid treatment system

Presenter: Sarvo Group

Soil Bio Technology

Presenter: Vision Earth Care P. Ltd

Closing Remarks: Shri Vinod Kumar Suman, IAS, Director Urban Development Directorate, Govt. of Uttarakhand