

HARYANA WATER CONCLAVE 2023

(April 26-27, 2023)

An open forum discussion in the form of **HARYANA WATER CONCLAVE 2023** was organized on 26-27 April 2023 at Panchkula under the aegis of Haryana Water Resources Authority (HWRA). Experts from various parts of India discussed issues like restoring water in river, reservoir and canals, effective strategies for ponds rejuvenation, protection of surface water quality, Impact of untreated grey water on environment, etc. Faculty members from MRIIRS also participated in the event

Following were the sub-themes on which discussions were held during the conclave:

- Enhancing surface water availability
- Participatory groundwater management
- Exploring strategies of grey water utilization
- Water conservation practices and impacts
- Planning best agricultural water use
- Formulating practicing guidelines and standards for water regulation
- Industrial water security and water use efficiency
- Learning from water related various completed and ongoing schemes
- Illustrating use of alternative water resource
- Vision for Infrastructural and mining water use
- Water for environment, culture and sports & recreation activities
- Water policy and planning and infrastructural development

Discussion on Action Plan for reducing water demand, maximizing reuse of Treated waste water

During one of the sessions, Shri Dushyant Chautala, Honorable deputy Chief Minister addressed the gathering and appreciate that all departments have addressed the issue of water and this conclave will help Haryana to become role model and secure future requirement of water of our generations. Water supply infrastructure is outdated, old parallel laying down of sewer and drinking water pipeline on decay has led to mixing of water and deterioration of water quality. This conclave will give road map for Haryana to become model state in water domain. All STPs are becoming outdated and ETPs with ZLDs should be brought in and there should be no financial hesitation to upgrade our much needed reformation in our approach. Natural lakes should be revived and smart cities must take it up on priority. Pond rejuvenation by canal system or tubewell is on the plan. This conclave will certainly help in improving water quality in drinking water and irrigation water.

Shri A K Singh, IAS, ACS, PHED, during his presentation discussed about various ways of reuse of Treated waste water

- The wastewater after treatment from Various STPs is being discharged into the nearby drains/canals and other water bodies. It is a travesty of circumstances that on the one hand, the surface and ground water resources are highly stressed and depleting fast whereas on the other hand this treated wastewater is being allowed to go waste without any purposeful application. so to reduce stress on existing sources use of **TREATED WASTEWATER** becomes a major demand of time. Accordingly, Haryana State notified Reuse of Treated Waste Water (TWW) Policy, 2019 vide Haryana Government Notification No. 5/18/2012-3PH Dated 30.10.2019. **As a result on revision of Action Plan, there would be reuse 50% of TWW by 2024 and 100% TWW by 2030.**
- Implementation of Treated Waste Water Policy is being monitored closely at the level of Public Health Engineering Department and State Action Plan has been prepared from each department involved in construction of STPs and sewerage system. By the end of the December 2025, 26 STPs/CETP of 467 MLD Capacity will be added in the treatment capacity & 327 MLD (Approx) will be added in the generation by the end of December 2025.
- At present, 188.50 MLD Treated Waste Water is being reused for various purposes, which includes 111.50 MLD for irrigation purposes, 60.00 MLD for Horticulture purposes, 9.00 MLD for Construction activities, 3.00 MLD for Water Bodies Rejuvenation / Forestry and 5.00 MLD for Textile Industries. Thus in Phase-I: - Irrigation & Water Resources Department has got approved project costing Rs. 500.00 crore covering 35 STPs having capacity of 399.10 MLD in 21 Districts for use of TWW in 1st phase which has been sanctioned by Ministry of Agriculture and Farmers Welfare, Government of India under NABARD assisted MIF for INR 490.00 Crore. This project will cover CCA of about 23,359 hectare through micro-irrigation and the entire project is to be executed upto 2023-24. Out of the already approved 35 STPs, 27 STPs having capacity of 339.50 MLD have been found feasible as per site conditions and hence, finalized for re-use of Treated Waste Water (TWW) through Micro Irrigation in various districts and even work has also been started. In phase II, PHED has supplied a list of 57 STPs to Irrigation & Water Resources Department, feasibility of the same has been checked / being checked. Out of 57 STPs, 16 STPs having capacity of 130.50 MLD have been found feasible and DPR of the same are under preparation. Further, one STP Parwaloo (24.00 MLD), Two STPs at Badhi Majra (10.00 MLD each) in Yamuna Nagar and Three STPs in District Panipat (10.00 MLD, 35.00 MLD & 25.00 MLD) are being proposed for using TWW in Thermal Power Plants. 23 STPs having capacity 163.75 MLD have been found non feasible and 12 STPs having capacity 120.00 MLD are being checked for feasibility .

Shri Anand Mohan Sharan, IAS, ACS, Industries & Commerce, emphasized on the requirement of reuse of Treated waste water and mentioned the following points:

- 100% reuse of TWW in HSIIDC estates, Out of 31 Estates of HSIIDC 18 Estates have functional CETP (1 being run by GMDA- IMT Manesar) with a total capacity of 184.6 MLD with an availability of 101.8 MLD of TWW. This 100% of TWW (6.74 MLD of TWW) in 5 Estates is being completely utilized in green belt (Rohtak, Bahadurgarh, Jind, Kutana, Murthal). However, in the next two years the availability of TWW might increase and hence there is a potential of increasing reuse of TWW in areas other than green belt . In next 13 estates, about 18% of TWW (17.45 MLD out of 95.10 MLD) is being utilized in green belt and industry. However, there is a potential of increasing reuse of TWW to 63 MLD (more than 60% of available TWW) in the next two years with augmentation of infrastructure (laying of recirculation lines and improving design parameters) with an approx. budget outlay of INR 70 Cr. Additionally, it is being planned to **set-up 6 new CETPs** with a total capacity of **57.5 MLD** with a budget outlay of about **INR 228 Cr by 2025**. There is no demand from the industry for CETP in 1 Estate (IE Tohana), as there is no industrial discharge, and they are very small estates.
- Detailed plan for setting up new CETPs to achieve 100% reuse of TWW in HSIIDC estates by 2025 has been prepared for Sohna Barwala, Kharkhoda, Dharuhera, Karnal and Samalkha. The sewerage system of the remaining estates (Udyog Vihar Gurugram, Faridabad (Sector 31&59), Yamuna Nagar, Technology Park Panchkula, Kalka, Sonapat) have been connected to master sewerage of HSVP & PHED However, CETPs in these estates will be constructed as and when required and if found feasible

Proposed Way Forward & Action Plan:

- **In Panipat district** it is proposed to lay a new water supply pipeline connecting the STPs with Storage Tank of HSVP for sector 29 part II cluster, to increase the freshwater tariff to Rs 20/KLD and to supply TWW in the initial phase for 6 months free of cost to the industries to induce behavioral change and encourage industries to use TWW
- **In Faridabad**, 92 textile industries out of which 54 are dyeing industries and total demand of non potable water is 4867.34 MLD is largely being met by the reuse of TWW from the ETPs installed in the individual industries. Almost all textile industries are reusing TWW through their established ETPs, however there is a requirement of about 800 MLD of non potable water out of which 100 MLD could be potentially addressed by the new STP coming up in Ballabgarh.
- **In Barhi**, 144 textile Industries with 100% dyeing industries, Total Demand for non potable water is 13 MLD and CETP of 26 MLD is already installed. It is proposed that the Recirculation line will be laid in phase I and II in next two years with a budget outlay of INR 3.20 Cr. Also, for softening of water, it is proposed to formulate a new capital assistance scheme to encourage the industrial units to set up RO plant at their premises.



