

DECENTRALISED WASTE WATER SYSTEM FOR SCHOOLS/ COLLEGES / INSTITUTIONS

Background

Delhi Jal Board is striving hard to augment the ground water so that the future generations are not deprived of these scarce resources. Due to inadequate availability of river water, the ground water resources in Delhi are over stressed to meet ever growing demands in Delhi. There is a need to have a comprehensive plan to engage all stakeholders. It also requires a social movement which will rather force/discourage people/ organizations / institutions / offices / Community Parks from extracting Ground Water, without effecting their needs for water, especially for their horticulture needs. One of the major source of ground water depletion is its extraction and use for horticulture purpose. There are large parks/ground areas of different agencies or large institutions/organizations green areas which use ground water/borewells for their horticulture needs. As far as DJB is concerned, a number of measures are being taken or planned for effective ground water management. Further, DJB on its part, has been making efforts to encourage use of treated effluent for various possible purposes. Delhi Jal Board in its meeting held on 24.08.2018 has approved the following policy for implementation by various stake holders:

- **Policy to utilize treated Waste Water for Horticulture and other purposes.**

The concept of Decentralized Waste Water Treatment can be used for treating up to 1 MLD of sewage locally and then also using the treated effluent for horticulture purposes. This is not feasible for bigger than 1 ML quantity as it would need extensive land.

DJB has already implemented a model project on above lines, with 8000 L/day capacity using a portion of Waste Water of Varunalaya Phase-I and treated effluent is used for horticulture purposes. NDMC has also installed decentralized STP at many locations and the treated effluent is being used by them for horticulture purpose in their parks. The raw sewage is being lifted by them from the nearby sewer network.

It is, therefore, proposed to encourage implementation of Decentralize Waste Water Treatment System (DWWTS) in all Schools/Institutions/ Complexes/ Parks/ Hospitals etc. as detailed below –

- (a) There are around 5000 Govt./Aided/Pvt. Schools in Delhi. It is proposed to make Decentralized Waste Water System (DWWS) mandatory for all schools, which would use the treated effluent for their horticulture needs. This will result in zero discharge in DJB sewer network. For all Govt. Schools, the work of establishment of Decentralized Waste Water Treatment Plant could be entrusted to PWD/Education Department of GNCT of Delhi and as far as Aided Schools are concerned, it could be either also through PWD or some grants towards cost incurred may be given to them by Education Department of GNCT only after construction of DWWS, or as decided by the Education Department of GNCT of Delhi. Private Schools would of course do it on their own.
- (b) All major parks and green belt areas whether with Delhi Govt./ DDA/ MCD etc. would not be allowed to use ground water anymore and instead they would make arrangement for DWWTS near to the feeding point provided by DJB, from where they would lift raw sewerage from the sewer line, treat it and use for their horticulture needs. This would avoid exploitation of ground water, besides ensuring recharging the same. All agencies would be required to install DWWTS.
- (c) Where parks/green areas do not have any access to any feeding point from DJB sewer network due to technical feasibility to be decided by SE(Civil) Maintenance DJB of the area. A certificate to that effect would be given only after which the concerned agency could be able to use ground water for its horticulture needs.
- (d) Once this DWWTS is activated, duly verified by DJB Engineers, any bore-well in the school/college/institution premise would be sealed. This would avoid exploitation of ground water besides ensuring recharging the same. This would also reduce pressure on our Sewer System.
- (e) Departments can contact Science and Environment (CSE) or any other expert Organization/Agencies for their support and guidance for this project.

SE(Maintenance), DJB would be the Divisional Nodal Officer for coordinating issues of Schools/ Colleges/ Institutions/ Complexes/ Hospitals, etc. in their respective areas, including providing sewage lifting points wherever required, ensuring zero sewage discharge in DJB System once DWWTS is implemented etc.

- (f) DJB will allow any of the willing Dept/Societies/Institutions from the Sewer Manholes passing from the areas for its suitable treatment as per latest DPCC/CPCB norms/guide lines for the utilization for the purposes other than the drinking, largely for the Horticulture.
- (g) The Agency/Dept/Organizations will seek approval from the concerned Superintending Engineer (Maintenance) of Delhi Jal Board for allowing the lifting of the sewage from sewer Manholes/STPs/Pump houses, making technically suitable arrangement on their own risk and cost. If need be the Agencies will lay a pipe line system up to the location/proposed sites for giving the suitable treatment before utilization. SE(Civil) Maintenance, DJB will submit the copy of all approval given to CE(Plg.) Dr & CE(Plg.) Water.
- (h) The Agency shall install a suitable treatment plant keeping in view the treatment standards for horticulture purposes as per norms of CPCB/ DPCC.
- (i) Once the lifting of the sewage is allowed from certain Manhole, the Agency will be the custodian for upkeep of the manhole.
- (j) The Agency will be liable for levy of penalty in case the standards prescribed for treatment are not-met as per the DPCC/CPCB guidelines.
- (k) All such units will be open to inspections by the Govt. Agencies for keeping the check & ensuring implementation of the prescribed norms. The Agency will also follow directions/instructions/regulations of DMC Act/regulations by Local Bodies.
- (l) To encourage the implementation of the instant proposal, it is also proposed that only 10% of the sewerage maintenance charges on the volumetric consumption of water will be levied instead of 60% of the Volumetric Consumption charges, wherever applicable.