

Minutes of the meeting held on 20/08/2022 at 12.30 PM by the Managing Director, KWA to review the preparation of master plan for DPR of sewerage/septage system for Thiruvananthapuram Municipal Corporation

List of participants

1. Sri.Venkatesapathy.S, IAS, Managing Director, KWA.
2. Sri.Jayaprakash.C, Chief Engineer (Sewerage, PPD & WASCON), Thiruvananthapuram.
3. Smt.Bindu Sugunan, Deputy Chief Engineer (Sewerage, PPD & WASCON), Thiruvananthapuram
4. Sri.Salim.P.K, Superintending Engineer, Sewerage Circle, Thiruvananthapuram.
5. Sri. Noushad A., DCE 2, PIU , KWA, Jalabhavan Thiruvananthapuram
6. Sri. Jayachandran, Superintending Engineer, Sewerage Circle, Kochi
7. Sri. Shyju P Thadathil, Executive Engineer, Sewerage Circle, Thrissur
8. Smt.Seeja.J.Selin, Executive Engineer, Sewerage Circle, Thiruvananthapuram
9. Sri. Sooraj Sukumar, Executive Engineer, Sewerage Maintenance Division, Pattoor, Thiruvananthapuram
10. Sri. Ajish Kumar G, Executive Engineer, Project Division, Thiruvananthapuram
11. Sri. Sreekesh R, Assistant Executive Engineer (Sewerage, PPD & WASCON), Thiruvananthapuram.
12. Smt.Thara Devi.K.V, Assistant Engineer, PPD Camp office Thiruvananthapuram..

The Managing Director welcomed all the participants and stressed the need to prepare the DPR in a time bound manner.

Earlier the DPR preparation work was awarded to the firm M/s REPL, and as they could not complete the assignment in time, they were terminated and now it is decided to carry out the work internally. At present, 107 MLD STP at Muttathara is working at 60% of the installed capacity. In order to ensure the full utilisation of the capacity of the existing plant, priority should be given to those wards that can be directly connected to Muttathara STP, while preparing the DPR.

The Superintending Engineer, PPD & Sewerage Circle, Trivandrum presented the action plan for preparation of DPR for 100 wards. MD directed to proceed with the available funds under the RKi head already available.

Out of the 100 wards of Thiruvananthapuram Municipal Corporation, at present, 21 wards are fully covered with sewer network, 22 wards are partially covered and 57 wards are uncovered. Now attention is focused on the 79 wards excluding the fully covered wards for the preparation of DPR.

Basis of PER Preparation

1. Risk Assessment and Mitigation relevant for Planning Stage
2. Categorization of Works
3. Analysis of Alternate Proposals and Selection of most suitable.
4. Prioritization of Clusters based on Stakeholder Analysis
5. Suitable Treatment Technology.

SE, Sewerage Circle, Trivandrum also explained in detail the plan for the preparation of DER for 79 wards .

Investigation estimate amounting to Rs 160 Lakhs within the already approved AS amount was



presented as detailed below.

No	Item & Purpose	Amount (Rs Lakhs)
1	<p>Topographical DGPS Survey</p> <p>Purpose: For Sewerage network, accurate level survey is required. DGPS is widely used for sewerage network survey. It is expected that total survey to be conducted for uncovered area as well as partly covered area is about 3000Km.</p>	75
2	<p>Social Survey</p> <p>Purpose: Amount of sewerage generation varies based on type of buildings, economy level of people, availability of piped water supply and other sources etc. In order to make a realistic sewer load calculation a social survey needs to be conducted. Some of the details like type of habitation, location are available in the existing GIS Mapping of TMC. Additional information can be collected by telephonic interview and remaining by field survey. 5 Interns and 2 Vehicles are proposed for 6 months. Interns Hiring expenses (Vehicle hiring is added in Item 4)</p>	3.6
3	<p>Purchase of DGPS Instrument and software</p> <p>Purpose: It is important to have a quality assurance plan to ensure that the outsourced services are delivered promptly. In order for that it is proposed to conduct a survey by KWA internal surveyors on random basis daily. On completion of the survey, it can be utilized for other projects for actual survey and/or for quality assurance purpose. The payback period is 4 months.</p>	42
4	<p>Vehicle Hiring (4 vehicles for 6 months)</p> <p>Hiring of Vehicles for social survey and topographical survey verification.</p>	8.4
5	<p>Geotechnical Investigation</p> <p>Purpose: Sewerage system involves deep structures. Uncertainty of soil strata and not accounting in the design stage including ground water level will lead to reduced life of structures, non-completion of work or delayed projects. It is proposed to make geotechnical investigation for structures like STP and Pumping Stations</p>	10



6	Office modification including Purchase of Computers Purpose The project will have about 3500Km of sewer network, 5 additional STPs, GIS mapping and processing of existing and ongoing structures. A design team of 10 internal resources will be allocated for design and mapping which requires office space modification, additional computers, UPS and printer. Need also electrical work.	10
7	Training for Staff	4
8	Report Preparation expenses	4
9	Unforeseen Items	3
	Total (Incl GST)	160

Managing Director appreciated the analysis part of the draft PER and suggested the following aspects on which the work has to be planned.

- a. DPR preparation needs to be expedited by planning the required tasks based on type of skills and technical proficiency required. Some activities such as social survey etc. can be done earlier and planning has to be done simultaneously so as to reduce the overall completion period.
- b. Since the implementation of the master plan is likely to consume more time, as an interim measure, the possibility of effective and full capacity utilization of the existing well cum pumping stations has to be explored.
- c. Proposal for additional AS if necessary shall be monitored by the office of the Chief Engineer, Sewerage, PPD&WASCON.
- d. Suitable septage disposal points have to be identified such that the transportation can be minimized and traffic congestion to Muttathara plant can be reduced.

Superintending Engineer informed that he had a discussion with the Corporation Authorities regarding the proposed septage disposal at ongoing pumping station at Akkulam, as it is suitable considering the location, site size and transportation facility. This can be included in the proposal.

The meeting ended by 1.30 PM.

**MANAGING DIRECTOR**

