

# UIDSSMT

## **Sewerage / Sewage Treatment Projects: Procedure for preparation and submission of DPRs for technical approval**

The DPR must be prepared as per the Guidelines given in the Manual on Sewerage and Sewage Treatment published by CPHEEO, Ministry of Urban Development incorporating the under mentioned details for technical appraisal and clearance :-

### **A. General:**

Whether this sub-project is contemplated as part of the overall CDP of the city?  
Yes/No.:

If yes, the DPR should contain the following:

- i. Population as per 2001 census, present and future design period.
- ii. Present condition of the city such as, area, population covered by sewer system, sewage collection, treatment and disposal, low cost sanitation, septic tank etc.
- iii. Justification / need for the proposed sewerage project,
- iv. Area/ population to be covered by sewerage system, sewage collection, treatment and disposal, LCS, septic tank etc. under the proposed project, number of houses, number of LCS toilets, septic tanks, etc.
- v. Arrangements for collection, treatment and disposal of industrial and commercial effluents at present and future,
- vi. Soil characteristics, topography, geology etc.
- vii. Ground water table in different seasons.

- viii. Details of water bodies, such as pond, lake, canals, river, sea etc.
- ix. Availability of land for placing of treatment plants, pumping stations, disposal sites etc. and action plan for acquiring requisite land for various units.

DPR may also address issues such as,

- i. Collection mechanism to generate requisite revenue to make the system self-sustaining to meet the O&M expenditure initially and to generate adequate revenue to meet future investments.
- ii. Revenue and expenditure statement of the Urban Local Body for the last five years and in particular on water supply and sanitation services.
- iii. Availability of adequate trained manpower in the ULB, institutional capacity building etc.
- iv. Availability of adequate laboratory facilities along with trained lab personnel and lab equipment.
- v. Environment Impact Assessment, if any, required,
- vi. NOC/ Consent from State Pollution Control Authority for discharging the treated waste water to the standards prescribed by CPCB/ SPCB.
- vii. Funding pattern, financial phasing etc.
- viii. Implementation period, along with PERT chart.

**B. Technical :**

Detailed estimate should be prepared based on the following and furnished in the project report:

- (i) The Manual on Sewerage and Sewage Treatment published by the Ministry of Urban Development (2<sup>nd</sup> Edition in 1993) may be referred to for preparation of DPR.
- (ii) Project area should be surveyed in detail and layout plan and network plans may be drawn to scale indicating RL at 30 m interval, node no, link no. etc.
- (iii) Design of sewer network using the Computer Software.
- (iv) City map, Contour map, Index map, key plan, schematic diagrams, sewer network drawings, sewage treatment plant units' drawings.
- (v) Sewage characteristics based on analysis of 24 hour composite sample
- (vi) Existing service level of water supply in the city and whether the per capita water supply is adequate to sustain water carriage system; if not, action plan to improve the same during the design period,
- (vii) Salient features such as quantity of waste water to be generated, design criteria, type, size, details of pumping equipment, various unit operations etc.
- (viii) Whether the Municipal bye-laws are adequate to motivate the households to take sewer connections,
- (ix) Alternate sewage treatment options and choice of suitable option,
- (x) Unit operations of the sewage treatment option chosen giving due weightage to economize the capital as well as O&M costs with possible by-product recovery.
- (xi) Mode of disposal of treated effluent,
- (xii) Recycle and reuse of treated effluent for various beneficial non-potable uses,
- (xiii) Proposal, if any, for use of manure, sewage gas etc. to generate revenue