



## **ABSTRACT**

Atal Mission for Rejuvenation and Urban Transformation 2.0 - Constitution of the State-level Task Force and City-level Task Force on 24x7 Water supply projects under Atal Mission for Rejuvenation and Urban Transformation 2.0 - Approved in the 3<sup>rd</sup> meeting of the State High Powered Steering Committee held on 27.06.2022- Sanction - Accorded - Orders- Issued.

### **Municipal Administration & Water Supply (MA2) Department**

**G.O.(Ms) No.127**

**Dated: 09.09.2022**

திருவள்ளூர்வராண்டு, 2053

சுபகிருது, ஆவணி மாதம் 24-ஆம் நாள்

**Read:**

1. G.O.(Ms) No.139, Municipal Administration and Water Supply Department, dated 29.12.2021.
2. From the Additional Secretary, Ministry of Housing and Urban Affairs, Government of India, D.O.Letter No.Q12011/8/2021-CPHEEO, dated:10.05.2022.
3. G.O (D) No.205, Municipal Administration & Water Supply [MA-3(2)] Department dated:15.06.2022
4. Minutes of the 3<sup>rd</sup> meeting of the State High Powered Steering Committee (SHPSC) of Atal Mission for Rejuvenation and Urban Transformation 2.0 held on 27.06.2022.
5. From the Additional Chief Secretary / Chairman and Managing Director, Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited, Letter.No.TUFIDCO/AMRUT 2.0/490/AM(M)/2021-1, dated 08.07.2022.

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### **ORDER:**

The Ministry of Housing and Urban Affairs, Government of India has launched its flagship program, namely, "Atal Mission for Rejuvenation and Urban Transformation 2.0" (AMRUT 2.0) on 01.10.2021. The key components of the AMRUT 2.0 are (a) universal coverage of water supply; (b) sewerage, septage management and recycle / reuse of treated used water; and rejuvenation of water bodies (including urban wet land) and creation of green spaces.

2. Vide the Government Order first read above, administrative sanction for implementation of AMRUT 2.0 has been accorded and the State High Powered Steering Committee (SHPSC) headed by the Chief Secretary to Government has been constituted for the approval of the projects under the Mission.

3. In the letter second read above, the Additional Secretary, Ministry of Housing and Urban Affairs, Government of India has requested the Government to constitute a State-level Task Force at State level and City-level Task Force in all AMRUT cities with the Terms of References as detailed in the annexure, for continuous interaction with the National Task Force for planning, design and implementation of 24x7 water supply projects under Atal Mission for Rejuvenation and Urban Transformation 2.0.

4. The State High Powered Steering Committee (SHPS) of AMRUT 2.0 in its 3<sup>rd</sup> meeting held on 27.06.2022 vide reference fourth read above has inter-alia approved that, the existing technical committee on "Innovative technologies and best practices in water and sewerage sector" constituted vide Government Order third read above with the inclusion of Chief Engineer, Water Resources Department as one of the members, to function as State-level Task Force on 24x7 Water supply projects under AMRUT 2.0. The Committee has also approved to constitute the city-level Task Force (CTF) in all AMRUT Cities for continuous interaction and handholding for scaling up of 24x7 water supply projects.

5. In the letter fifth read above, the Additional Chief Secretary / Chairman and Managing Director, Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited has requested orders of the Government for constitution of State-level Task Force and City-level Task Force in all AMRUT cities for planning, design and implementation of 24x7 Water supply projects under AMRUT 2.0 as approved by the State High Powered Steering Committee (SHPS) in its 3<sup>rd</sup> meeting held on 27.06.2022 as detailed below:

**I. State-level Task Force on 24x7 Water supply projects under Atal Mission for Rejuvenation and Urban Transformation 2.0**

| Sl. No. | Officials  | Position        |
|---------|--|-----------------|
| 1.      | Joint Commissioner of Municipal Administration   | Member-Convenor |
| 2.      | Chief Engineer,<br>Directorate of Municipal Administration   | Member          |
| 3.      | Chief Engineer (General),<br>Greater Chennai Corporation   | Member          |
| 4.      | Chief Engineer, Water Resources Department   | Member          |
| 5.      | Engineering Director,<br>Tamil Nadu Water Supply and Drainage Board                                | Member          |
| 6.      | Engineering Director, Chennai Metropolitan Water<br>Supply and Sewerage Board                      | Member          |
| 7.      | Representative from Commissioner of Town<br>Panchayats   | Member          |
| 8.      | Representative from Anna University  | Special Invitee |
| 9.      | Representative from IIT- Madras  | Special Invitee |
| 10.     | Representative from Tamil Nadu Urban Finance and<br>Infrastructure Development Corporation Limited | Special Invitee |
| 11.     | Representative from Tamil Nadu Urban Infrastructure<br>Financial Services Limited                  | Special Invitee |

## II. City-level Task Force on 24 x 7 water supply projects in AMRUT Cities

| S. No | Officials/Experts/NGO   | Position | Officials  |
|-------|---|----------|--|
| 1.    | City Engineer concerned with water supply                             | Chairman | City Engineer/Municipal Engineer/ Regional Executive Engineer / Executive Engineer (Engineer from respective ULBs) |
| 2.    | Executive Engineer from State Boards/ Parastatals                     | Member   | Executive Engineer, Tamil Nadu Water Supply and Drainage Board   |
| 3.    | Senior Geologist from State Ground Water Department                   | Member   | Geologist, Tamil Nadu Water Supply and Drainage Board  |
| 4.    | Professor of Environmental Engineering from local engineering college | Member   | As may be decided by City-level Task Force(CTF)  |
| 5.    | GIS Expert/ Hydraulic Modeling expert                                 | Member   | As may be decided by CTF   |
| 6.    | Electrical/ Mechanical Engineer cum SCADA expert                      | Member   | As may be decided by CTF   |
| 7.    | PPP Expert at city level  | Member   | As may be decided by CTF   |
| 8.    | NGO at city level   | Member   | As may be decided by CTF   |
| 9.    | Deputy Engineer at CTF Chairman's office                              | Member   | Engineer from respective ULBs  |

The Terms of References of State-level Task Force and City-level Task Force are detailed in the Annexure.

6. The Government after careful examination of the proposal of the Additional Chief Secretary / Chairman and Managing Director, Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited, accord sanction for the constitution of the State-level Task Force and City-level Task Force in all AMRUT cities for planning, design and implementation of 24x7 water supply projects under Atal Mission for Rejuvenation and Urban Transformation 2.0 with the Terms of References as detailed in the Annexure, and order accordingly.

7. The Additional Chief Secretary/Chairman and Managing Director, Tamilnadu Urban Finance and Infrastructure Development Corporation Limited / Mission Director, Atal Mission for Rejuvenation and Urban Transformation is requested to take follow up action with regard to the State-level Task Force and also to issue suitable instructions to all the AMRUT Cities on constituting the City-level Task Force on 24x7 Water supply under Atal Mission for Rejuvenation and Urban Transformation 2.0.

8. This order issues with the concurrence of the Finance Department vide its U.O No.42227 / Fin (MAWS)/2022, Dated:09.09.2022

**//BY ORDER OF THE GOVERNOR //**

**SHIV DAS MEENA  
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT**

**To**

The Additional Chief Secretary /  
Chairman and Managing Director ,  
Tamil Nadu Urban Finance and Infrastructure  
Development Corporation Limited,  
Chennai – 600 035.

The Additional Chief Secretary, Water Resources Department,  
Chennai-600009.

The Additional Secretary, Ministry of Housing and Urban Affairs,  
Government of India, New Delhi-110 011.

The Commissioner, Greater Chennai Corporation, Chennai-3.

The Chairman and Managing Director, Tamil Nadu Urban Infrastructure  
Financial Services Limited, Chennai-600 028

The Commissioner of Town Panchayats,  
Chennai- 600 028.

The Director of Municipal Administration , Chennai- 600 028

The Managing Director, Chennai Metropolitan Water Supply and Sewerage  
Board , Chennai-600 028.

The Managing Director, Tamil Nadu Water Supply and Drainage Board,  
Chennai-600 005.

The Joint Commissioner of Municipal Administration, Office of the Director of  
Municipal Administration, Chennai-600 028.

The Registrar, Indian Institute of Technology Madras,  
Chennai 600 036.

The Registrar, Anna University,  
Chennai-600 025.

**Copy to :**

The Pay and Accounts Officer (East), Chennai-8.

The Accountant General (A&E), Chennai-18.

The Accountant General (Audit), Chennai-18

The Finance (MAWS) Department, Chennai-9.

The Municipal Administration and Water Supply (OP II) Department, Chennai-  
600 009.

**//FORWARDED BY ORDER//**

  
**SECTION OFFICER**

**MUNICIPAL ADMINISTRATION & WATER SUPPLY (MA2) DEPARTMENT**  
**ANNEXURE TO G.O.(Ms)No.127 , Dated: 09.09.2022**

**Terms of References of the State-level Task Force (STF) on 24x7 Water supply under AMRUT 2.0**

1. The Chairman may invite/ co-opt any official or non-official member as a Special Invitee including foreign expert. The task force may also form sub-committee(s) within, to examine theme-wise or region-wise issues.
2. Assess the number of AMRUT cities and monitor the cities which will be implementing 24x7 water supply projects and regularly interact with National Task Force.
3. Support cities in establishing a City-level Task Force (CTF) on 24x7 water supply system and extend handholding support.
4. Organize State/region wise meeting inviting all the City Engineers for AMRUT cities for handholding and dissemination of knowledge on 24x7 water supply.
5. Emphasize on the immediate goals and need for implementation of 24x7 Water Supply in AMRUT Cities, in at least one ward or one District Metering Areas (DMA) with 2000 households as envisaged under Atal Mission for Rejuvenation and Urban Transformation 2.0.
6. Organize the capacity building program and training to all the respective engineers/ staff working in the cities regarding 24x7 water supply.
7. Ensure that all the cities have sustainable and 95% reliable water source. To ensure this, members of STF shall take up site visits as and when required.
8. Disseminate various components for implementation on 24x7 water supply brought out in the "Guidelines for Planning, Design and Implementation of 24x7 Water Supply Systems" and revised Manual on Water Supply and Treatment, to be published by the Ministry of Housing Urban Affairs .
9. Identify and study the national and international best practices of 24x7 water supply from the viewpoint of effectiveness, efficiency, sustainability, impact and share the success and failure experiences. [The service delivery models, O&M, community engagement, institutional setup, adopted technology and lessons applicable/learnt to Indian cities will be identified and shared with the cities].
10. Extend handholding support to cities in preparing City Water Balance Plan, Detailed Project Reports, and reduction in Non-Revenue Water (NRW).
11. Advise cities in setting up Non-Revenue Water cells in all AMRUT Cities in the State.
12. Standardize the rate for works relating to surveying and hydraulic modelling, SCADA implementation etc. and DPR preparation and request cities to maintain uniform rate of charge across the State.
13. Advise cities to undertake the initiatives of capacity building, institutional strengthening of utilities, and facilitating the twinning program for Cities / ULBS within and outside the Country.
14. Monitor city's 24x7 water supply projects on the web portal which will be developed by CPHEEO to maintain data on digital mode and also monitor MIS on 24x7 water supply systems.

15. The duration of the STF shall be initially for 3 years (2022-2024) and will be extended till completion of Atal Mission for Rejuvenation and Urban Transformation 2.0.

**//FORWARDED BY ORDER//**

*S. S. Singh*  
21/1/22  
**SECTION OFFICER**

**MUNICIPAL ADMINISTRATION & WATER SUPPLY (MA2) DEPARTMENT**  
**ANNEXURE TO G.O.(Ms)No.127 , Dated: 09.09.2022**

**Terms of References of City-level Task Force (CTF) on 24x7 Water supply under Atal Mission for Rejuvenation and Urban Transformation 2.0**

1. The Chairman may invite / co-opt any official or non-official member as a Special Invitee.
2. Shall organize the training to engineers and their staff working in the city regarding 24x7 water supply by explaining how to implement 24x7 Water Supply in at least one ward or one District Metering Areas(DMA) with 2,000 households.
3. Implement Model RFP by inviting tender for appointing the consultant for city who will do major works/activities required for preparation of the DPR for executing the 24x7 water supply project. Appoint the consultant for carrying out planning of city water supply, GIS based survey, designing water supply networks, preparation of Detailed Project Report, preparation of draft tender papers, help city administration to float tender for construction of the project of converting existing intermittent system of a city to 24x7 continuous water supply scheme. After appointing agency for construction work, performing duties of Project Management Consultant (PMC) till commissioning of the project, uploading of all the information to the proposed GIS based web portal will be the responsibility of the appointed consultant.
4. Monitor the activities that come under the duties of the appointed consultant who will be responsible for all the works till commissioning of the regular major works pertaining to 24x7 water supply.
5. Prepare GIS mapping of water supply infrastructure for the operational zone of the respective District Metering Areas(DMA)/city. Design the transmission main from water works or clear water sumps to the overhead reservoirs and water distribution network in the operational zone/city:
  - i. To ensure that maps of water supply infrastructure of the operational zone are available with them.
  - ii. Operational Zones/Cities may have proper digitised map of the Water supply network.
  - iii. Cities may have CAD data in form of "As-Built-Drawings" of water supply network for the Operational Zone.
  - iv. Need to adopt a GIS strategy to convert their existing data of network into a GIS ready format. The Maps need to be properly Geo referenced using Geographic Control Points (GCP)s collected in the city.
  - v. Need to digitise the ward boundaries and convert them to GIS format with attributes of ward wise area and census population of last 5 decades.
  - vi. City land-use maps for the Operational Zone/City should be created by taking help of City Development Plan (CDP).
  - vii. Should direct the city engineer, through their GIS cell, to geo reference these maps and get them converted to GIS format, as

most of the cities have their maps of water supply scheme including Transmission and Distribution network on AutoCAD format.

- viii. Condition assessment of the existing pipelines and valves should be carried out. In GIS mapping, the usable existing pipes should be shown and considered in the design.
6. Ensure that the city has perennial sustainable water source with 95% dependability.
7. Forecast population for intermediate and ultimate stage of 15 years and 30 years, respectively ahead of base year; base year being expected year of commissioning of the proposed project. The Population forecast shall be done ward wise by considering the ward wise population density and equivalent area method for the Operational Zone/City.
8. Ensure that the distribution system is designed with peak factor of 2.5 and all pipelines from source and that of the distribution system are designed for projected demand of ultimate stage for the Operational Zone/City.
9. Ensure that the transmission mains which are the main lines of the project shall be designed properly by optimizing the capital and energy.
10. Ensure that the GIS based hydraulic model is prepared showing the existing and proposed new pipelines and the newly planned service reservoirs.
11. Ensure the following for distribution system:
  - i. There is one operational zone per service reservoir/pumping station.
  - ii. All the proposed district metered areas (DMA)s are hydraulically discrete.
  - iii. Boundary of the operational zone should be so decided that the service reservoir would not get empty nor overflow.
  - iv. The distribution pipe network is for existing as well as newly proposed pipes required for 100% coverage in the proposed DMA.
  - v. After running the model, the nodal pressures are checked for required heads (say 17m for cities with population more than 1 lakh and 12m for cities with population less than 1 lakh) and the velocity of flow in pipes shall not be more than 3m/s.
  - vi. House service connections are given for pipes having diameter more than 100 mm. For this purpose, additional rider pipes should be shown and included in the design of the distribution system.
  - vii. Critical points such as nodes of highest elevation and the farthest place are shown in the GIS based distribution maps. These points are required for the design of the SCADA system.
  - viii. Wherever road width is 6m and above, pipeline on both sides should be laid.
12. Ensure the following with respect to metering:
  - i. There is 100% consumer metering
  - ii. Each meter is GIS tagged.
  - iii. Tariff is with telescopic rate based on volumetric consumption.
  - iv. Bulk meters are installed at all strategic and suitable places so that Non-Revenue Water (NRW) computation is possible, and its reduction becomes possible.
  - v. All bulk meters are connected to the SCADA system.



- vi. For commercial, industrial and societies of high-rise buildings, Automatic Meter Reading (AMR) meters are planned.
  - vii. The required control valves (FCVs/ PRVs for hilly areas) are planned for designed distribution of water.
  - viii. WTP, MBRS, ZBRS (Zonal Balance Reservoir), ESRS, pumping stations are located on all season roads and the roads for missing lanes are provided in DPR along with cost so that pipelines up to city boundary are laid on all season roads.
  - ix. The electricity at head works, all pumping stations and WTP are on 24x7 mode. For this purpose, the express feeders from 11 KV or above sub stations are proposed in the DPR along with its cost.
  - x. Water hammer controlling devices are installed at proper locations for all pumping mains. The pumping mains must be analysed for surge. Maximum negative pressure shall not be less than -0.9 Kg/cm<sup>2</sup>. In Cities where water is directly pumped into their distribution system, the same procedure is adopted.
  - xi. Wherever possible, Break pressure tank (BPT) should be planned. The inlet and outlet of BPT should be placed at the same level.
13. Ensure that the service reservoirs feeding high level areas should be separated and should be fed by separate transmission main so that only needed quantity of water is pumped to high level and energy cost is optimized.
  14. Ensure that an item of replacing House Service Connection (HSC) should be incorporated in the DPR as leakage occurs at joint/ junction of municipal pipe with HSC if ferrule connection is not made and the connection is made by the non-skilled plumber.
  15. Establish Consumer grievance redressal cell.
  16. Design Disaster (if source fails) management system for each city.
  17. Ensure that- each city has set up Non-Revenue Water (NRW) cell.
  18. The duration of the City-level Task Force (CTF) shall be initially for 3 years (2022-2024) and will be extended till completion of Atal Mission for Rejuvenation and Urban Transformation 2.0 period.

**//FORWARDED BY ORDER//**

  
SECTION OFFICER

