

**National Mission for Clean Ganga**  
**Format for submission of Monthly Progress Report in the NGT Matter OA**  
**No. 673 of 2018**  
**(in compliance to NGT order dated 24.09.2020)**  
**For the State of Manipur submitted on 20<sup>th</sup> AUGUST 2024**

**Overall status of the State:**

**I. Total Population:**

|                         | <b>2011 Census</b> | <b>Projected as on 2020</b> |
|-------------------------|--------------------|-----------------------------|
| <b>Urban Population</b> | 8,34,154           | 10,47,135                   |
| <b>Rural Population</b> | 17,36,236          | 21,79,541                   |
| <b>Total</b>            | 25,70,390          | 32,26,676                   |

Estimated Sewage Generation (MLD) : 115.054 MLD

**II. Details of Sewage Treatment Plant:**

- Existing No. of STPs and Treatment Capacity : 1 (one) STP of 27 MLD operational
- Capacity Utilization of existing STPs : 21.59 MLD
- MLD of sewage being treated through alternate technology : NIL
- Gap in Treatment Capacity in MLD : 5.41 MLD
- No. of Operational STPs : 1 (one) Detail of STP is at **Annexure - 1**
- No. of Complying STPs : 1 (one)
- No. of Non-complying STPs : Nil

**Details of each existing STP in the State**

| No. | Location             | Existing STP Capacity | Capacity Being Utilized | Operational Status of STP | Compliance Status of STP |
|-----|----------------------|-----------------------|-------------------------|---------------------------|--------------------------|
| 1   | Lamphel, Imphal West | 27 MLD                | 21.59 MLD               | Operational (79.98%)      | Complying                |

**Details of proposed STPs in the State**

| No. | Location | Capacity of the STP proposed in MLD | Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded) | Likely Date of Completion |
|-----|----------|-------------------------------------|-----------------------------------------------------------------------|---------------------------|
| 1   | Imphal   | 49 MLD                              | Implementation started                                                | 2026                      |

### III. Details of Industrial Pollution:

|  |                                                                                                         |   |                                                                                                                                                                                                                                                |
|--|---------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | No. of industries in the State                                                                          | : | 404 Nos.                                                                                                                                                                                                                                       |
|  |                                                                                                         |   | 337 outside Industrial Estate                                                                                                                                                                                                                  |
|  |                                                                                                         |   | 67 inside Industrial Estate                                                                                                                                                                                                                    |
|  | No. of water polluting industries in the State located along the 9 (nine) prioritized rivers of Manipur | : | Nil                                                                                                                                                                                                                                            |
|  | Quantity of effluent generated from the industries in MLD                                               | : | 0.93 KLD (estimated) in case of the 3 units located within Nilakuthi Food Park, Imphal East                                                                                                                                                    |
|  | Quantity of Hazardous Sludge generated from the Industries in TPD                                       | : | Requested the Member Secretary, Manipur Pollution Control Board vide letter No. A-DTCI-109/4/2022-DTCI-DTC&I Dt.05/06/2023 to support with the data on Industrial Waste Generated (in TPD) inside the 3 (three) Industrial Estates of Manipur. |
|  | Number of industrial units having ETPs                                                                  | : | Nil                                                                                                                                                                                                                                            |
|  | Number of industrial units connected to CETP                                                            | : | 3 (three)                                                                                                                                                                                                                                      |
|  | Number and total capacity of ETPs                                                                       | : | Nil                                                                                                                                                                                                                                            |
|  | Details of existing                                                                                     | : | Nil                                                                                                                                                                                                                                            |
|  | Under construction                                                                                      | : | Nil                                                                                                                                                                                                                                            |
|  | Proposed                                                                                                | : | Nil                                                                                                                                                                                                                                            |
|  | Compliance status of the ETPs                                                                           | : | Nil                                                                                                                                                                                                                                            |
|  | Number and total capacity of CETPs                                                                      | : | 1 (one) CETP                                                                                                                                                                                                                                   |
|  | Details of existing                                                                                     | : | 1 unit of 400 KLD capacity                                                                                                                                                                                                                     |
|  | Under construction                                                                                      | : | 3                                                                                                                                                                                                                                              |
|  | Proposed                                                                                                | : | Nil                                                                                                                                                                                                                                            |

| Town   | Existing ETP Capacity | CETP Proposed, if any | Status (under construction etc.)                                                                                                                                                                                                                                                                                                                                 |
|--------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imphal | 400 KLD capacity      | Nil                   | The 3(three) ETPs at Takyelpat, Tera Urak & Kuraopokpi Industrial Estates of Manipur has been constructed under PM Gatishakti "Scheme for Special Assistance to the States for Capital Investment for 2022-23". As per the recent report, the civil works are completed. A joint inspection is schedule on 31 <sup>st</sup> July, 2024 for handling taking over. |

- Status of compliance and operation of the CETPs

| Town   | No. of industries | Industrial discharge | Status of ETPs | Status of CETPs (Existing, under construction & proposed)                                                 |
|--------|-------------------|----------------------|----------------|-----------------------------------------------------------------------------------------------------------|
| Imphal | 5 (five)          | Data not available   | Nil            | 1 (one) CETP of 400 Kilo Liter / Day at Nilakuthi Industrial Estate, Imphal<br><b>Status : Functional</b> |

IV. **Solid Waste Management:**

- Total Urban Local Bodies (ULBs) : 27 ULBs
- Population of ULBs : 6,19,778 (2011 Census)  
: 7,92,660 (2021 projected population)
- Current Municipal Solid Waste Generation : 290 MTD  
(as per SBM 2.0 guidelines, MSW generation is estimated @450gm per capita generation for Imphal Municipal Corporation (for more than one lakh population) and @300gm per capita generation for other ULBs (for less than one lakh population) based on 2020 projected population)
- Waste Collected : 196 TPD (Collected by ULBs)
- Existing Management / treatment facility : 211.5 TPD
- Utilization of MSW processing : 143 TPD  
[Managed by ULBs = 143 TPD  
Managed at Source = 87.1 TPD  
Total Managed = 230.152 TPD]
- Number, installed capacity and utilization of existing MSW processing facilities in TPD bifurcated by type of processing.

| SN | Name of MSW processing unit                                   | Installed capacity | Utilization (in TPD) | Type of processing                                                                                              | Action plan to bridge Gap between utilization and installed facility                                                                                                                                                                                                          |
|----|---------------------------------------------------------------|--------------------|----------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | IMC / Municipal Solid waste Management Plant, Lamdeng, Imphal | 100                | 90                   | <ul style="list-style-type: none"> <li>• Waste to Energy (WTE) and Composting</li> </ul>                        | <ul style="list-style-type: none"> <li>• Intensify the IEC on Door to Door waste collection and source segregation.</li> <li>• Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of services from the corporation.</li> </ul> |
| 2  | Lamshang MC                                                   | 1                  | 1.2                  | <ul style="list-style-type: none"> <li>• Manual and machine-assisted segregation, aerobic composting</li> </ul> | <ul style="list-style-type: none"> <li>• Capacity building to achieve 100% collection</li> <li>• IEC campaign to encourage home composting</li> <li>• Tie-ups with local clubs to reduce, recycle and reuse household waste</li> </ul>                                        |
| 3  | Samurou MC                                                    |                    | 3.55                 |                                                                                                                 | <ul style="list-style-type: none"> <li>• Presently collected waste</li> </ul>                                                                                                                                                                                                 |

| SN | Name of MSW processing unit    | Installed capacity | Utilization (in TPD) | Type of processing                                                                                                                                                                                       | Action plan to bridge Gap between utilization and installed facility                                                                                                                                                                                                                                                                                                                                                         |
|----|--------------------------------|--------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                | 5                  |                      | <ul style="list-style-type: none"> <li>Segregation cum transfer station with some composting pits therein.</li> </ul>                                                                                    | <p>after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant.</p> <ul style="list-style-type: none"> <li>Increase in awareness, Manpower and vehicles.</li> <li>Allotment of Permanent land for management of solid waste has been proposed to DC.</li> <li>And setting up of an own solid waste processing facility will help mitigating the gap.</li> </ul> |
| 4  | Thongkhong Laxmi MC            | 5                  | 3.44                 | <ul style="list-style-type: none"> <li>Segregation cum transfer station and composting pits.</li> </ul>                                                                                                  | <ul style="list-style-type: none"> <li>In terms of ward wise, area wise Leikai wise coverage of D2D collection.</li> <li>More awareness and behavioral change campaign with increase in manpower and SWM vehicles.</li> <li>Setting up of own Solid Waste Management &amp; Processing Facility.</li> </ul>                                                                                                                   |
| 5  | Sekmai MC                      | 1                  | 1.2                  | <ul style="list-style-type: none"> <li>Home Composting is predominant in all wards.</li> <li>Central Composting at Segregation Shed, Parao.</li> <li>Dry Waste disposed at Lamdeng SWM Plant.</li> </ul> | <ul style="list-style-type: none"> <li>Engagement of local clubs/SHGs to achieve 100% segregation at source.</li> <li>Capacity enhancement for management and processing</li> </ul>                                                                                                                                                                                                                                          |
| 6  | Lilong IW MC                   | 1                  | 1                    | <ul style="list-style-type: none"> <li>Segregation Shed for Material Recovery</li> <li>Vermi composting</li> </ul>                                                                                       | <ul style="list-style-type: none"> <li>More composting pits, more vehicles and manpower and encouraging source segregation and home composting.</li> <li>Cluster basis facilities at</li> <li>Lamdeng SWM Plant.</li> </ul>                                                                                                                                                                                                  |
| 7  | Lamlai MC                      | 3                  | 0.9                  | <ul style="list-style-type: none"> <li>Composting (Home + Centralized)</li> <li>Source segregation and Centralized segregation</li> </ul>                                                                | <ul style="list-style-type: none"> <li>Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)</li> </ul>                                                                                                                                                                                                                                                                                                   |
| 8  | Thoubal MC / Thoubal SWM Plant | 13                 | 5.7                  | <ul style="list-style-type: none"> <li>Segregation and composting</li> </ul>                                                                                                                             | <ul style="list-style-type: none"> <li>Encouraging source segregation and home composting</li> </ul>                                                                                                                                                                                                                                                                                                                         |

| SN | Name of MSW processing unit | Installed capacity | Utilization (in TPD) | Type of processing                                                                                                                                                                            | Action plan to bridge Gap between utilization and installed facility                                                                                                                                                                                                          |
|----|-----------------------------|--------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                             |                    |                      |                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Awareness generation to public.</li> <li>• Compactor machine Segregation machine is installed.</li> </ul>                                                                                                                            |
| 9  | Yairipok MC                 | 1                  | 1.6                  | <ul style="list-style-type: none"> <li>• Wet waste get processed at source itself as feed of poultry and piggery farms</li> <li>• Segregated recyclable waste is sent to recycler</li> </ul>  | <ul style="list-style-type: none"> <li>• Treatment facility at Thoubal Cluster</li> </ul>                                                                                                                                                                                     |
| 10 | Sikhong Sekmai MC           | 6                  | 0.56                 | <ul style="list-style-type: none"> <li>• Wet waste gets processed at source itself as feed of poultry and piggery farms</li> <li>• Segregated recyclable waste is sent to recycler</li> </ul> | <ul style="list-style-type: none"> <li>• The ULB shall try to create more facilities to augment the existing installed capacity of the SWM and shall also try to procure machinery/equipment to effectively manage the segregation activities in a scientific way.</li> </ul> |
| 11 | Lilong Thoubal MC           | 1                  | 1                    | <ul style="list-style-type: none"> <li>• Segregation Shed Composting Unit</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.</li> </ul>                                                                                                                  |
| 12 | Heirop MC                   | 1                  | 0.4                  | <ul style="list-style-type: none"> <li>• Transfer and Segregation station and Composting</li> </ul>                                                                                           | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B).</li> <li>• Increase in manpower, Awareness drives &amp; Engagement of Recyclers.</li> </ul>                                                                                      |
| 13 | Wangjing Lamding MC         | 1                  | 0.81                 | <ul style="list-style-type: none"> <li>• Segregation and transfer station</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B)</li> <li>• Increase in manpower, Awareness drives &amp; Engagement of Recyclers</li> </ul>                                                                                        |
| 14 | Andro MC                    | 1.07               | 0.83                 | <ul style="list-style-type: none"> <li>• Bulk waste is processed or consumed at source as poultry and piggery feeds, Aerobic Composting, Segregation and</li> </ul>                           | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B)</li> <li>• Increase in manpower</li> <li>• Awareness drives &amp; Engagement of Recyclers</li> </ul>                                                                              |

| SN | Name of MSW processing unit        | Installed capacity | Utilization (in TPD) | Type of processing                                                                                                                                                                                                                         | Action plan to bridge Gap between utilization and installed facility                                                                                                                                                                                                                                                                                                    |
|----|------------------------------------|--------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                    |                    |                      | Recyclable waste sent to recycler                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                         |
| 15 | Kakching MC/<br>Kakching SWM Plant | 17                 | 6.78                 | <ul style="list-style-type: none"> <li>Composting, Segregation &amp; Recycling</li> </ul>                                                                                                                                                  | <ul style="list-style-type: none"> <li>Intensified IEC on door-to-door waste collection and source segregation.</li> <li>Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council</li> </ul>                                                                                                       |
| 16 | Kakching Khunou MC                 | 2.2                | 1.88                 | <ul style="list-style-type: none"> <li>Composting, Segregation &amp; Recycling</li> </ul>                                                                                                                                                  | <ul style="list-style-type: none"> <li>Intensified IEC on Door-to-Door Waste Collection and Source Segregation.</li> <li>Mandatory Submission of Payment Receipts of D2D waste collection at the time of availing any form of service from the Council.</li> </ul>                                                                                                      |
| 17 | Sugnu MC                           | 1.2                | 0.6                  | <ul style="list-style-type: none"> <li>Composting, Segregation &amp; Recycling</li> </ul>                                                                                                                                                  | <ul style="list-style-type: none"> <li>Intensified IEC on door-to-door waste collection and source segregation.</li> <li>Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council. Transport of unrecyclable waste to Kakching Cluster.</li> </ul>                                                 |
| 18 | Mayang Imphal MC                   | 8                  | 6                    | <ul style="list-style-type: none"> <li>Composting Pits and segregation Sheds/MRF are operational.</li> <li>Remaining collected waste sent to treatment plant at Lamdeng Imphal and Segregated recyclable waste sent to recycler</li> </ul> | <ul style="list-style-type: none"> <li>Treatment Plant/Composting Pits and segregation Sheds/MRF are operational.</li> <li>Remaining collected waste are sent to treatment plant at Lamdeng.</li> <li>Segregated recyclable waste sent to recycler</li> <li>The ULB shall manage to fill up the gap when the prevailing situation of the state is improving.</li> </ul> |
| 19 | Wangoi MC                          | 1                  | 1.25                 | 0                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>In terms of ward wise, area wise, Leikai wise coverage of D2D collection. There is 100% D2D collection.</li> <li>Encouraging home composting and source segregation.</li> <li>More awareness and behavioral change campaign with increase manpower and</li> </ul>                                                                |

| SN | Name of MSW processing unit | Installed capacity | Utilization (in TPD) | Type of processing                                                                                                                 | Action plan to bridge Gap between utilization and installed facility                                                                                                                                                                                      |
|----|-----------------------------|--------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                             |                    |                      |                                                                                                                                    | SWM vehicles. <ul style="list-style-type: none"> <li>• Setting up of a solid waste management &amp; processing facility of its own.</li> </ul>                                                                                                            |
| 20 | Kumbi MC                    | 1                  | 1.29                 | <ul style="list-style-type: none"> <li>• Composting</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>• Now 100% D2D Collection</li> <li>• Land available 0.27 acre</li> </ul>                                                                                                                                           |
| 21 | Kwakta MC                   | 1                  | 0.55                 | <ul style="list-style-type: none"> <li>• Composting</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>• Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster basis is completed, the untreated wastes shall be transferred at the cluster head for further processing</li> </ul> |
| 22 | Moirang MC                  | 4                  | 2.99                 | <ul style="list-style-type: none"> <li>• Composting</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>• Segregation shed has constructed.</li> <li>• Composting plants also been constructed and it has commissioned.</li> <li>• IEC Campaign has organised for proper 100% source segregation.</li> </ul>               |
| 23 | Ningthoukhong MC            | 5.5                | 1.7                  | <ul style="list-style-type: none"> <li>• Composting &amp; sent back for re-cycling</li> </ul>                                      | <ul style="list-style-type: none"> <li>• Vigorous IEC campaign and implementation of stringent rules or bye-laws.</li> </ul>                                                                                                                              |
| 24 | Bishnupur MC                | 5                  | 2.8                  | <ul style="list-style-type: none"> <li>• Sanitary Landfill</li> </ul>                                                              | <ul style="list-style-type: none"> <li>• Vigorous IEC campaign and implementation of stringent rules or by-laws</li> <li>• By-Laws is published and shall be implemented for closing the gap</li> </ul>                                                   |
| 25 | Oinam MC                    | 1.5                | 0.9                  | <ul style="list-style-type: none"> <li>• Composting</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>• Encouraging households to source segregate waste and practice home composting of wet waste.</li> <li>• Engaging recyclers for dry waste</li> </ul>                                                               |
| 26 | Nambol MC                   | 2                  | 1.9                  | <ul style="list-style-type: none"> <li>• Composting pit</li> <li>• Manual Segregation initiated at the segregation shed</li> </ul> | <ul style="list-style-type: none"> <li>• Increasing recovery of other recyclable materials apart from plastic bottles/waste.</li> <li>• Encouraging source segregation and home composting.</li> </ul>                                                    |
| 27 | Jiribam MC                  | 22.005             | 2.27                 | <ul style="list-style-type: none"> <li>• Composting, send back for recycling, MRF</li> </ul>                                       | additional 0.1926 ton of waste is generated and collected from relief camps, Jiribam                                                                                                                                                                      |
|    | <b>Total</b>                | <b>211.5</b>       | <b>143</b>           |                                                                                                                                    |                                                                                                                                                                                                                                                           |

|                                                                                                                        |                                                                          |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| • Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%) | • Planning for upgrade the installed capacity as per required by 2029-30 |
| • No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)                   | • Existing – Nil<br>• Proposed – 5TPD                                    |
| • Total No. of wards                                                                                                   | • 305 Wards                                                              |
| • No. of wards having door to door collection service                                                                  | • 305 Wards                                                              |
| • No. of wards practicing segregation at source                                                                        | • 305 Wards                                                              |

- Details of MSW treatment facilities proposed and under construction:

| Sl. No. | Name of ULB or Processing unit                                                                                                                    | Capacity | Technology                                                                    | Proposed / under Construction |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------|-------------------------------|
| 1       | Annexed at <b>Table-3</b>                                                                                                                         |          |                                                                               |                               |
|         | • No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills                                                                |          | • 5 (five) sanitary landfill and 7 controlled dumpsites<br>• Annexure-Table 3 |                               |
|         | • No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers                                                            |          | • Nil                                                                         |                               |
|         | • No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers |          | • 1 at Jiribam MC [floating racks/screens installed]                          |                               |
|         | • Status of ULB wise Management of Solid waste                                                                                                    |          | • At <b>Annexure – Table -1 and Table -2</b>                                  |                               |

#### **V. Bio-medical Waste Management August, 2024:**

|                                             |   |                                                                                                                                        |                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total Bio-medical generation                | : | 0.83 TPD                                                                                                                               | <ul style="list-style-type: none"> <li>• Deep burial practiced at remote rural areas</li> <li>• DPR submitted to ministry for up-gradation of the existing CBMWTF</li> <li>• Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management</li> </ul> |
| No. of Hospitals and Health Care Facilities | : | 534 Nos.<br>[i/c 420 PHSCs]                                                                                                            |                                                                                                                                                                                                                                                                                                         |
| Status of Treatment Facility CBMWTF         | : | CBMWTF = 1 No.<br>(Capacity-100 Kg/hr.)<br>Captive Facility = 2 Nos.<br>(Capacities-100 Kg/hr. & 105 Kg/hr.)<br>Deep Burial = 391 Nos. |                                                                                                                                                                                                                                                                                                         |
| Status of Treatment Facility ETPs           | : | 83 Nos.                                                                                                                                |                                                                                                                                                                                                                                                                                                         |

## VI. Hazardous Waste Management:

|                                                                 |   |                                                           |
|-----------------------------------------------------------------|---|-----------------------------------------------------------|
| Total Hazardous Waste generation                                | : | 0.99 TPD                                                  |
| No. of Industries generating Hazardous waste                    | : | 334 (automobile service centres mainly micro-scale units) |
| Treatment Capacity of all TSDFs                                 | : | Nil                                                       |
| Avg. Quantity of Hazardous waste reaching the TSDFs and Treated | : | Nil                                                       |
| Details of on-going or proposed TSDF                            | : | Under preparation of DPR, Final DPR by 2024 2024          |

## VII. Plastic Waste Management:

|                                                                                                                                                  |   |                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total Plastic Waste generation                                                                                                                   | : |                                                                                                                                                                                                                                                                                           |
| Treatment / Measures adopted for reduction or management of plastic waste                                                                        | : |                                                                                                                                                                                                                                                                                           |
| Details of Alternate Treatment Technology being adopted by the State/UT                                                                          | : |                                                                                                                                                                                                                                                                                           |
| Identification of including drains contributing to river pollution and action as per NGT order on in-situ treatment                              | : |                                                                                                                                                                                                                                                                                           |
| Details of Nodal Officer appointed by Chief Secretary in the State / UT                                                                          | : |                                                                                                                                                                                                                                                                                           |
| VIII. Details of meetings carried under the in the State/UT                                                                                      | : |                                                                                                                                                                                                                                                                                           |
| IX Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river | : |                                                                                                                                                                                                                                                                                           |
| IX. Ground water regulation                                                                                                                      | : |                                                                                                                                                                                                                                                                                           |
| X. Good irrigation practices being adopted by the State                                                                                          | : |                                                                                                                                                                                                                                                                                           |
| XI. Rainwater Harvesting                                                                                                                         | : |                                                                                                                                                                                                                                                                                           |
| XII. Demarcation of Floodplain and removal of illegal encroachments                                                                              | : |                                                                                                                                                                                                                                                                                           |
| XIII. Maintaining minimum e-flow of river                                                                                                        | : |                                                                                                                                                                                                                                                                                           |
| XIV. Plantation activities along the rivers                                                                                                      | : |                                                                                                                                                                                                                                                                                           |
| XV. Development of biodiversity park                                                                                                             | : |                                                                                                                                                                                                                                                                                           |
| XVI. Reuse of Treated Water                                                                                                                      | : |                                                                                                                                                                                                                                                                                           |
| XVII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards                                       | : |                                                                                                                                                                                                                                                                                           |
| XVIII. Status of Preparation of Action Plan by the 13 Coastal States                                                                             | : |                                                                                                                                                                                                                                                                                           |
| XIX. Regulation of Mining Activities in the State / UT                                                                                           | : | <b>The Mines and Mineral (Regulation and Development) Act, 1957</b> differentiates minerals into (a) major mineral and (b) minor mineral. The mineral administration of mining activities belonging to major minerals vests with the Central Government and are regulated under the Mines |

|                                                                                                                     |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                     |   | <p>and Mineral (Regulation and Development) Act and Rules frame there under. The mineral administration of minor minerals vests with the respective State Governments and are regulated under their respective minor mineral concession Rules framed under section 15(1) of the Act and Rules framed their under. Similarly, in Manipur, the mining activities belonging to minor minerals are regulated under the <b>Manipur Minor Mineral Concession Rules, 2012</b> and amendments thereon.</p> <p>In order to check illegal mining, to regulate transportation and storage of minor minerals, <b>The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) rules, 2018</b> has also been notified.</p> <p>In addition, The Manipur Mineral Policy, 2021 is being framed.</p> |
| XX. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring | : |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

**A. Total Status of STPs in Imphal (as on 20<sup>th</sup> August, 2024)**

| Particular                          | Unit    | Phase I  | Phase II | Ongoing NRCD Project | Total    |
|-------------------------------------|---------|----------|----------|----------------------|----------|
| Capacity of STP                     | MLD     | 27       | 49       | 17                   | 93       |
| Capacity of STP Utilized            | MLD     | 21.59    |          |                      | 21.59    |
| Total Sewer Pipe                    | RM      | 69,429   | 2,77,289 |                      | 3,46,718 |
| Primary (Main Pipe)                 | RM      | 25,291   |          |                      | 25,291   |
| Secondary (Sub-main Pipe)           | RM      | 44,138   |          |                      | 44,138   |
| Interception & Diversion Pipelines  | RM      |          |          | 14,545               | 14,545   |
| No. of urban drains to be collected | Drain   |          |          | 72                   | 72       |
| Targeted Connection septic tank     | Unit    | 9,564    | 42,190   |                      |          |
| Connected septic tank               | Unit    | 8210     |          |                      | 8210     |
| Lift Station                        | Unit    | 5        | 21       | 14                   | 40       |
| Population (by 2054)                | Lakh    | 1,86,534 | 3,49,759 |                      | 5,36,293 |
| Covered Municipal Ward              | Wards   | 11       | 16       | 14                   |          |
| Area covered                        | Sq. Km. | 11       | 35       |                      |          |
| Covered Polluted River              |         |          |          | Nambul P-II          |          |
| Method of Treatment                 |         | ASP      | SBR      | MBBR                 |          |

**Note :** Targeted household for Phase I has been decreased from 12,000 Nos. to 9,564 because 2436 household shall be covered in Imphal Sewerage project – Phase II.

**Status of utilization of the existing STP :**

- 1 (one) unit of 27 MLD STP (ASP technology) is operational under PHED
- 69,429 rm sewer pipeline [25,291 rm primary lines, 44.14 rm secondary lines]
- Total target connection is 9,564 households

**INCREMENTAL STATUS OF UTILIZATION FOR 27MLD STP AT LAMPHEL PAT, IMPHAL WEST**

|                            | Jan 2022  | Feb 2022  | Mar 2022  | Apr 2022  | May 2022  | June 2022 | July 2022 | Aug 2022  | Sep 2022  | Oct 2022  | Cumulative as on 20 <sup>th</sup> August 2024 | Gap             |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------------------------------|-----------------|
| <b>Household Connected</b> | 4000      | 250       | 250       | 60        | 10        | 30        | 0         | 50        | 280       | 356       | <b>8210</b>                                   | <b>1354</b>     |
| <b>Utilization in MLD</b>  | 9 MLD     | 9.5 MLD   | 10 MLD    | 10.26 MLD | 10.28 MLD | 10.35 MLD | 10.35 MLD | 16.5 MLD  | 17.34 MLD | 18.35 MLD | <b>21.59 MLD</b>                              | <b>5.41 MLD</b> |
| <b>Utilization in %</b>    | 33%       | 35%       | 38%       | 38%       | 38%       | 38%       | 38%       | 61.31 %   | 64.24 %   | 67.96 %   | <b>79.98 %</b>                                | <b>20.02 %</b>  |
|                            | Nov. 2022 | Dec. 2022 | Jan. 2023 | Feb. 2023 | Mar. 2023 | May 2023  | June 2023 | July 2023 | Aug 2023  | Sept 2023 |                                               |                 |
| <b>Household Connected</b> | 800       | 50        | 14        | 150       | 20        | 50        | 0         | 0         | 0         | 0         |                                               |                 |
| <b>Utilization in MLD</b>  | 20.60 MLD | 20.74 MLD | 20.78 MLD | 21.17 MLD | 21.22 MLD | 21.59 MLD | 21.59 MLD | 21.59 MLD | 21.59 MLD | 21.59 MLD |                                               |                 |
| <b>Utilization in %</b>    | 76.32 %   | 76.85 %   | 76.99%    | 78.41 %   | 78.62 %   | 79.98 %   | 79.98 %   | 79.98 %   | 79.98 %   | 79.98 %   |                                               |                 |
|                            | Oct. 2023 | Nov 2023  | Dec 2023  | Jan 2024  | Feb 2024  | Mar 2024  | Apr. 2024 | May 2024  | June 2024 | July 2024 |                                               |                 |
| <b>Household Connected</b> | 0         | 30        | 20        | 300       | 70        | 30        | 30        | 20        | 20        | 8190      |                                               |                 |
| <b>Utilization</b>         | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     | 21.59     |                                               |                 |

|                            |                 |         |         |         |         |         |        |         |         |        |  |  |
|----------------------------|-----------------|---------|---------|---------|---------|---------|--------|---------|---------|--------|--|--|
| <b>in MLD</b>              | MLD             | MLD     | MLD     | MLD     | MLD     | MLD     | MLD    | MLD     | MLD     | MLD    |  |  |
| <b>Utilization in %</b>    | 79.98 %         | 79.98 % | 79.98 % | 79.98 % | 79.98 % | 79.98 % | 79.98% | 79.98 % | 79.98 % | 79.98% |  |  |
|                            | <b>Aug 2024</b> |         |         |         |         |         |        |         |         |        |  |  |
| <b>Household Connected</b> | 8210            |         |         |         |         |         |        |         |         |        |  |  |
| <b>Utilization in MLD</b>  | 21.59 MLD       |         |         |         |         |         |        |         |         |        |  |  |
| <b>Utilization in %</b>    | 79.98 %         |         |         |         |         |         |        |         |         |        |  |  |

**B. In-situ Bio-remediation and others:**

|   | <b>Name of the Polluted River (P-V)</b> | <b>Total Length of the River</b> | <b>Length of Polluted stretches</b> | <b>BOD Range (mg/l)</b> | <b>Population at polluted zone</b> | <b>Status / Proposed for Treatment</b>                                                                                                                                                                                                                                                                                                                                                |
|---|-----------------------------------------|----------------------------------|-------------------------------------|-------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Imphal                                  | 89.24 km                         | 19.98 km                            | 2.9 - 3.1               | 84,857                             | <ul style="list-style-type: none"> <li>Revised DPR for Imphal River along with Fecal Sludge and Septage Management (FSSM) for 315 KLD at 27 ULBs and in situ treatment through Bio-remediation of 16.75 MLD submitted to NRCD on 18<sup>th</sup> September 2021.</li> <li>Revised DPR with full justification on the comments made by the Ministry will be submitted soon.</li> </ul> |
| 2 | Iril                                    | 156.50 km                        | 18.12 km                            | 2.8 - 3.0               | 1,714                              |                                                                                                                                                                                                                                                                                                                                                                                       |
| 3 | Khuga                                   | 79.25 km                         | 10.92 km                            | 2.0 – 3.0               | 857                                |                                                                                                                                                                                                                                                                                                                                                                                       |
| 4 | Khujairok                               | 10.06 km                         | 4.21 km                             | 3.2                     | 4,286                              |                                                                                                                                                                                                                                                                                                                                                                                       |
| 5 | Lokchao/ Thongjarok                     | 17.04 km                         | 5.31 km                             | 3.0                     | 1,143                              |                                                                                                                                                                                                                                                                                                                                                                                       |
| 6 | Manipur                                 | 261.00 km                        | 35.00 km                            | 3.1                     | 7,143                              |                                                                                                                                                                                                                                                                                                                                                                                       |
| 7 | Thoubal                                 | 142.80 km                        | 24.61 km                            | 2.8                     | 30,286                             |                                                                                                                                                                                                                                                                                                                                                                                       |
| 8 | Wangjing                                | 35.08 km                         | 3.70 km                             | 3.1 - 3.2               | 7,143                              |                                                                                                                                                                                                                                                                                                                                                                                       |

**Note:**

ASP (Activated Sludge Process), EAP (Extended Aeration Process),  
SBR (Sequencing Batch Reactor), MBBR (Moving Bed Biofilm Reactor)

|         | FORMAT FOR SEWAGE TREATMENT PLANTS AND UTILIZATION OF SEWAGE (20 <sup>th</sup> August, 2024) |            |                 |                            |                       |                                                           |                                 |                                                   |                                                    |        |                                                           |     |          |          |          |                           |
|---------|----------------------------------------------------------------------------------------------|------------|-----------------|----------------------------|-----------------------|-----------------------------------------------------------|---------------------------------|---------------------------------------------------|----------------------------------------------------|--------|-----------------------------------------------------------|-----|----------|----------|----------|---------------------------|
| Sl. No. | City / Town                                                                                  | No. of STP | Location of STP | Coordinates of STP         | STP Commissioned year | Status (operational/ Non-Operational/ Under Construction) | STP Installed Capacity (In MLD) | Actual Utilization of installed capacity (In MLD) | Technology UASB / ASP / OP / SBR / MBBR / FAB etc. |        | Compliance Status Source: Manipur Pollution Control Board |     |          |          |          |                           |
|         |                                                                                              |            |                 |                            |                       |                                                           |                                 |                                                   |                                                    |        | Oil & Grease                                              | pH  | TSS mg/l | COD mg/l | BOD mg/l | Faecal Coliform (#/100ml) |
| 1       | Imphal                                                                                       | 1          | Lamphel         | 24°49''45'N<br>93°54''58'E | 2020                  | Operational                                               | 27                              | 21.59 MLD                                         | ASP                                                | Inlet  | 9.0                                                       | 7   | 165      | 400      | 245      | 145                       |
|         |                                                                                              |            |                 |                            |                       |                                                           |                                 |                                                   |                                                    | Outlet | 2.7                                                       | 7.3 | 35       | 44       | 12.5     | 125                       |

TABLE 1: SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT - ULB WISE IN MANIPUR, AUGUST, 2024

| No. | Name of ULB | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and Collected + Managed at source | Managed/Treated (in TPD) |                   |                     |                |                                    | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                                                                                                                                                                                                                                                                                                |
|-----|-------------|-------------|----------------|-----------------------------|-----------------------|---------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |             | 2011 Census | 2021 Projected |                             |                       |                                                         | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/Gen] x 100 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 1   | Imphal MC   | 2,68,243    | 3,50,050       | 158                         | 130.0                 | 2                                                       | 100                      | 90                | 25.5                | 115.5          | 27%                                | <ul style="list-style-type: none"> <li>• Intensify the IEC on Door to Door waste collection and source segregation.</li> <li>• Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the corporation.</li> </ul>                                                                                                                                                                                                      |
| 2   | Lamshang MC | 8,130       | 9,739          | 2.92                        | 1.2                   | 0.22                                                    | 1                        | 1.2               | 1.5                 | 2.7            | 7.53%                              | <ul style="list-style-type: none"> <li>• Capacity to achieve 100% collection</li> <li>• IEC campaigns to encourage home composting</li> <li>• Tie-ups with local clubs to reduce, recycle and reuse household waste.</li> </ul>                                                                                                                                                                                                                                                   |
| 3   | Samurou MC  | 16582       | 18,602         | 5.58                        | 3.55                  | 0.49                                                    | 5                        | 3.55              | 1.54                | 5.09           | 8.78%                              | <ul style="list-style-type: none"> <li>• Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant.</li> <li>• Increase in awareness &amp; increase in manpower and vehicles.</li> <li>• Allotment of Permanent land for management of solid waste has been proposed to DC.</li> <li>• And setting up of an own solid waste processing facility will help mitigating the gap.</li> </ul> |
| 4   | Thongkhong  | 14,878      | 18,677         | 5.6                         | 3.44                  | 0.49                                                    | 5                        | 3.44              | 1.67                | 5.11           | 8.75%                              | <ul style="list-style-type: none"> <li>• In terms of ward wise, area wise laikai</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                       |

| No. | Name of ULB       | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and (Collected + Managed at source) | Managed/Treated (in TPD) |                   |                     |                |                                     | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                   |
|-----|-------------------|-------------|----------------|-----------------------------|-----------------------|-----------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                   | 2011 Census | 2021 Projected |                             |                       |                                                           | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/ Gen] x 100 |                                                                                                                                                                                                      |
|     | Laxmi MC          |             |                |                             |                       |                                                           |                          |                   |                     |                |                                     | wise coverage of D2D collection.<br>• More awareness and behavioral change campaign with increase manpower and SWM vehicles.<br>• Setting up of an own Solid waste management & Processing facility. |
| 5   | Sekmai MC         | 5,065       | 6,358          | 1.9                         | 1.20                  | 0.2                                                       | 1                        | 1.2               | 0.50                | 1.7            | 11%                                 | • Engagement of local clubs/SHGs to achieve 100% segregation at source.<br>• Capacity enhancement for management and processing.                                                                     |
| 6   | Lilong IW MC      | 12,427      | 15,600         | 4.68                        | 1                     | 0.68                                                      | 1                        | 1                 | 3                   | 4              | 15%                                 | • More composting pits, more vehicles and manpower and encouraging source segregation and home composting.<br>• Cluster basis facilities at Lamdeng SWM Plant.                                       |
| 7   | Lamlai MC         | 4,601       | 5,776          | 1.73                        | 1                     | 0                                                         | 3                        | 0.9               | 0.73                | 1.63           | 6%                                  | • Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach).                                                                                                                          |
| 8   | Thoubal MC        | 45,947      | 57,678         | 17.3                        | 6.3                   | 0.3                                                       | 13                       | 5.7               | 11                  | 16.7           | 3%                                  | • Encouraging source segregation and home composting<br>• Awareness generation to public.<br>• Compactor machine Segregation machine, compressor                                                     |
| 9   | Yairipok MC       | 9,569       | 12,012         | 3.6                         | 1.6                   | 0                                                         | 1                        | 1.6               | 2                   | 3.6            | 0%                                  | • Treatment facilities at Thoubal cluster                                                                                                                                                            |
| 10  | Sikhong Sekmai MC | 7,390       | 9,277          | 2.78                        | 0.56                  | 0                                                         | 6                        | 0.56              | 2.22                | 2.78           | 0%                                  | • The ULB shall try to create more facilities to augment the existing installed capacity of the SWM facility and also try                                                                            |

| No. | Name of ULB         | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and (Collected + Managed at source) | Managed/Treated (in TPD) |                   |                     |                |                                     | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                                                                                     |
|-----|---------------------|-------------|----------------|-----------------------------|-----------------------|-----------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                     | 2011 Census | 2021 Projected |                             |                       |                                                           | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/ Gen] x 100 |                                                                                                                                                                                                                                                                        |
|     |                     |             |                |                             |                       |                                                           |                          |                   |                     |                |                                     | to procure machinery/equipment to effectively manage the segregation activities in a scientific way.                                                                                                                                                                   |
| 11  | Lilong TBL MC       | 24,900      | 31,258         | 9.37                        | 2.00                  | 0.87                                                      | 1                        | 1                 | 6.5                 | 7.5            | 20%                                 | <ul style="list-style-type: none"> <li>• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.</li> </ul>                                                                                                           |
| 12  | Heirol MC           | 2,974       | 3,733          | 1.12                        | 0.47                  | 0                                                         | 1                        | 0.4               | 0.65                | 1.05           | 6.3%                                | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B)</li> <li>• Increase in manpower.</li> <li>• Awareness drives &amp; Engagement of recyclers.</li> </ul>                                                                     |
| 13  | Wangjing Lamding MC | 8,055       | 10,112         | 3.03                        | 1                     | 0                                                         | 1                        | 0.81              | 2.03                | 2.84           | 6.3%                                | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B)</li> <li>• Increase in manpower.</li> <li>• Awareness drives &amp; Engagement of recyclers</li> </ul>                                                                      |
| 14  | Andro MC            | 8,744       | 10,977         | 3.29                        | 0.9                   | 0                                                         | 1.07                     | 0.83              | 2.39                | 3.22           | 2.13%                               | <ul style="list-style-type: none"> <li>• Treatment facilities at Thoubal Khunou (Cluster B)</li> <li>• Increase in manpower.</li> <li>• Awareness drives &amp; Engagement of recyclers</li> </ul>                                                                      |
| 15  | Kakching MC         | 32,138      | 40,344         | 12.1                        | 8.62                  | 0.1                                                       | 17                       | 6.78              | 3.38                | 10.16          | 16%                                 | <ul style="list-style-type: none"> <li>• Intensified IEC on door-to-door waste collection and source segregation.</li> <li>• Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council.</li> </ul> |

| No. | Name of ULB        | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and Collected + Managed at source) | Managed/Treated (in TPD) |                   |                     |                |                                     | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                                                                                                                                                                                          |
|-----|--------------------|-------------|----------------|-----------------------------|-----------------------|----------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                    | 2011 Census | 2021 Projected |                             |                       |                                                          | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/ Gen] x 100 |                                                                                                                                                                                                                                                                                                                                                                             |
| 16  | Kakching Khunou MC | 11,379      | 14,284         | 4.28                        | 2.20                  | 0.53                                                     | 2.2                      | 1.88              | 1.55                | 3.43           | 20%                                 | <ul style="list-style-type: none"> <li>Intensified IEC on door-to-door waste collection and source segregation.</li> <li>Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council.</li> </ul>                                                                                                          |
| 17  | Sugnu MC           | 5,132       | 6,442          | 1.93                        | 1.15                  | 0.3                                                      | 1.2                      | 0.6               | 0.48                | 1.08           | 44%                                 | <ul style="list-style-type: none"> <li>Intensified IEC on door-to-door waste collection and source segregation</li> <li>Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council</li> <li>Transport of unrecyclable waste to Kakching Cluster</li> </ul>                                               |
| 18  | Mayang Imphal MC   | 24,239      | 34,428         | 10.33                       | 6.0                   | 1.02                                                     | 8                        | 6                 | 3.31                | 9.31           | 10%                                 | <ul style="list-style-type: none"> <li>Treatment Plant/Composting Pits and segregation Sheds/MRF are operational.</li> <li>Remaining collected waste are sent to treatment plant at Lamdeng.</li> <li>Segregated recyclable waste are sent to recycler</li> <li>The ULB shall manage to fill up the gap when the prevailing situation of the state is improving.</li> </ul> |
| 19  | Wangoi MC          | 9,106       | 11,431         | 3.42                        | 1.45                  | 0                                                        | 1                        | 1.25              | 1.98                | 3.23           | 5.83%                               | <ul style="list-style-type: none"> <li>In terms of ward wise, area wise, Leikai wise coverage of D2D collection, there is 100% coverage of D2D collection.</li> <li>Encouraging source segregation and</li> </ul>                                                                                                                                                           |

| No. | Name of ULB      | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and (Collected + Managed at source) | Managed/Treated (in TPD) |                   |                     |                |                                     | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                       |
|-----|------------------|-------------|----------------|-----------------------------|-----------------------|-----------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                  | 2011 Census | 2021 Projected |                             |                       |                                                           | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/ Gen] x 100 |                                                                                                                                                                                                          |
|     |                  |             |                |                             |                       |                                                           |                          |                   |                     |                |                                     | home composting.<br>• More awareness and behavioral change campaign with increase in manpower and SWM vehicles.<br>• Setting up of solid waste management and processing facility of its own.            |
| 20  | Kumbi MC         | 9,546       | 11,983         | 3.59                        | 2                     | 0.08                                                      | 1                        | 1.29              | 1.51                | 2.8            | 22%                                 | • Now 100% D2D collection<br>• Land available 0.27 acre                                                                                                                                                  |
| 21  | Kwakta MC        | 8,579       | 10,769         | 3.23                        | 1.13                  | 0                                                         | 1                        | 0.55              | 2.1                 | 2.65           | 17.96%                              | • Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster basis is completed, the untreated wastes shall be transferred at the cluster head for further processing. |
| 22  | Moirang MC       | 19,893      | 24,972         | 7.49                        | 5.4                   | 0.09                                                      | 4                        | 2.99              | 2                   | 4.99           | 33%                                 | • Segregation shed has constructed. Composting plans also been constructed. It has commissioned.<br>• Campaign has organised for proper 100% source segregation.                                         |
| 23  | Ningthoukhong MC | 13,078      | 16,417         | 4.92                        | 2.2                   | 0.22                                                      | 5.5                      | 1.7               | 2.5                 | 4.2            | 15%                                 | • Vigorous IEC campaign and implementation of stringent rules or by laws.                                                                                                                                |
| 24  | Bishnupur MC     | 12,167      | 15,274         | 4.58                        | 3.48                  | 0                                                         | 5                        | 2.8               | 1.1                 | 3.9            | 14.8%                               | • Vigorous IEC campaign and implementation of stringent rules or bye-laws, By-Laws is published and shall be implemented for closing the gap.                                                            |

| No.                               | Name of ULB | Population  |                | Solid Waste Generated (MTD) | Waste Collected (TPD) | Gap between Generated and (Collected + Managed at source) | Managed/Treated (in TPD) |                   |                     |                |                                    | Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks                                                                                                 |
|-----------------------------------|-------------|-------------|----------------|-----------------------------|-----------------------|-----------------------------------------------------------|--------------------------|-------------------|---------------------|----------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |             | 2011 Census | 2021 Projected |                             |                       |                                                           | Facilities (TPD)         | Managed / Treated | Processed at source | Map Gap in TPD | Gen-Man Gap= [(Gen-Man)/Gen] x 100 |                                                                                                                                                                                                    |
| 25                                | Oinam MC    | 7,161       | 8,989          | 2.69                        | 1.6                   | 0.0                                                       | 1.5                      | 0.9               | 1.1                 | 2              | 26%                                | <ul style="list-style-type: none"> <li>Encouraging households to source segregate waste and practice home composting of wet waste.</li> <li>Engaging recyclers for dry waste.</li> </ul>           |
| 26                                | Nambol MC   | 22,512      | 28,260         | 8.47                        | 4.3                   | -0.03                                                     | 2                        | 1.9               | 4.2                 | 6              | 28%                                | <ul style="list-style-type: none"> <li>Increasing recovery of other recyclable materials apart from plastic bottles/waste.</li> <li>Encouraging source segregation and home composting.</li> </ul> |
| 27                                | Jiribam MC  | 7,343       | 9,218          | 2.88                        | 2.2700                | 0.00                                                      | 22.005                   | 2.270             | 0.61                | 2.2882         | 0%                                 | <ul style="list-style-type: none"> <li>Additional 0.1926 ton of waste is generated and collected from relief camps, Jiribam.</li> </ul>                                                            |
| <b>Total</b>                      |             | 6,19,778    | 7,92,660       | 290                         | 196                   | 7.538                                                     | 211.5                    | 143               | 87.1                | 230.15         |                                    |                                                                                                                                                                                                    |
| <b>PC to the generated wastes</b> |             |             |                |                             | 67%                   | 3%                                                        | 73%                      | 49%               | 30%                 | 79%            | <b>21%</b>                         |                                                                                                                                                                                                    |

**Note :** \*1. Taking r=2.3 as annual Population growth rate [Ref.: MoUD, GoI]      \*2. Waste generated is estimated including floating population @10%  
\*3. As per SBM 2.0 guidelines, Waste generated is estimated in @450gm per capita generation (for more than 1 lakh population) for Imphal MC and @ 300gm per capita generation (for less than 1 lakh population)

**TABLE 2 : SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT – WARDWISE OF ULBs IN MANIPUR, AUGUST, 2024**

| Sl. No. | Name of ULB         | Total Wards | Door to Door (D2D) Collection |      | Segregated at source |      | Land Available in Acre                                                              | Type of processing unit                                                                                                                                | Plan to mitigate the gap generation and Management                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------|---------------------|-------------|-------------------------------|------|----------------------|------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         |                     |             | No. of Wards                  | in % | No. of Wards         | in % |                                                                                     |                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1       | Imphal MC           | 27          | 27                            | 100% | 27                   | 80%  |                                                                                     | <ul style="list-style-type: none"> <li>Waste to Energy plant (WTE) and composting</li> </ul>                                                           | <ul style="list-style-type: none"> <li>Intensified awareness on source segregation and home composting.</li> </ul>                                                                                                                                                                                                                                                                                                                                                            |
| 2       | Lamshang MC         | 9           | 9                             | 85%  | 9                    | 75%  | 0                                                                                   | <ul style="list-style-type: none"> <li>Manual and machine-assisted segregation, aerobic composting</li> </ul>                                          | <ul style="list-style-type: none"> <li>IEC activities to emphasize Segregation at Source.</li> <li>Subscription to municipal waste collection</li> </ul>                                                                                                                                                                                                                                                                                                                      |
| 3       | Samurou MC          | 11          | 11                            | 100% | 11                   | 70%  | 0                                                                                   | <ul style="list-style-type: none"> <li>Segregation cum transfer station with some composting pits therein.</li> </ul>                                  | <ul style="list-style-type: none"> <li>Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant.</li> <li>Increase in awareness.</li> <li>Increase in Manpower and vehicles.</li> <li>Allotment of Permanent land for management of solid waste has been proposed to DC.</li> <li>And setting up of an own solid waste processing facility will help mitigating the gap.</li> </ul> |
| 4       | Thongkhong Laxmi MC | 11          | 11                            | 100% | 11                   | 70%  | 2.5 (Allotment order issued, premium paid, process for issue of Jamabandi going on) | <ul style="list-style-type: none"> <li>Segregation cum transfer station and composting pits.</li> </ul>                                                | <ul style="list-style-type: none"> <li>In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D</li> <li>More awareness and behavioural change campaign required.</li> <li>Increase of manpower and machinery.</li> <li>Setting up of solid waste management and processing facility of its own.</li> </ul>                                                                                          |
| 5       | Sekmai MC           | 9           | 9                             | 100% | 9                    | 78%  | 0                                                                                   | <ul style="list-style-type: none"> <li>Home Composting is predominant in all wards.</li> <li>Central Composting at Segregation Shed, Parao.</li> </ul> | <ul style="list-style-type: none"> <li>IEC activities to emphasize segregation at Source.</li> <li>Campaigns to reduce recycle and segregation machines</li> </ul>                                                                                                                                                                                                                                                                                                            |

| Sl. No. | Name of ULB       | Total Wards | Door to Door (D2D) Collection |      | Segregated at source |      | Land Available in Acre | Type of processing unit                                                                                                                                                                       | Plan to mitigate the gap generation and Management                                                                                                                                                                                                                                    |
|---------|-------------------|-------------|-------------------------------|------|----------------------|------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         |                   |             | No. of Wards                  | in % | No. of Wards         | in % |                        |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                       |
|         |                   |             |                               |      |                      |      |                        | <ul style="list-style-type: none"> <li>• Dry Waste disposed at Lamdeng SWM Plant.</li> </ul>                                                                                                  |                                                                                                                                                                                                                                                                                       |
| 6       | Lilong IW MC      | 9           | 9                             | 100% | 9                    | 80%  | 0                      | <ul style="list-style-type: none"> <li>• Segregation Shed for Material Recovery</li> <li>• Vermi composting</li> </ul>                                                                        | <ul style="list-style-type: none"> <li>• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.</li> <li>• Cluster basis facilities at Lamdeng SWM Plant.</li> </ul>                                                                |
| 7       | Lamlai MC         | 9           | 9                             | 100% | 9                    | 78%  | 0.88                   | <ul style="list-style-type: none"> <li>• Composting (Home +Centralised)</li> <li>• Source segregation and centralised segregation</li> </ul>                                                  | <ul style="list-style-type: none"> <li>• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach).</li> <li>• Rigorous IEC activities.</li> </ul>                                                                                                                     |
| 8       | Thoubal MC        | 18          | 18                            | 100% | 18                   | 84%  | 6.7                    | <ul style="list-style-type: none"> <li>• Segregation and composting</li> </ul>                                                                                                                | <ul style="list-style-type: none"> <li>• Engaging more workers in the composting plant.</li> <li>• Introduction of compactor and segregation machines.</li> </ul>                                                                                                                     |
| 9       | Yairipok MC       | 9           | 9                             | 100% | 9                    | 100% | 2.2                    | <ul style="list-style-type: none"> <li>• Wet waste gets processed at source itself as feed of poultry and piggery farms</li> <li>• Segregated recyclable waste is sent to recycler</li> </ul> | <ul style="list-style-type: none"> <li>• Treatment facility at Thoubal cluster.</li> </ul>                                                                                                                                                                                            |
| 10      | Sikhong Sekmai MC | 9           | 9                             | 100% | 9                    | 67%  | 0.62                   | <ul style="list-style-type: none"> <li>• Wet waste gets processed at source as feed of poultry and piggery farms.</li> <li>• Segregated recyclable waste is sent to recycler</li> </ul>       | <ul style="list-style-type: none"> <li>• The ULB shall try to create more facilities to augment the existing installed capacity of the SWM facility and shall also try to procure machinery equipment to effectively manage the segregation activities in scientific ways.</li> </ul> |
| 11      | Lilong TBL MC     | 9           | 9                             | 100% | 9                    | 70%  | 0.313                  | <ul style="list-style-type: none"> <li>• Segregation Shed</li> <li>• Composting Unit</li> </ul>                                                                                               | <ul style="list-style-type: none"> <li>• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.</li> </ul>                                                                                                                          |
| 12      | Heirop MC         | 9           | 9                             | 100% | 9                    | 100% | 2.084                  | <ul style="list-style-type: none"> <li>• Transfer and Segregation Station and Composting</li> </ul>                                                                                           | <ul style="list-style-type: none"> <li>• Treatment facility at Thoubal Khunou (Cluster B)</li> </ul>                                                                                                                                                                                  |

| Sl. No. | Name of ULB         | Total Wards | Door to Door (D2D) Collection |      | Segregated at source |      | Land Available in Acre | Type of processing unit                                                                                                                                                                                                             | Plan to mitigate the gap generation and Management                                                                                                                                                                                                                                                           |
|---------|---------------------|-------------|-------------------------------|------|----------------------|------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         |                     |             | No. of Wards                  | in % | No. of Wards         | in % |                        |                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                              |
| 13      | Wangjing Lamding MC | 9           | 9                             | 100% | 9                    | 100% | 1.46                   | <ul style="list-style-type: none"> <li>• Segregation and transfer station</li> </ul>                                                                                                                                                | <ul style="list-style-type: none"> <li>• Treatment facility at Thoubal Khunou (Cluster B)</li> </ul>                                                                                                                                                                                                         |
| 14      | Andro MC            | 12          | 12                            | 100% | 12                   | 80%  | 0.96                   | <ul style="list-style-type: none"> <li>• Bulk of wet waste is processed or consumed at source a poultry &amp; piggery feeds</li> <li>• Aerobic Composting</li> <li>• Segregation &amp; Recyclable waste sent to recycler</li> </ul> | <ul style="list-style-type: none"> <li>• Treatment facility at Thoubal Khunou (Cluster B)</li> </ul>                                                                                                                                                                                                         |
| 15      | Kakching MC         | 12          | 12                            | 100% | 12                   | 95%  | 4.5                    | <ul style="list-style-type: none"> <li>• Composting, segregation &amp; recycling</li> </ul>                                                                                                                                         | <ul style="list-style-type: none"> <li>• Intensified awareness on source segregation.</li> <li>• Manual segregation</li> <li>• Mechanical segregation (to be started shortly) and aerobic composting to mitigate the gap of generation and management.</li> </ul>                                            |
| 16      | Kakching Khunou MC  | 9           | 9                             | 95%  | 9                    | 86%  | 2                      | <ul style="list-style-type: none"> <li>• Composting, segregation &amp; Recycling</li> </ul>                                                                                                                                         | <ul style="list-style-type: none"> <li>• Intensified awareness on source segregation.</li> <li>• Manual segregation</li> <li>• Mechanical Segregation (to be started shortly) and</li> <li>• Aerobic composting to mitigate the gap of generation and management</li> </ul>                                  |
| 17      | Sugnu MC            | 9           | 9                             | 88%  | 9                    | 75%  | 1                      | <ul style="list-style-type: none"> <li>• Composting, Segregation &amp; Recycling</li> </ul>                                                                                                                                         | <ul style="list-style-type: none"> <li>• Transport of remaining unrecyclable segregated waste to Kakching cluster.</li> <li>• Engagement of recyclers</li> <li>• Intensified awareness on source segregation, manual segregation and composting to mitigate the gap of generation and management.</li> </ul> |

| Sl. No. | Name of ULB      | Total Wards | Door to Door (D2D) Collection |      | Segregated at source |      | Land Available in Acre | Type of processing unit                                                                                                                                                                                                                            | Plan to mitigate the gap generation and Management                                                                                                                                                                                                                    |
|---------|------------------|-------------|-------------------------------|------|----------------------|------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         |                  |             | No. of Wards                  | in % | No. of Wards         | in % |                        |                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
| 18      | Mayang Imphal MC | 13          | 13                            | 85%  | 13                   | 85%  | 1.25                   | <ul style="list-style-type: none"> <li>• Composting pits and segregation sheds/MRF are operational.</li> <li>• Remaining collected waste sent to treatment plant at Lamdeng Imphal.</li> <li>• Segregated recyclables sent to recycler.</li> </ul> | <ul style="list-style-type: none"> <li>• Composting Pits and segregation Sheds/MRF are operational.</li> <li>• Remaining collected waste sent to treatment plant at Lamdeng Imphal</li> <li>• Segregated recyclables sent to recycler.</li> </ul>                     |
| 19      | Wangoi MC        | 9           | 9                             | 100% | 9                    | 71%  | 0                      |                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• More awareness and behavioural changes campaign.</li> <li>• Increase of manpower.</li> <li>• Allotment of SWM land.</li> <li>• Setting up of a SWM and processing facility of its own.</li> </ul>                            |
| 20      | Kumbi MC         | 9           | 9                             | 100% | 9                    | 80%  | 0.52                   | • Composting                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                       |
| 21      | Kwakta MC        | 9           | 9                             | 100% | 9                    | 65%  | 0.625                  | • Composting                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Untreated waste is dumped at uncontrolled dumpsite as a short time measure.</li> <li>• Once the cluster basis is completed, the untreated wastes shall be transferred at the cluster head for further processing.</li> </ul> |
| 22      | Moirang MC       | 12          | 12                            | 100% | 12                   | 85%  | 5.1                    | • Composting                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Requested DC to allot land.</li> <li>• Rigorous IEC Campaign to be held for source segregation.</li> </ul>                                                                                                                   |
| 23      | Ningthoukhong MC | 14          | 14                            | 100% | 14                   | 85%  | 1.31                   | • Composting & sent back for re-cycling                                                                                                                                                                                                            | • Composting and recycling                                                                                                                                                                                                                                            |
| 24      | Bishnupur MC     | 12          | 12                            | 100% | 12                   | 85%  | 5                      | • Sanitary Landfill                                                                                                                                                                                                                                | • Composting plant at 2.5 Acre                                                                                                                                                                                                                                        |
| 25      | Oinam MC         | 9           | 9                             | 100% | 9                    | 70%  | 0                      | • Composting                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Encouraging households to source segregate waste and practice home composting of wet waste.</li> <li>• Engaging recyclers for dry waste.</li> </ul>                                                                          |

| Sl. No.                            | Name of ULB | Total Wards | Door to Door (D2D) Collection |      | Segregated at source |      | Land Available in Acre | Type of processing unit                                                                                                            | Plan to mitigate the gap generation and Management                                                                                                                                                                                  |
|------------------------------------|-------------|-------------|-------------------------------|------|----------------------|------|------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    |             |             | No. of Wards                  | in % | No. of Wards         | in % |                        |                                                                                                                                    |                                                                                                                                                                                                                                     |
| 26                                 | Nambol MC   | 18          | 18                            | 100% | 18                   | 88%  | 3.21                   | <ul style="list-style-type: none"> <li>• Composting pit</li> <li>• Manual Segregation initiated at the segregation shed</li> </ul> | <ul style="list-style-type: none"> <li>• Capacity building of sanitary Workers.</li> <li>• Increasing manpower, vehicles and machinery.</li> <li>• Extensive awareness drive.</li> <li>• Co-opting SHGs and CSOs in SWM.</li> </ul> |
| 27                                 | Jiribam MC  | 10          | 10                            | 100% | 10                   | 85%  | 6.02                   | <ul style="list-style-type: none"> <li>• Composting, Send back for recycling, MRF</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Nil</li> </ul>                                                                                                                                                                             |
| <b>Total</b>                       |             | 305         | 305                           |      | 305                  |      | 45.132                 |                                                                                                                                    |                                                                                                                                                                                                                                     |
| <b>In Percentage-Ward coverage</b> |             |             |                               | 100% |                      | 100% |                        |                                                                                                                                    |                                                                                                                                                                                                                                     |
| <b>Average Household coverage</b>  |             |             |                               | 97%  |                      | 81%  |                        |                                                                                                                                    |                                                                                                                                                                                                                                     |

**Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, AUGUST, 2024**

| Sl No. | Name of ULB or Name of Processing Unit | Processing unit Under Construction |                                                                           | Uncontrolled Dumpsite |             | Controlled Dumpsite |             | Sanitary Landfill |             | Area of Legacy waste within 1 km buffer of the river | Drains falling into river having floating racks/screen |
|--------|----------------------------------------|------------------------------------|---------------------------------------------------------------------------|-----------------------|-------------|---------------------|-------------|-------------------|-------------|------------------------------------------------------|--------------------------------------------------------|
|        |                                        | Capacity TPD                       | Technology                                                                | No.                   | Area (Acre) | No.                 | Area (Acre) | No.               | Area (Acre) |                                                      |                                                        |
| 1      | Imphal MC and Lamdeng SWM Plant        | Nil                                | Waste to Energy Plant and composting                                      | Nil                   |             | Nil                 | Nil         | 1                 | Nil         | Nil                                                  | Nil                                                    |
| 2      | Lamshang MC                            | 0                                  | Manual segregation and aerobic composting                                 | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 3      | Samurou MC                             | NA                                 | NA                                                                        | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 4      | Thongkhong Laxmi MC                    | NA                                 | NA                                                                        | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 5      | Sekmai MC                              | 0                                  | Manual and machine assisted segregation. Aerobic composting               | Nil                   |             | 0                   | 0           | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 6      | Lilong IW MC                           | 0                                  | Manual Segregation of waste for material recovery<br>Vermicomposting pits | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 7      | Lamlai MC                              | 0                                  | NA                                                                        | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 8      | Thoubal MC                             | 0                                  | Manual Segregation and aerobic composting                                 | Nil                   |             | Nil                 | Nil         | 1                 | 2           | Nil                                                  | Nil                                                    |
| 9      | Yairipok MC                            | 0                                  | Composting/aerobic                                                        | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 10     | Sikhong Sekmai MC                      | 0                                  | Composting/aerobic                                                        | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 11     | Lilong TBL MC                          | 0                                  | Manual Segregation of waste for material                                  | Nil                   |             | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |

| Sl No. | Name of ULB or Name of Processing Unit | Processing unit Under Construction |                                                                  | Uncontrolled Dumpsite |                                                                                          | Controlled Dumpsite |             | Sanitary Landfill |             | Area of Legacy waste within 1 km buffer of the river | Drains falling into river having floating racks/screen |
|--------|----------------------------------------|------------------------------------|------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------|---------------------|-------------|-------------------|-------------|------------------------------------------------------|--------------------------------------------------------|
|        |                                        | Capacity TPD                       | Technology                                                       | No.                   | Area (Acre)                                                                              | No.                 | Area (Acre) | No.               | Area (Acre) |                                                      |                                                        |
|        |                                        |                                    | recovery                                                         |                       |                                                                                          |                     |             |                   |             |                                                      |                                                        |
| 12     | Heirok MC                              | 0                                  | Manual Segregation and composting/aerobic                        | Nil                   |                                                                                          | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 13     | Wangjing Lamding MC                    | 0                                  | Manual Segregation and composting/aerobic                        | Nil                   |                                                                                          | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 14     | Andro MC                               | 0                                  | Manual segregation & aerobic composting                          | Nil                   |                                                                                          | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 15     | Kakching MC                            | 0                                  | Manual segregation                                               | Nil                   |                                                                                          | 1                   | 2           | 1                 | 2.5         | Nil                                                  | Nil                                                    |
| 16     | Kakching Khunou MC                     | 0                                  | NA                                                               | 1                     | 2                                                                                        | 0                   | 0           | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 17     | Sugnu MC                               | 0                                  | NA                                                               | 1                     | 1                                                                                        | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 18     | Mayang Imphal MC                       | 0                                  | Manual segregation of waste & composting construction completed. | Nil                   |                                                                                          | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 19     | Wangoi MC                              | 0                                  | Nil                                                              | Nil                   | 0.03 acre (Khas land and state land used by the SWM as controlled dumpsite but yet to be | Nil                 | Nil         | Nil               | Nil         | Nil                                                  | Nil                                                    |

| Sl No. | Name of ULB or Name of Processing Unit                              | Processing unit Under Construction |                                                                     | Uncontrolled Dumpsite |                        | Controlled Dumpsite |             | Sanitary Landfill |             | Area of Legacy waste within 1 km buffer of the river | Drains falling into river having floating racks/screen |
|--------|---------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------|-----------------------|------------------------|---------------------|-------------|-------------------|-------------|------------------------------------------------------|--------------------------------------------------------|
|        |                                                                     | Capacity TPD                       | Technology                                                          | No.                   | Area (Acre)            | No.                 | Area (Acre) | No.               | Area (Acre) |                                                      |                                                        |
|        |                                                                     |                                    |                                                                     |                       | allotted to Wangoi MC) |                     |             |                   |             |                                                      |                                                        |
| 20     | Kumbi MC                                                            | 0                                  | Composting pit                                                      | 1                     |                        | 1                   | 0.27        | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 21     | Kwakta MC                                                           | 0                                  | Composting unit                                                     | Nil                   |                        | 1                   | 0.016       | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 22     | Moirang MC                                                          | 0                                  | Segregation, composting and recovery of reusable wastes.            | Nil                   |                        | 1                   | 2.5         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 23     | Ningthoukhong MC                                                    | 0                                  | Anaerobic ,Segregation, Composting and recovery of reusable wastes. | Nil                   |                        | 1                   | 1.31        | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 24     | Bishnupur MC, Multi-Segregation shed at Chothe Village, Ward No. 12 | 0                                  | Manual segregation and aerobic composting                           | Nil                   |                        | Nil                 | Nil         | 1                 | 2.5         | Nil                                                  | Nil                                                    |
| 25     | Oinam MC                                                            | 0                                  | Composting (operational)                                            | Nil                   |                        | 1                   | 0.4         | Nil               | Nil         | Nil                                                  | Nil                                                    |
| 26     | Nambol MC                                                           | 0                                  | Manual segregation, Aerobic and vermi-composting                    | Nil                   |                        | 1                   | 3.21        | Nil               | Nil         | Nil                                                  | Nil                                                    |

| SI No. | Name of ULB or Name of Processing Unit | Processing unit Under Construction |                                                                                           | Uncontrolled Dumpsite |             | Controlled Dumpsite |              | Sanitary Landfill |             | Area of Legacy waste within 1 km buffer of the river | Drains falling into river having floating racks/screen |
|--------|----------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|-------------|---------------------|--------------|-------------------|-------------|------------------------------------------------------|--------------------------------------------------------|
|        |                                        | Capacity TPD                       | Technology                                                                                | No.                   | Area (Acre) | No.                 | Area (Acre)  | No.               | Area (Acre) |                                                      |                                                        |
| 27     | Jiribam MC                             | 0                                  | Manual segregation, Pit composting, Windrow composting and MRF, C&D waste processing unit | Nil                   |             | Nil                 | Nil          | 1                 | 1.72        | Nil                                                  | 1                                                      |
|        | <b>Total</b>                           | <b>0</b>                           |                                                                                           |                       |             | <b>7</b>            | <b>9.706</b> | <b>5</b>          | <b>8.72</b> |                                                      | <b>1</b>                                               |

**STATUS OF WATER QUALITY OF POLLUTED RIVERS****Remark :**

Manipur Pollution Control Board has been conducting monthly water quality analysis of the polluted rivers. The monthly water quality data of the polluted rivers will be reported during 1<sup>st</sup> week of the next month i. e. Report for November will get on 1-10<sup>th</sup> 2024. Therefore, Water Quality Report for November will be reproduced in the MPR of 2024.

Water Quality of the Imphal, Iril, Manipur, Thoubal, Wangjing, Khuga, Khujairok, Lokchao, Nambul, Waisel Maril & Moirang Rivers and Effluent of Sewage Treatment Plant, Langol  
for the month of August, 2024

**1. Imphal River**

| Location   | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|------------|-----|-----|-------------|-------------|-------------------------------|
| Koirengei  | 7.3 | 7.4 | 3.2         | 8.4         | 50                            |
| Minutrhong | 7.2 | 7.3 | 3.3         | 10.6        | 70                            |
| Mahabali   | 7.3 | 7.4 | 3.2         | 9.4         | 75                            |

**2. Iril River**

| Location      | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|---------------|-----|-----|-------------|-------------|-------------------------------|
| Kangla Siphai | 7.4 | 7.5 | 3.2         | 13.2        | 55                            |
| Porompat      | 7.5 | 7.5 | 3.2         | 9.2         | 60                            |
| Lilong        | 7.2 | 7.3 | 3.3         | 12.0        | 65                            |

**3. Manipur River**

| Location  | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|-----------|-----|-----|-------------|-------------|-------------------------------|
| Yairipok  | 7.7 | 7.3 | 3.3         | 12.3        | 50                            |
| Sekmaiing | 7.5 | 7.4 | 3.2         | 11.4        | 70                            |
| Ithai     | 7.5 | 7.3 | 3.2         | 14.0        | 75                            |

**4. Thoubal River**

| Location | DO | pH | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|----------|----|----|-------------|-------------|-------------------------------|
| Litan    | NA | NA | NA          | NA          | NA                            |

**5. Wangjing River**

| Location | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|----------|-----|-----|-------------|-------------|-------------------------------|
| Heirolk  | 7.4 | 7.4 | 3.3         | 12.2        | 55                            |
| Wangjing | 7.3 | 7.3 | 3.2         | 10.4        | 60                            |

**6. Khuga River**

| Location            | DO | pH | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|---------------------|----|----|-------------|-------------|-------------------------------|
| Churachandpur Bazar |    |    |             |             |                               |
| Khuga Dam           | NA | NA | NA          | NA          | NA                            |

7. Khujairok River

| Location  | DO | pH | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|-----------|----|----|-------------|-------------|-------------------------------|
| Khujairok | NA | NA | NA          | NA          | NA                            |

8. Lokchao River, Bishnupur

| Location                               | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|----------------------------------------|-----|-----|-------------|-------------|-------------------------------|
| Lokchao Bridge near<br>Bishnupur Bazar | 7.4 | 7.3 | 3.3         | 10.4        | 45                            |

9. Nambul River

| Location       | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|----------------|-----|-----|-------------|-------------|-------------------------------|
| Samushang      | 7.3 | 7.3 | 4.3         | 15.4        | 115                           |
| Naoremthong    | 7.2 | 7.2 | 4.1         | 15.2        | 95                            |
| Hump Bridge    | 7.1 | 7.1 | 4.5         | 16.8        | 190                           |
| Heirangoithong | 7.2 | 7.2 | 4.4         | 16.6        | 200                           |
| Singda Dam     |     |     |             |             |                               |

10. Kongba River

| Location        | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|-----------------|-----|-----|-------------|-------------|-------------------------------|
| Kongba Eranpham | 7.0 | 7.3 | 4.0         | 16.6        | 110                           |
| Kongba Erong    | 6.9 | 7.4 | 4.1         | 11.3        | 115                           |

11. Waisel Maril

| Location                       | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|--------------------------------|-----|-----|-------------|-------------|-------------------------------|
| Meijrao Bridge,<br>Hiyangthang | 6.9 | 7.3 | 4.2         | 13.8        | 135                           |
| Kha Sangenbam<br>Mayai Leikai  | 7.3 | 7.4 | 4.0         | 12.0        | 80                            |

12. Moirang River

| Location                      | DO  | pH  | BOD<br>mg/L | COD<br>mg/L | Fecal Coliform<br>(MPN/100ml) |
|-------------------------------|-----|-----|-------------|-------------|-------------------------------|
| Laikhurembi, Moirang<br>Bazar | 7.4 | 7.4 | 3.5         | 10.6        | 50                            |

13. Sewage Treatment Plant Effluent

| Location |           | Oil & Grease<br>(mg/L) | pH               | TSS<br>mg/L      | BOD<br>mg/L | COD<br>Mg/l | Fecal Coliform<br>(MPN/100ml) |
|----------|-----------|------------------------|------------------|------------------|-------------|-------------|-------------------------------|
| Langol   | Inlet     | 9.0                    | 7.0              | 165.0            | 245.0       | 400.0       | 145.0                         |
|          | Outlet    | 2.7                    | 7.3              | 35.0             | 12.5        | 44.0        | 125.0                         |
|          | Standards |                        | 6.5<br>to<br>9.0 | Less<br>than 100 | 30.0        |             | Less than<br>1000             |

## Annexure – 5

## Action Plan of the model river in Manipur

| Action          | Target Action                                                                                                                                                                                                            | Priority – II : Nambul River         |             |                                                           |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|-----------------------------------------------------------|
|                 |                                                                                                                                                                                                                          | Target Quantity                      | Time Line   | Status                                                    |
| <b>Action 1</b> | <b>Solid Waste Management</b>                                                                                                                                                                                            |                                      |             |                                                           |
| <b>1.1</b>      | Identification of garbage vulnerable point                                                                                                                                                                               | 12 Municipal Wards                   | Oct 2019    | Completed<br><b>Action:</b><br>MAHUD / IMC                |
| <b>1.2</b>      | Door to Door Collection, identify & register of missed out house hold, punitive action against litterer along the river                                                                                                  | 12 Municipal Wards                   | Oct 2019    | Completed<br><b>Action:</b><br>MAHUD / IMC                |
| <b>1.3</b>      | Formation of Tasks Force for proper implementation of waste management                                                                                                                                                   |                                      | Oct 2019    | Constituted                                               |
| <b>1.4</b>      | Providing of household waste bins                                                                                                                                                                                        | 19,863 bins                          | Oct 2020    | 80% completed<br><b>Action:</b><br>Environment & CC       |
| <b>1.5</b>      | High rise fencing of grilling and netting at vulnerable zones of both the river banks to protect throwing of solid wastes into the river                                                                                 | 5 km                                 | Apr 2021    | Completed<br><b>Action:</b><br>Environment & CC           |
| <b>1.6</b>      | Renovation of existing crematoria along the river stretch                                                                                                                                                                | 56 Nos.                              | Apr 2021    | Completed<br><b>Action:</b><br>Environment & CC           |
| <b>1.7</b>      | Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places                                                                          | 37 Nos.                              | Oct 2020    | Completed<br><b>Action:</b><br>Environment & CC           |
| <b>1.8</b>      | Construction of Public toilets at vulnerable points                                                                                                                                                                      | 35 Nos. by IMC<br>20 Nos. under NRCD | Apr 2021    | Completed<br><b>Action:</b><br>Environment & CC           |
| <b>1.9</b>      | IEC / Public Awareness Activities                                                                                                                                                                                        | 14 No. (one each in every ward)      | Every month | Conducted regularly<br><b>Action:</b><br>Environment & CC |
| <b>Action 2</b> | <b>Channelization, treatment, utilization and disposal of treated domestic sewage</b>                                                                                                                                    |                                      |             |                                                           |
| <b>2.1</b>      | Identification of location and estimation of liquid waste generation at Imphal town                                                                                                                                      |                                      | Oct 2019    | Completed<br><b>Action:</b> PHED                          |
| <b>2.2</b>      | <b>Interception and diversion</b> of the urban drains / outfalls to the Nambul River by laying pipes of 14,545 meters at both the banks of River at 12 Municipal Wards viz. 6, 7, 8, 9, 11, 12, 13, 14,15, 16, 24 and 27 |                                      | Apr 2022    | 30% Completed<br><b>Action:</b><br>Environment & CC       |
| <b>2.3</b>      | <b>Treatment option and capacity :</b><br>Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD                                                                                                     |                                      | Apr 2022    | 85% Completed<br><b>Action:</b><br>Environment & CC       |
| <b>2.4</b>      | Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD                                                                                                                                                           |                                      | Dec 2019    | Commissioned<br><b>Action:</b> PHED                       |
| <b>2.5</b>      | Commissioning of the Imphal Sewerage                                                                                                                                                                                     |                                      | Apr 2022    | DPR Submitted,                                            |

| Action          | Target Action                                                                                                                                                                                                     | Priority – II : Nambul River |             |                                                             |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------|-------------------------------------------------------------|
|                 |                                                                                                                                                                                                                   | Target Quantity              | Time Line   | Status                                                      |
|                 | Project Phase-II of 41 MLD                                                                                                                                                                                        |                              |             | waiting for approval of NIT from NDB<br><b>Action:</b> PHED |
| <b>Action 3</b> | <b>Protection of catchment area</b>                                                                                                                                                                               |                              |             |                                                             |
| <b>3.1</b>      | <i>In-situ</i> augmentation of medicinal plants and economic plantation at catchment                                                                                                                              |                              |             | Completed<br><b>Action:</b> Forest                          |
| <b>Action 4</b> | <b>Protection and prevention of Flood Plain Zone</b>                                                                                                                                                              |                              |             |                                                             |
| <b>4.1</b>      | Protection and Improvement of River Bunds.<br>1,500 m for Nambul River<br>16,860 m in Imphal River<br>2,670 m in Kongba River<br>2,403 m in Thoubal River<br>317 m in Wangjing River<br>11,711 m in Manipur River |                              | Before 2021 | Status will be updated soon<br><b>Action:</b> WRD           |
| <b>4.2</b>      | Re-Sectioning of Rivers and Streams.<br>82,091 m in Imphal River.<br>15,480 m in Kongba River<br>89,100 m in Nambul and its tributaries.<br>1,900 m in Chakpi River                                               |                              | Before 2021 | Status will be updated soon<br><b>Action:</b> WRD           |
| <b>4.3</b>      | CC/RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable river banks.                                                                                                       |                              | Before 2021 | Status will be updated soon<br><b>Action:</b> WRD           |

**B. 8 (eight) polluted stretches of Rivers viz. Imphal, Iril, Khuga, Khujaïrok, Lokchao, Manipur, Thoubal, Wangjing under Priority V in Manipur**

| Action          | Target Action                                                                                                         | Target Quantity                                | Timeline             | Status & Actor                                              |
|-----------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------|-------------------------------------------------------------|
| <b>Action 1</b> | <b>Solid Waste Management</b>                                                                                         |                                                |                      |                                                             |
| <b>1.1</b>      | Identification of garbage vulnerable point along the 8 (eight) identified polluted river stretches                    | 59 Municipal Wards                             | 6 months (2024 2019) | Status will be updated soon<br><b>Action :</b> MAHUD / ULBs |
| <b>1.2</b>      | Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach | 59 Municipal Wards<br>33.45 MT                 | 1 year (June 2020)   |                                                             |
| <b>1.3</b>      | Installation of littering bins at suitable places                                                                     | 500 Nos. of Bins                               | 1 year (June 2020)   |                                                             |
| <b>1.4</b>      | Setting up of waste processing site at Cluster Approach                                                               | 5 Cluster Units                                | 2 Year (June 2021)   |                                                             |
| <b>1.5</b>      | Construction of Public toilets at vulnerable points                                                                   | 59 Nos. (one each for every ward for 59 wards) | 2 Year (June 2021)   |                                                             |
| <b>1.6</b>      | IEC / Public Awareness Activities                                                                                     | 177 Nos. (3 times for every 59 Wards)          | Ongoing              |                                                             |
| <b>1.7</b>      | Encouraging of home composting                                                                                        | 10% of total household                         | Ongoing              |                                                             |
| <b>Action 2</b> | <b>Channelization, treatment, utilization and disposal of treated domestic sewage</b>                                 |                                                |                      |                                                             |

|                 |                                                                                                                                                                                                                                      |                                                                                                                                                                                                      |                        |                                                                                                           |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>2.1</b>      | Identification of location and estimation of liquid waste generation                                                                                                                                                                 | Under survey                                                                                                                                                                                         | Ongoing                | Completed<br><b>Action : PHED</b>                                                                         |
| <b>2.2</b>      | Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur                                                                                       | 27.024 + 38.73 = 65.754 MLD                                                                                                                                                                          | 2 Years<br>(June 2021) | DPR submitted to NRCD, Ministry of Jal Shakti, Govt. of India<br><br><b>Action : Environment &amp; CC</b> |
| <b>2.3</b>      | <b>Commissioning of the Imphal Sewerage Project Phase-II:</b><br>Installation of STPs of 3 (three) units SBR (Sequencing Batch Reactors) technology covering all the remaining wards of Imphal Municipal Corporation (Finalized DPR) | 41 MLD                                                                                                                                                                                               | Funding awaited        | DPR submitted, waiting for approval of NIT from NDB<br><br><b>Action : PHED</b>                           |
| <b>Action 3</b> | <b>Protection of catchment Area of 1539 sq. km.</b>                                                                                                                                                                                  |                                                                                                                                                                                                      |                        |                                                                                                           |
| <b>3.1</b>      | <i>In situ</i> augmentation with economic plants                                                                                                                                                                                     | 1539 sq. km.                                                                                                                                                                                         | 2 Years<br>(June 2021) | Status will be updated soon<br><b>Action : Forest</b>                                                     |
| <b>3.2</b>      | Inventorisation and mapping of springs for protection and rejuvenation at catchment                                                                                                                                                  | 8 rivers                                                                                                                                                                                             | 1 Year<br>(June 2020)  | Status will be updated soon<br><b>Action : Environment &amp; CC</b>                                       |
| <b>Action 4</b> | <b>Protection and prevention of Flood Plain Zone</b>                                                                                                                                                                                 |                                                                                                                                                                                                      |                        |                                                                                                           |
| <b>4.1</b>      | Protection and Improvement of River Bunds                                                                                                                                                                                            | 1. 1500 m for Nambul River<br>2. 16860 m in Imphal River and its tributaries<br>3. 2670 m in Kongba River<br>4. 2403 m in Thoubal River<br>5. 317 m in Wangjing River<br>6. 11711 m in Manipur River | Before 2021            | Status will be updated soon<br><b>Action : WRD</b>                                                        |
| <b>4.2</b>      | Re-Sectioning of Rivers and Streams                                                                                                                                                                                                  | 1. 82091 m in Imphal River<br>2. 15480 m in Kongba River<br>3. 89100 m in Nambul and its tributaries<br>4. 1900 m in Chakpi River                                                                    | Before 2021            |                                                                                                           |
| <b>4.3</b>      | CC / RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable river banks                                                                                                                         | Along Nambul, Imphal, Thoubal, Kongba, Iril and other major rivers                                                                                                                                   | Before 2021            |                                                                                                           |

