

**Government of Manipur
Directorate of Environment and Climate Change
Porompat, Imphal – 05**

No. 4/124/2019 (RRC) / DoE&CC

Imphal, the 13th February, 2025

To,
The Executive Director – Technical (NMCG)
National Mission for Clean Ganga
Ministry of Jal Shakti, Govt. of India

Sub. : Submission of Monthly Progress Report(MPR) to the Central Monitoring Committee in the NGT Matter OA No. 673 of 2018;

Sir,

I have the honour to submit herewith the Monthly Progress Report (MPRs) in respect of Manipur State for the month of September, October, November and December, 2024 for kind reference and doing the needful.

With regards,

Encl : As above

Yours Sincerely


13/02/2025
(Dr. T. Brajakumar Singh)
Director

Copy to :

1. Staff Officer to the Chief Secretary, Government of Manipur
2. Principal Secretary (Forest, Environment and Climate Change), Govt. of Manipur
3. Scientist 'B', National River Conservation Division, Ministry of Jal Shakti, Govt. of India

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 20th September 2024

Overall status of the State:

I. Total Population:

	2011 Census	Projected as on 2020
Urban Population	8,34,154	10,47,135
Rural Population	17,36,236	21,79,541
Total	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

Details of under construction STPs in the State

No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
1	Maibam Leikai, Imphal West	16 MLD	100 %	NIL	Operational
2	Iroisemba, Imphal West	1 MLD	100%	NIL	Operational

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 scheduled on 31 st 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 Status : Functional

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 : 195 TPD (Collected by ULBs)
- Existing Management / treatment facility : 211.5 TPD
- Utilization of MSW processing : 142.77 TPD
[Managed by ULBs = 142.77 TPD
Managed at Source = 87.14 TPD
Total Managed = 229.90 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	Waste to Energy (WTE) and Composting	- Intensify the IEC on Door-to-Door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of services from the corporation.
2	Lamshang MC	1	1.23	Aerobic composting	Capacity building in collection management and processing
3	Samurou MC	5	3.56	Segregation shed	Presently collected waste after segregation of recyclable plastic waste and

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				cum transfer station with some composting pits therein.	cardboard is being transferred to Lamdeng Solid Waste Management Plant. • Increase in awareness, Manpower and vehicles. • Allotment of Permanent land for management of solid waste has been proposed to DC. • And setting up of an own solid waste processing facility will help mitigating the gap.
4	Thongkhong Laxmi MC	5	3.45	• Segregation cum transfer station and composting pits.	• In terms of ward wise, area wise Leikai wise coverage of D2D collection, there is 100% coverage of D2D. • More awareness and behavioral change campaign with increase in manpower and SWM vehicles. • Setting up of own Solid Waste Management & Processing Facility.
5	Sekmai MC	1	1.2	• Home Composting is predominant in all wards. • Central Composting at Segregation Shed, Parao. • Dry Waste disposed at Lamdeng SWM Plant.	• Engagement of local clubs/SHGs to achieve 100% segregation in management and processing. • Capacity enhancement in management and processing.
6	Lilong IW MC	1	1	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	3	0.9	• Composting (Home + Centralized) • Source segregation and Centralized segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC /	13	5.3	• Segregation and	• Encouraging source

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
	Thoubal SWM Plant			composting	segregation and home composting • Awareness generation to public. • Compactor machine and Segregation machine are installed.
9	Yairipok MC	1	1.6	• Wet waste get processed at source itself as feed of poultry and piggery farms • Segregated recyclable waste is sent to recycler	• Treatment facility at Thoubal Cluster
10	Sikhong Sekmai MC	6	0.56	• Wet waste gets processed at source itself as feed of poultry and piggery farms • Segregated recyclable waste is sent to recycler	• 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.
11	Lilong Thoubal MC	1	1	• Segregation Shed Composting Unit	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirop MC	1	0.4	• Transfer and Segregation station and Composting	• Treatment facilities at Thoubal Khunou (Cluster B). • Increase in manpower, Awareness drives & Engagement of Recyclers.
13	Wangjing Lamding MC	1	0.81	• Segregation and transfer station	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower, Awareness drives & Engagement of Recyclers
14	Andro MC	1.07	0.83	• Bulk waste is processed or	• Treatment facilities at Thoubal Khunou (Cluster B)

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				consumed at source as poultry and piggery feeds, Aerobic Composting, Segregation and Recyclable waste sent to recycler	• Increase in manpower • Awareness drives & Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	17	6.8	• Composting, Segregation & Recycling	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council
16	Kakching Khunou MC	2.2	1.87	• Composting, Segregation & Recycling	• Intensified IEC on Door-to-Door Waste Collection and Source Segregation. • Mandatory Submission of Payment Receipts of D2D waste collection at the time of availing any form of service from the Council.
17	Sugnu MC	1.2	0.6	• Composting, Segregation & Recycling	• Intensified IEC on door-to-door waste collection and source segregation. • 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.
18	Mayang Imphal MC	8	6	• Composting Pits and segregation Sheds/MRF are operational. • Remaining collected waste sent to treatment plant at Lamdeng Imphal and Segregated	• Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. • Remaining collected waste are sent to treatment plant at Lamdeng. • Segregated recyclable waste sent to recycler • The ULB shall manage to fill up

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	the gap when the prevailing situation of the state is improving.
19	Wangoi MC	1	1.25	0	• In terms of ward wise, area wise, leikai wise coverage of D2D collection. There is 100% D2D collection. • Encouraging home composting and source segregation. • More awareness and behavioral change campaign with increase manpower and SWM vehicles. • Setting up of a solid waste management & processing facility of its own.
20	Kumbi MC	1	1.29	• Composting	• Now 100% D2D Collection • Land available 0.27 acre
21	Kwakta MC	1	0.55	• Composting	• 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	4	2.99	• Composting	• Segregation shed has constructed. • Composting plants also been constructed and it has commissioned. • IEC Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	5.5	1.7	• Composting & sent back for re-cycling	• Vigorous IEC campaign and implementation of stringent rules or bye-laws.
24	Bishnupur MC	5	2.8	• Sanitary Landfill	• Vigorous IEC campaign and implementation of stringent rules or by-laws • By-Laws is published and shall be implemented for closing

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					the gap
25	Oinam MC	1.5	0.9	• Composting	• Encouraging households to source segregate waste and practice home composting of wet waste. • Engaging recyclers for dry waste
26	Nambol MC	2	1.9	• Composting pit • Manual Segregation initiated at the segregation shed	• Increasing recovery of other recyclable materials apart from plastic bottles/waste. • Encouraging source segregation and home composting.
27	Jiribam MC	22.005	2.27	• Composting, send back for recycling, MRF	• Additional 0.1926 ton of waste is generated and collected from relief camps, Jiribam
	Total	211.5	142.77		

• 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 • 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 Table-3			
	• No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills		• 5 (five) sanitary landfill and 7 controlled dumpsites • 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		• 1 at Jiribam MC [floating racks/screens installed]	

solid waste from falling into the rivers	
• Status of ULB wise Management of Solid waste	• At Annexure – Table -1 and Table -2

V. Bio-medical Waste Management September, 2024:

Total Bio-medical generation	:	0.83 TPD	• Deep burial practiced at remote rural areas • DPR submitted to ministry for up-gradation of the existing CBMWTF • Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management
No. of Hospitals and Health Care Facilities	:	534 Nos. [i/c 420 PHSCs]	
Status of Treatment Facility CBMWTF	:	CBMWTF = 1 No. (Capacity-100 Kg/hr.) Captive Facility = 2 Nos. (Capacities-100 Kg/hr. & 105 Kg/hr.) 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	:	The Mines and Mineral (Regulation and Development) Act, 1957 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 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 Manipur Minor Mineral Concession Rules, 2012 and amendments thereon. In order to check illegal mining, to regulate transportation and storage of minor minerals, The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) rules, 2018 has also been notified. In addition, The Manipur Mineral Policy, 2021 is being framed.

XX.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	
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A. Total Status of STPs in Imphal (as on 20th September 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	8225			8225
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 LAMPHEPAT, 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 th Sept.20 24	Gap
Household Connected	4000	250	250	60	10	30	0	50	280	356	8225	1339
Utilization in MLD	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	21.59 MLD	5.41 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	61.31 %	64.24 %	67.96 %	79.98 %	20.02 %
	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	May 2023	June 2023	July 2023	Aug 2023	Sept 2023		
Household Connected	800	50	14	150	20	50	0	0	0	0		
Utilization in MLD	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		
Utilization	76.32	76.85	76.99%	78.41	78.62	79.98	79.98	79.98	79.98	79.98		

in %	%	%		%	%	%	%	%	%	%		
	Oct. 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr. 2024	May 2024	June 2024	July 2024		
Household Connected	0	30	20	300	70	30	30	20	20	8190		
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD		
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %		
	August 2024	Sept 2024										
Household Connected	8210	8225										
Utilization in MLD	21.59 MLD	21.59 MLD										
Utilization in %	79.98 %	79.98 %										

B. In-situ Bio-remediation and others:

	Name of the Polluted River (P-V)	Total Length of the River	Length of Polluted stretches	BOD Range (mg/l)	Population at polluted zone	Status / Proposed for Treatment
1	Imphal	89.24 km	19.98 km	2.9 - 3.1	84,857	- 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 18th September 2021. - Revised DPR with full justification on the comments made by the Ministry will be submitted soon.
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/ Thongjaorok	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 th September, 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 93°54''58'E	2020	Operational	27	21.59 MLD	ASP	Inlet	8.9	7.1	150	395	250	160
										Outlet	2.6	7.3	34	43	12.3	120

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK**Takyel Industrial Estate, Imphal West Districts, Manipur.**

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	M/S Modern Foods	Nambul	T. Sanajaoba Singh	Noodles
2	M/S Hangle Industries	Nambul	H. Nabadeep Singh	Spices & Food Products
3	M/S Pera Fruit Products	Nambul	Kh. Sanayaima Singh	Fruit Processing
4	M/S Khudol	Nambul	K. Siddhanta Sharma	Food Processing
5	M/S Ratana Fruit	Nambul	L. Sarat Singh	Food items
6	M/S Universal Iodises Salt Industries	Nambul	P. Joychandra Singh	Food Items

Nilakuthi Food Park, Imphal East

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	Shree Balaji Flour Mill	Imphal	Mrs. Rangnamei Martha	Flour
2	KMU	Imphal	Wangkheirakpam Gobin Singh	Bakery
3	Thangjam Agro Industries Pvt. Ltd.	Imphal	Thangjam Joykumar Singh	Bakery

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

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed)	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)/Man] x 100	
1	Imphal MC	2,68,243	3,50,050	158	130.0	2	100	90	25.5	115.5	27%	- Intensify the IEC on Door-to-Door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the corporation.
2	Lamshang MC	8,130	9,739	2.92	1.23	0.19	1	1.23	1.5	2.73	6.51%	Capacity building in collection management and processing
3	Samurou MC	16582	18,602	5.58	3.56	0.48	5	3.56	1.54	5.1	8.60%	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness & increase in manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap.
4	Thongkhong Laxmi MC	14,878	18,677	5.6	3.45	0.48	5	3.45	1.67	5.12	8.57%	- In terms of ward wise, area wise leikai wise coverage of D2D collection. - More awareness and behavioral change campaign with increase manpower and SWM vehicles. - Setting up of an own Solid waste

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed)	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)/Man] x 100	
												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. - Capacity enhancement for management and processing.
6	Lilong IW MC	12,427	15,600	4.6	1	0.6	1	1	3	4	13%	- More composting pits, more vehicles and manpower and encouraging source segregation and home composting. - 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	5.8	0.3	13	5.3	11.2	16.5	5%	- Encouraging source segregation and home composting - Awareness generation to public. - 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 to procure machinery/equipment to effectively manage the segregation activities in a scientific way.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed)	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)/Man] x 100	
11	Lilong TBL MC	24,900	31,258	9.37	2.00	0.87	1	1	6.5	7.5	20%	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirol MC	2,974	3,733	1.12	0.47	0	1	0.4	0.65	1.05	6.3%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers.
13	Wangjing Lamding MC	8,055	10,112	3.03	1	0	1	0.81	2.03	2.84	6.3%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
14	Andro MC	8,744	10,977	3.29	0.9	0	1.07	0.83	2.39	3.22	2.13%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
15	Kakching MC	32,138	40,344	12.1	8.63	0.09	17	6.8	3.38	10.18	16%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council.
16	Kakching Khunou MC	11,379	14,284	4.28	2.10	0.63	2.2	1.87	1.55	3.42	20%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed)	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	
												receipts of D2D waste collection at the time of availing any form of service from the council.
17	Sugnu MC	5,132	6,442	1.93	1.1	0.43	1.2	0.6	0.40	1	48%	- Intensified IEC on door-to-door waste collection and source segregation - 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
18	Mayang Imphal MC	24,239	34,428	10.33	6.0	1.02	8	6	3.31	9.31	10%	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - Remaining collected waste are sent to treatment plant at Lamdeng. - Segregated recyclable waste are sent to recycler - The ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	9,106	11,431	3.42	1.45	0	1	1.25	1.98	3.23	5.83%	- In terms of ward wise, area wise, leikai wise coverage of D2D collection, there is 100% coverage of D2D collection. - Encouraging source segregation and home composting. - More awareness and behavioral

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed)	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	
												change campaign with increase in manpower and SWM vehicles. 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 - 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. - 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)	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)/Man] x 100	
25	Oinam MC	7,161	8,989	2.69	1.6	0.0	1.5	0.9	1.1	2	26%	- Encouraging households to source segregate waste and practice home composting of wet waste. - Engaging recyclers for dry waste.
26	Nambol MC	22,512	28,260	8.50	4.3	0	2	1.9	4.2	6.1	28%	- Increasing recovery of other recyclable materials apart from plastic bottles/waste. - Encouraging source segregation and home composting.
27	Jiribam MC	7,343	9,218	2.8532	2.2782	0.00	22.005	####	####	2.2882	0%	Additional 0.1926 ton of waste is generated and collected from relief camps, Jiribam.
Total		6,19,778	7,92,660	290	195	7.66	211.5	####	####	229.90		
PC to the generated wastes					67%	3%	73%	49%	30%	79%	21%	

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, SEPTEMBER, 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%		Waste to Energy plant (WTE) and composting	Intensified awareness on source segregation and home composting.
2	Lamshang MC	9	9	85%	9	75%	0	Aerobic composting	Continue IEC activities to emphasize Segregation at source
3	Samurou MC	11	11	100%	11	70%	0	Segregation cum transfer station with some composting pits therein.	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness. - Increase in Manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap.
4	Thongkhong Laxmi MC	11	11	100%	11	70%	2.5 (Allotment order issued, premium paid, process for issue of Jamabandi going on)	Segregation cum transfer station and composting pits.	- In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D - More awareness and behavioural change campaign required. - Increase of manpower and machinery. - Setting up of solid waste management and processing facility of its own.
5	Sekmai MC	9	9	81%	9	75%	0	- Home Composting is predominant in all wards. - Central Composting at Segregation Shed, Parao. - Dry Waste disposed at Lamdeng SWM Plant.	On-going IEC activities to emphasize segregation at Source.

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 %			
6	Lilong IW MC	9	9	100%	9	80%	0	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	9	9	100%	9	88%	0.88	• Composting (Home +Centralised) • Source segregation and centralised segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach). • Rigorous IEC activities.
8	Thoubal MC	18	18	78%	18	84%	6.7	• Segregation and composting	• Engaging more workers in the composting plant. • Introduction of compactor and segregation machines.
9	Yairipok MC	9	9	100%	9	100%	2.2	• Wet waste gets processed at source itself as feed of poultry and piggery farms • Segregated recyclable waste is sent to recycler	• Treatment facility at Thoubal cluster.
10	Sikhong Sekmai MC	9	9	100%	9	67%	0.62	• Wet waste gets processed at source as feed of poultry and piggery farms. • Segregated recyclable waste is sent to recycler	• 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.
11	Lilong TBL MC	9	9	100%	9	70%	0.313	• Segregation Shed • Composting Unit	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirol MC	9	9	100%	9	100%	2.084	• Transfer and Segregation Station and Composting	• Treatment facility at Thoubal Khunou (Cluster B)
13	Wangjing Lamding MC	9	9	100%	9	100%	1.46	• Segregation and transfer station	• Treatment facility at Thoubal Khunou (Cluster B)

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 %			
14	Andro MC	12	12	100%	12	80%	0.96	• Bulk of wet waste is processed or consumed at source a poultry & piggery feeds • Aerobic Composting • Segregation & Recyclable waste sent to recycler	• Treatment facility at Thoubal Khunou (Cluster B)
15	Kakching MC	12	12	100%	12	95%	2	• Composting, segregation & recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical segregation (to be started shortly) and aerobic composting to mitigate the gap of generation and management.
16	Kakching Khunou MC	9	9	95%	9	85%	2	• Composting, segregation & Recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical Segregation (to be started shortly) and • Aerobic composting to mitigate the gap of generation and management
17	Sugnu MC	9	9	82%	9	70%	1	• Composting, Segregation & Recycling	• Transport of remaining unrecyclable segregated waste to Kakching cluster. • Engagement of recyclers • Intensified awareness on source segregation, manual segregation and composting to mitigate the gap of generation and management.
18	Mayang Imphal MC	13	13	85%	13	85%	1.25	• Composting pits and segregation sheds/MRF are operational. • Remaining collected waste sent to treatment plant at Lamdeng Imphal. • Segregated recyclables sent to recycler.	• Composting Pits and segregation Sheds/MRF are operational. • Remaining collected waste sent to treatment plant at Lamdeng Imphal • Segregated recyclables sent to recycler.

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 %			
19	Wangoi MC	9	9	100%	9	71%	0		• More awareness and behavioural changes campaign. • Increase of manpower. • Allotment of SWM land. • Setting up of a SWM and processing facility of its own.
20	Kumbi MC	9	9	100%	9	80%	0.52	• Composting	
21	Kwakta MC	9	9	100%	9	65%	0.625	• Composting	• 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	12	12	100%	12	85%	5.1	• Composting	• Requested DC to allot land. • Rigorous IEC Campaign to be held for source segregation.
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	• Encouraging households to source segregate waste and practice home composting of wet waste. • Engaging recyclers for dry waste.
26	Nambol MC	18	18	100%	18	88%	3.21	• Composting pit • Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers. • Increasing manpower, vehicles and machinery. • Extensive awareness drive. • Co-opting SHGs and CSOs in SWM.
27	Jiribam MC	10	10	100%	10	85%	6.02	• Composting, Send back for recycling, MRF	• Nil

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 %			
Total		305	305		305		40.632		
In Percentage-Ward coverage				100%		100%			
Average Household coverage				97%		81%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, SEPTEMBER, 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	Samrouh 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 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

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)		
11	Lilong TBL MC	0	Manual Segregation of waste for material recovery	Nil		Nil	Nil	Nil	Nil	Nil	Nil
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 (Khasland and stateland used by the SWM as	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)		
					controlled dumpsite but yet to be 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	0	Manual segregation and aerobic composting	Nil		Nil	Nil	1	2.5	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)		
	Village, Ward No. 12										
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
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
	Total	0				7	9.706	5	8.72		1

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 1st week of the next month i. e. Report for November will get on 1-10th 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 September, 2024

1. Imphal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.4	7.4	3.2	8.6	55
Minutrhong	7.2	7.3	3.3	9.8	75
Mahabali	7.3	7.3	3.3	9.6	80

2. Iril River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.4	7.5	3.2	12.8	55
Porompat	7.4	7.5	3.2	8.8	60
Lilong	7.3	7.3	3.3	11.8	65

3. Manipur River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Yairipok	7.4	7.3	3.2	12.6	55
Sekmaiying	7.5	7.4	3.2	11.2	75
Ithai	7.5	7.4	3.3	11.8	70

4. Thoubal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Litan	NA	NA	NA	NA	NA

5. Wangjing River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Heirok	7.4	7.3	3.3	12.0	60
Wangjing	7.4	7.3	3.2	10.2	65

6. Khuga River

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

7. Khujairok River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Khujairok	NA	NA	NA	NA	NA

8. Lokchao River, Bishnupur

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	7.4	7.4	3.2	10.6	50

9. Nambul River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Samushang	7.1	7.2	4.3	15.2	120
Naoremthong	7.2	7.1	4.2	15.4	95
Hump Bridge	7.0	7.1	4.5	16.6	185
Heirangoithong	7.1	7.1	4.6	16.2	200
Singda Dam					

10. Kongba River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	6.9	7.2	4.2	14.2	130
Kongba Erong	6.8	7.1	4.0	11.8	120

11. Waisel Maril

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	6.8	7.2	4.1	13.4	145
Kha Sangenbam Mayai Leikai	7.2	7.3	4.0	12.2	85

12. Moirang River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	7.4	7.3	3.4	10.4	55

13. Sewage Treatment Plant Effluent

Location		Oil & Grease (mg/L)	pH	TSS mg/L	BOD mg/L	COD Mg/l	Fecal Coliform (MPN/100ml)
Langol	Inlet	8.9	7.1	150.0	250.0	395.0	160.0
	Outlet	2.6	7.3	34.0	12.3	43.0	120.0
	Standards		6.5 to 9.0	Less than 100	30.0		Less than 1000

Annexure – 5

Action Plan of the model river in Manipur

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
Action 1	Solid Waste Management			
1.1	Identification of garbage vulnerable point	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.2	Door to Door Collection, identify & register of missed out house hold, punitive action against litterer along the river	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.3	Formation of Tasks Force for proper implementation of waste management		Oct 2019	Constituted
1.4	Providing of household waste bins	19,863 bins	Oct 2020	80% completed Action: Environment & CC
1.5	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 Action: Environment & CC
1.6	Renovation of existing crematoria along the river stretch	56 Nos.	Apr 2021	Completed Action: Environment & CC
1.7	Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places	37 Nos.	Oct 2020	Completed Action: Environment & CC
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	Completed Action: Environment & CC
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly Action: Environment & CC
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation at Imphal town		Oct 2019	Completed Action: PHED
2.2	Interception and diversion 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 Action: Environment & CC
2.3	Treatment option and capacity : Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	85% Completed Action: Environment & CC
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned Action: PHED
2.5	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 Action: PHED
Action 3	Protection of catchment area			
3.1	<i>In-situ</i> augmentation of medicinal plants and economic plantation at catchment			Completed Action: Forest
Action 4	Protection and prevention of Flood Plain Zone			
4.1	Protection and Improvement of River Bunds. 1,500 m for Nambul River 16,860 m in Imphal River 2,670 m in Kongba River 2,403 m in Thoubal River 317 m in Wangjing River 11,711 m in Manipur River		Before 2021	Status will be updated soon Action: WRD
4.2	Re-Sectioning of Rivers and Streams. 82,091 m in Imphal River. 15,480 m in Kongba River 89,100 m in Nambul and its tributaries. 1,900 m in Chakpi River		Before 2021	Status will be updated soon Action: WRD
4.3	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 Action: WRD

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

Action	Target Action	Target Quantity	Timeline	Status & Actor
Action 1	Solid Waste Management			
1.1	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 Action : MAHUD / ULBs
1.2	Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach	59 Municipal Wards 33.45 MT	1 year (June 2020)	
1.3	Installation of littering bins at suitable places	500 Nos. of Bins	1 year (June 2020)	
1.4	Setting up of waste processing site at Cluster Approach	5 Cluster Units	2 Year (June 2021)	
1.5	Construction of Public toilets at vulnerable points	59 Nos. (one each for every ward for 59 wards)	2 Year (June 2021)	
1.6	IEC / Public Awareness Activities	177 Nos. (3 times for every 59 Wards)	Ongoing	
1.7	Encouraging of home composting	10% of total household	Ongoing	
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation	Under survey	Ongoing	Completed Action : PHED
2.2	Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur	27.024 + 38.73 = 65.754 MLD	2 Years (June 2021)	DPR submitted to NRCDD, Ministry of Jal Shakti, Govt. of India Action : Environment & CC
2.3	Commissioning of the Imphal Sewerage Project Phase-II: 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 Action : PHED
Action 3	Protection of catchment Area of 1539 sq. km.			
3.1	<i>In situ</i> augmentation with economic plants	1539 sq. km.	2 Years (June 2021)	Status will be updated soon Action : Forest
3.2	Inventorisation and mapping of springs for protection and rejuvenation at catchment	8 rivers	1 Year (June 2020)	Status will be updated soon Action : Environment & CC

Action 4 Protection and prevention of Flood Plain Zone				
4.1	Protection and Improvement of River Bunds	1. 1500 m for Nambul River 2. 16860 m in Imphal River and its tributaries 3. 2670 m in Kongba River 4. 2403 m in Thoubal River 5. 317 m in Wangjing River 6. 11711 m in Manipur River	Before 2021	Status will be updated soon Action : WRD
4.2	Re-Sectioning of Rivers and Streams	1. 82091 m in Imphal River 2. 15480 m in Kongba River 3. 89100 m in Nambul and its tributaries 4. 1900 m in Chakpi River	Before 2021	
4.3	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	

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 20th October, 2024

Overall status of the State:

I. Total Population:

	2011 Census	Projected as on 2020
Urban Population	8,34,154	10,47,135
Rural Population	17,36,236	21,79,541
Total	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

Details of under construction STPs in the State

No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
1	Maibam Leikai, Imphal West	16 MLD	100 %	NIL	Operational
2	Iroisemba, Imphal West	1 MLD	100%	NIL	Operational

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". Overall, all 100% of the civil works & installation of machineries completed as per recent report

- 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)	Requested the Member Secretary, Manipur Pollution Control Board vide letter No. A-DTCI-	Nil	1 (one) CETP of 400 Kilo Liter / Day at Nilakuthi Industrial Estate, Imphal

		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		Status : Functional
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Action taken report of the review meeting for compliances of Hon'ble NGT orders

Sl. No.	Agenda	ATR
1.	4(ii) PHED, TC&I and Health Department shall prepare a comprehensive action plan along with Blueprint for achieving zero untreated discharge of wastewater of the State by 5 th August, 2022.	i. The State Government is setting up Effluent Treatment Plant (ETP) inside the three (3) Industrial Estates. At present the MANDICO (Implementing Agency) have started the Civil Work an overall 100% work has been completed. ii. As per report from MD (MANIDCO) the project is at the edge of completion, further trail run of the machinery is under progress and will be handed over to the Directorate by 1st week of December, 2024.
2.	4(iv) The existing CETP of 400 KDL at Nilakuthi Food Park as the proposed amount of Rs. 1.77 Cr, which has already been allocated as additional fund by the State Planning Department for Development Corpus Fund (DCF) under Demand no. 30 BE 2022-23 for construction of drainage system form the industrial units to the CETP, shall referred to Finance Department for consideration and release at the earliest.	Construction of drainage system from the industrial units to the CETP is 100% completed as per report submitted by MANIDCO & is fully functional.

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 : 195 TPD (Collected by ULBs)
- Existing Management / treatment facility : 211.5 TPD
- Utilization of MSW processing : 142.14 TPD
[Managed by ULBs = 142.14 TPD
Managed at Source = 86.90 TPD
Total Managed = 229.04 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	Waste to Energy (WTE) and Composting	- Distribution of Twin Bins to households started. - Awareness campaign in various localities started for D2D collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of services from the corporation.
2	Lamshang MC	1	1.23	Aerobic composting	Capacity building in collection management and processing
3	Samurou MC	5	3.56	Segregation shed cum transfer station	Presently collected waste after segregation of recyclable plastic waste and cardboard is

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				with some composting pits therein.	being transferred to Lamdeng Solid Waste Management Plant. • Increase in awareness, Manpower and vehicles. • Allotment of Permanent land for management of solid waste has been proposed to DC. • And setting up of an own solid waste processing facility will help mitigating the gap. • Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	5	3.45	• Segregation cum transfer station and composting pits.	• In terms of ward wise, area wise Leikai wise coverage of D2D collection, there is 100% coverage of D2D. • More awareness and behavioral change campaign with increase in manpower and SWM vehicles. • Setting up of own Solid Waste Management & Processing Facility.
5	Sekmai MC	1	1.2	• Home Composting is predominant in all wards. • Central Composting at Segregation Shed, Parao. • Dry Waste disposed at Lamdeng SWM Plant.	• Engagement of local clubs/SHGs to achieve 100% segregation in management and processing. • Capacity enhancement in management and processing.
6	Lilong IW MC	1	1	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	3	0.9	• Composting (Home + Centralized) • Source segregation and Centralized segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
8	Thoubal MC / Thoubal SWM Plant	13	5.2	Segregation and composting	- Encouraging source segregation and home composting - Awareness generation to public. - Compactor machine and Segregation machine are installed.
9	Yairipok MC	1	1.6	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	Treatment facility at Thoubal Cluster
10	Sikhong Sekmai MC	6	0.56	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	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.
11	Lilong Thoubal MC	1	1	Segregation Shed Composting Unit	More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirok MC	1	0.4	Transfer and Segregation station and Composting	- Treatment facilities at Thoubal Khunou (Cluster B). - Increase in manpower, Awareness drives & Engagement of Recyclers.
13	Wangjing Lamding MC	1	0.81	Segregation and transfer station	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower, Awareness drives & Engagement of Recyclers

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
14	Andro MC	1.07	0.83	Wet waste is processed or consumed at source as poultry and piggery feeds, Aerobic Composting, Segregation and Recyclable waste sent to recycler	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower - Awareness drives & Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	17	6.5	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council
16	Kakching Khunou MC	2.2	1.85	Composting, Segregation & Recycling	- Intensified IEC on Door-to-Door Waste Collection and Source Segregation. - Mandatory Submission of Payment Receipts of D2D waste collection at the time of availing any form of service from the Council.
17	Sugnu MC	1.2	0.6	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of service from the council. Transport of unrecyclable waste to Kakching Cluster.
18	Mayang Imphal MC	8	6	- Composting Pits and segregation Sheds/MRF are operational. - The remaining collected waste sent to treatment plant at Lamdeng Imphal	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - The remaining waste is sent to the treatment plant at Lamdeng. - Segregated recyclable waste sent to recyclers

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				Segregated recyclable waste sent to recycler	ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	1	1.25	Nil	- In terms of ward wise, area wise, leikai wise coverage of D2D collection. There is 100% D2D collection. - Encouraging home composting and source segregation. - More awareness and behavioral change campaign with increase manpower and SWM vehicles. - Setting up of a solid waste management & processing facility.
20	Kumbi MC	1	1.29	Composting	- Now 80% D2D Collection - Land available 0.52 acre
21	Kwakta MC	1	0.45	Composting	Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster base is completed, the untreated wastes shall be transferred at the cluster head for further processing
22	Moirang MC	4	2.99	Composting	- Segregation shed has constructed. - Composting plants have also been constructed, and it has commissioned. - IEC Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	5.5	1.7	Composting & sent back for re-cycling	Vigorous IEC campaign and implementation of stringent rules or byelaws.
24	Bishnupur MC	5	2.8	Sanitary Landfill	- Vigorous IEC campaign and implementation of stringent rules or by-laws - By-Laws is published and shall be implemented for closing the

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					gap
25	Oinam MC	1.5	0.9	Composting	- Encouraging households to source segregate waste and practice home composting of wet waste. - Engaging recyclers for dry waste
26	Nambol MC	2	1.9	- Composting pit - Manual Segregation initiated at the segregation shed	- Increasing recovery of other recyclable materials apart from plastic bottles/waste. - Encouraging source segregation and home composting.
27	Jiribam MC	22.005	2.17	Composting, send back for recycling, MRF	Additional 0.1926 ton of waste is generated and collected from relief camps, Jiribam
	Total	211.5	142		

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 - 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 Table-3			
	No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills		5 (five) sanitary landfill and 9 controlled dumpsites - 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 Annexure – Table -1 and Table -2	

V. Bio-medical Waste Management October, 2024:

Total Bio-medical generation	:	0.83 TPD	• Deep burial practiced at remote rural areas • DPR submitted to ministry for up-gradation of the existing CBMWTF • Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management
No. of Hospitals and Health Care Facilities	:	534 Nos. [i/c 420 PHSCs]	
Status of Treatment Facility CBMWTF	:	CBMWTF = 1 No. (Capacity-100 Kg/hr.) Captive Facility = 2 Nos. (Capacities-100 Kg/hr. & 105 Kg/hr.) 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	:	The Mines and Mineral (Regulation and Development) Act, 1957 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 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 there under. Similarly, in Manipur, the mining activities belonging to minor minerals are regulated under the Manipur Minor Mineral Concession Rules, 2012 and amendments thereon. In order to check illegal mining, to regulate transportation and storage of minor minerals, The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) rules, 2018 has also been notified. In addition, The Manipur Mineral Policy, 2021 is being framed.
XX.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	

A. Total Status of STPs in Imphal (as on 20th October, 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	8235			8235
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, 44.138 rm secondary lines]
- Total target connection is 9,564 households

INCREMENTAL STATUS OF UTILIZATION FOR 27MLD STP AT LAMPHEPAT, 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 th Oct. 2024	Gap
Household Connected	4000	250	250	60	10	30	0	50	280	356	8235	1329
Utilization in MLD	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	21.59 MLD	5.41 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	61.31 %	64.24 %	67.96 %	79.98 %	20.02 %
	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	May 2023	June 2023	July 2023	Aug 2023	Sept 2023		
Household Connected	800	50	14	150	20	50	0	0	0	0		
Utilization in MLD	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		
Utilization	76.32	76.85	76.99%	78.41	78.62	79.98	79.98	79.98	79.98	79.98		

in %	%	%		%	%	%	%	%	%	%		
	Oct. 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr. 2024	May 2024	June 2024	July 2024		
Household Connected	0	30	20	300	70	30	30	20	20	8190		
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD		
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %		
	August 2024	Sept 2024	Oct 2024									
Household Connected	8210	8225	8235									
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD									
Utilization in %	79.98 %	79.98 %	79.98 %									

B. In-situ Bio-remediation and others:

	Name of the Polluted River (P-V)	Total Length of the River	Length of Polluted stretches	BOD Range (mg/l)	Population at polluted zone	Status / Proposed for Treatment
1	Imphal	89.24 km	19.98 km	2.9 - 3.1	84,857	- Revised DPR for Imphal River along with Faecal 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 18th September 2021. - Revised DPR with full justification on the comments made by the Ministry will be submitted soon.
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 th October, 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 93°54''58'E	2020	Operational	27	21.59 MLD	ASP	Inlet	8.7	7.0	140	390	35.2	155
										Outlet	2.5	7.3	33	41	12.4	125

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK**Takyel Industrial Estate, Imphal West Districts, Manipur.**

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	M/S Modern Foods	Nambul	T. Sanajaoba Singh	Noodles
2	M/S Hangle Industries	Nambul	H. Nabadeep Singh	Spices & Food Products
3	M/S Pera Fruit Products	Nambul	Kh. Sanayaima Singh	Fruit Processing
4	M/S Khudol	Nambul	K. Siddhanta Sharma	Food Processing
5	M/S Ratana Fruit	Nambul	L. Sarat Singh	Food items
6	M/S Universal Iodises Salt Industries	Nambul	P. Joychandra Singh	Food Items

Nilakuthi Food Park, Imphal East

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	Shree Balaji Flour Mill	Imphal	Mrs. Rangnamei Martha	Flour
2	KMU	Imphal	Wangkheirakpam Gobin Singh	Bakery
3	Thangjam Agro Industries Pvt. Ltd.	Imphal	Thangjam Joykumar Singh	Bakery

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

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
1	Imphal MC	2,68,243	3,50,050	158	130.0	2	100	90	25.5	115.5	42	27%	• Distribution of Twin bins to household started. • Awareness campaign in various localities started for D2D collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the corporation.
2	Lamshang MC	8,130	9,739	2.92	1.23	0.19	1	1.23	1.5	2.73	0	6.51%	• Capacity building in collection management and processing
3	Samurou MC	16582	18,602	5.58	3.56	0.48	5	3.56	1.54	5.1	0	8.60%	• Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. • Increase in awareness & increase in manpower and vehicles. • Allotment of Permanent land for management of solid waste has been

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
													proposed to DC. • And setting up of an own solid waste processing facility will help mitigating the gap. • Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	14,878	18,677	5.6	3.45	0.48	5	3.45	1.67	5.12	0	8.57%	• In terms of ward wise, area wise leikai wise coverage of D2D collection. • More awareness and behavioral change campaign with increase manpower and SWM vehicles. • Setting up of an own Solid waste management & Processing facility.
5	Sekmai MC	5,065	6,358	1.9	1.2	0.2	1	1.2	0.5	1.7	0	11%	• Engagement of local clubs/SHGs to achieve 100% segregation at source. • Capacity enhancement for management and processing.
6	Lilong IW MC	12,427	15,600	4.6	1	0.6	1	1	3	4	1	13%	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
7	Lamlai MC	4,601	5,776	1.73	1	0	3	0.9	0.73	1.63	0	6%	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach).
8	Thoubal MC	45,947	57,678	17.30	6.1	0.3	13	5.2	10.9	16.1	1	7%	• Encouraging source segregation and home composting • Awareness generation to public. • Compactor machine Segregation machine is installed
9	Yairipok MC	9,569	12,012	3.6	1.6	0	1	1.6	2	3.6	0	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	0%	• The ULB shall try to create more facilities to augment the existing installed capacity of the SWM facility and try 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	2	20%	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen- Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
12	Heirol MC	2,974	3,733	1.12	0.47	0	1	0.4	0.65	1.05	0	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers.
13	Wangjing Lamding MC	8,055	10,112	3.03	1	0	1	0.81	2.03	2.84	0	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
14	Andro MC	8,744	10,977	3.29	0.9	0	1.07	0.83	2.39	3.22	0	2.13%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
15	Kakching MC	32,138	40,344	12.1	8.58	0.14	17	6.5	3.38	9.88	2	18%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the council.
16	Kakching Khunou MC	11,379	14,284	4.28	2.00	0.76	2.2	1.85	1.52	3.37	1	21%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
													payment receipts of D2D waste collection at the time of availing any form of service from the council.
17	Sugnu MC	5,132	6,442	1.93	1.1	0.43	1.2	0.6	0.40	1	1	48%	- Intensified IEC on door-to-door waste collection and source segregation - 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
18	Mayang Imphal MC	24,239	34,428	10.33	6.0	1.02	8	6	3.31	9.31	1	10%	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - Remaining collected waste are sent to treatment plant at Lamdeng. - Segregated recyclable waste are sent to recycler - The ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	9,106	11,431	3.42	1.45	0	1	1.25	1.98	3.23	0	5.83%	In terms of ward wise, area

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
													wise, leikai wise coverage of D2D collection, there is 100% coverage of D2D collection. - Encouraging source segregation and home composting. - More awareness and behavioral change campaign with increase in manpower and SWM vehicles. - Setting up of solid waste management and processing facility.
20	Kumbi MC	9,546	11,983	3.59	2	0.08	1	1.29	1.51	2.8	1	22%	- Now 80% D2D collection - Land available 0.52 acre
21	Kwakta MC	8,579	10,769	3.23	1.13	0	1	0.45	2.10	2.55	1	21.05%	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	3	33%	Segregation shed has constructed. Composting plans also been constructed.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen- Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
													It has commissioned. • Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	13,078	16,417	4.9	2.2	0.22	5.5	1.7	2.5	4.2	1	15%	• Vigorous IEC campaign and implementation of stringent rules or bye laws.
24	Bishnupur MC	12,167	15,274	4.58	3.48	0	5	2.8	1.1	3.9	1	14.8%	• Vigorous IEC campaign and implementation of stringent rules or byelaws, Bye-Laws is published and shall be implemented for closing the gap.
25	Oinam MC	7,161	8,989	2.69	1.6	0.0	1.5	0.9	1.1	2	1	26%	• Encouraging households to source segregate waste and practice home composting of wet waste. • Engaging recyclers for dry waste.
26	Nambol MC	22,512	28,260	8.50	4.3	0	2	1.9	4.2	6.1	2	28%	• Increasing recovery of other recyclable materials apart from plastic bottles/waste. • Encouraging source segregation and home composting.
27	Jiribam MC	7,343	9,218	2.84	2.17	0	22	2.17	0.67	2.84	0	0%	• An additional 0.082 ton of waste is generated and collected from relief camps,

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	Managed/Treated (in TPD)						
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	Processed at source	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	Plan to mitigate the gap between generation of wastes vs collection, managed / treated and Remarks
													Jiribam.
Total		6,19,778	7,92,660	290	195	7.84	211.5	142.14	86.90	229.04	61		
PC to the generated wastes					67%	3%	73%	49%	30%	79%		21%	

Note : *1. Taking r=2.3 as annual Population growth rate [Ref.: MoUD, Gol] *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, OCTOBER, 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	10%		Waste to Energy plant (WTE) and composting	70,000 twin bins had been purchased and started distribution in collaboration with the Imphal smart City Limited, NGOs and IMC. - Intensive Awareness on source segregation and home composting. [source segregation is very less but the waste is further segregated at collection point for resale by the NGOs/workers and the waste is further segregated at Lamdeng for composting and bricket]
2	Lamshang MC	9	9	65%	9	70%	0	Aerobic composting	Continue IEC activities to emphasize Segregation at source
3	Samurou MC	11	11	100%	11	70%	0	Segregation cum transfer station with some composting pits therein.	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness. - Increase in Manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap.
4	Thongkhong Laxmi MC	11	11	100%	11	70%	2.5 (Allotment order issued, premium paid, process for issue of	Segregation cum transfer station and composting pits.	- In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D - More awareness and behavioural change campaign required. - Increase of manpower and machinery. - Setting up of solid waste management and

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 %			
							Jamabandi going on)		processing facility of its own.
5	Sekmai MC	9	9	81%	9	75%	0	• Home Composting is predominant in all wards. • Central Composting at Segregation Shed, Parao. • Dry Waste disposed at Lamdeng SWM Plant.	• On-going IEC activities to emphasize segregation at Source.
6	Lilong IW MC	9	9	100%	9	80%	0	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	9	9	100%	9	78%	0.88	• Composting (Home +Centralised) • Source segregation and centralised segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach). • Rigorous IEC activities.
8	Thoubal MC	18	18	76%	18	82%	6.7	• Segregation and composting	• Engaging more workers in the composting plant. • Introduction of compactor and segregation machines.
9	Yairipok MC	9	9	100%	9	100%	2.2	• Wet waste gets processed at source itself as feed of poultry and piggery farms • Segregated recyclable waste is sent to recycler	• Treatment facility at Thoubal cluster.
10	Sikhong Sekmai MC	9	9	100%	9	67%	0.62	• Wet waste gets processed at source as feed of poultry and piggery farms. • Segregated recyclable waste is sent to recycler	• 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.

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 %			
11	Lilong TBL MC	9	9	100%	9	70%	0.313	• Segregation Shed • Composting Unit	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirok MC	9	9	100%	9	100%	2.084	• Transfer and Segregation Station and Composting	• Treatment facility at Thoubal Khunou (Cluster B)
13	Wangjing Lamding MC	9	9	100%	9	100%	1.46	• Segregation and transfer station	• Treatment facility at Thoubal Khunou (Cluster B)
14	Andro MC	12	12	85%	12	80%	0.96	• Bulk of wet waste is processed or consumed at source a poultry & piggery feeds • Aerobic Composting • Segregation & Recyclable waste sent to recycler	• Treatment facility at Thoubal Khunou (Cluster B)
15	Kakching MC	12	12	100%	12	95%	2	• Composting, segregation & recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical segregation (to be started shortly) and aerobic composting to mitigate the gap of generation and management.
16	Kakching Khunou MC	9	9	93%	9	81%	2	• Composting, segregation & Recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical Segregation (to be started shortly) and • Aerobic composting to mitigate the gap of generation and management
17	Sugnu MC	9	9	80%	9	70%	1	• Composting, Segregation & Recycling	• Transport of remaining unrecyclable segregated waste to Kakching cluster. • Engagement of recyclers • Intensified awareness on source segregation, manual segregation and composting to mitigate the gap of generation and management.

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	- Composting pits and segregation sheds/MRF are operational. - Remaining collected waste sent to treatment plant at Lamdeng Imphal. - Segregated recyclables sent to recycler.	- Composting Pits and segregation Sheds/MRF are operational. - ULB shall manage to fill up the gap when the prevailing situation of the state is improving. - Remaining collected waste sent to treatment plant at Lamdeng Imphal - Segregated recyclables sent to recycler.
19	Wangoi MC	9	9	100%	9	71%	0	Nil	- More awareness and behavioural changes campaign. - Increase of manpower. - Allotment of SWM land. - Setting up of a SWM and processing facility of its own.
20	Kumbi MC	9	9	100%	9	80%	0.52	Composting	
21	Kwakta MC	9	9	100%	9	65%	0.625	Composting	- 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	12	12	100%	12	85%	5.1	Composting	- Requested DC to allot land. - Rigorous IEC Campaign to be held for source segregation.
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	- Encouraging households to source segregate waste and practice home composting of wet waste. - Engaging recyclers for dry waste.

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	• Composting pit • Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers. • Increasing manpower, vehicles and machinery. • Extensive awareness drive. • Co-opting SHGs and CSOs in SWM.
27	Jiribam MC	10	10	100%	10	85%	6.02	• Composting, Send back for recycling, MRF	• Nil
Total		305	305		305		43.132		
In Percentage-Ward coverage				100%		100%			
Average Household coverage				95%		78%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, OCTOBER, 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	Home composting and manual segregation of waste, dry waste. Dry waste sent to Lamdeng solid waste management plant.	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 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

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)		
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 recovery	Nil		Nil	Nil	Nil	Nil	Nil	Nil
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	Nil		1	2	Nil	Nil	Nil	Nil
17	Sugnu MC	0	NA	Nil		1	1	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 /state land	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)		
					at Hao Salaam used for segregation shed but yet to be allotted to Wangoi MC. Allotment request sent to DC.						
20	Kumbi MC	0	Composting pit	Nil		1	0.52	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

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)		
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
27	Jiribam MC	0	Manual segregation, Pit composting, Windrow composting and MRF, C&D waste processing unit	Nil				1	1.72	Nil	1
	Total	0				9	12.956	5	8.72		1

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 the 1st week of the next month i. e. Report for October will get on 1-10th 2024. Therefore, Water Quality Report for October will be reproduced in the MPR of November 2024.

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

1. Imphal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.5	7.4	3.2	7.8	60
Minutrhong	7.3	7.3	3.3	8.8	70
Mahabali	7.4	7.4	3.2	8.6	75

2. Iril River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.5	7.5	3.1	11.8	50
Porompat	7.5	7.5	3.1	8.6	60
Lilong	7.4	7.4	3.2	11.2	65

3. Manipur River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Yairipok	7.4	7.3	3.2	10.8	60
Sekmaijing	7.4	7.3	3.3	10.6	70
Ithai	7.4	7.4	3.2	9.8	75

4. Thoubal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Litan	NA	NA	NA	NA	NA

5. Wangjing River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Heirok	7.4	7.3	3.3	10.6	60
Wangjing	7.3	7.3	3.2	10.4	70

6. Khuga River

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

7. Khujairok River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Khujairok	NA	NA	NA	NA	NA

8. Lokchao River, Bishnupur

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	7.5	7.4	3.2	9.8	50

9. Nambul River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Samushang	7.0	7.2	4.2	14.8	130
Naoremthong	6.9	7.1	4.1	15.2	100
Hump Bridge	6.8	7.0	4.4	16.2	190
Heirangoithong	6.9	7.1	4.5	15.8	210
Singda Dam					

10. Kongba River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	6.7	7.2	4.1	14.3	120
Kongba Erong	6.4	7.1	4.0	9.8	130

11. Waisel Maril

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	6.6	7.3	4.2	12.8	150
Kha Sangenbam Mayai Leikai	7.1	7.3	4.0	12.0	80

12. Moirang River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	7.3	7.2	3.3	9.8	50

13. Sewage Treatment Plant Effluent

Location		Oil & Grease (mg/L)	pH	TSS mg/L	BOD mg/L	COD Mg/l	Fecal Coliform (MPN/100ml)
Langol	Inlet	2.5	7.3	3.3	12.4	41	125
	Outlet	8.7	7.0	140	35.2	390	155
	Standards		6.5 to 9.0	Less than 100	30.0		Less than 1000

Annexure – 5

Action Plan of the model river in Manipur

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
Action 1	Solid Waste Management			
1.1	Identification of garbage vulnerable point	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.2	Door to Door Collection, identify & register of missed out house hold, punitive action against litterer along the river	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.3	Formation of Tasks Force for proper implementation of waste management		Oct 2019	Constituted
1.4	Providing of household waste bins	19,863 bins	Oct 2020	80% completed Action: Environment & CC
1.5	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 Action: Environment & CC
1.6	Renovation of existing crematoria along the river stretch	56 Nos.	Apr 2021	Completed Action: Environment & CC
1.7	Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places	37 Nos.	Oct 2020	Completed Action: Environment & CC
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	Completed Action: Environment & CC
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly Action: Environment & CC
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation at Imphal town		Oct 2019	Completed Action: PHED
2.2	Interception and diversion 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 Action: Environment & CC
2.3	Treatment option and capacity : Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	85% Completed Action: Environment & CC
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned Action: PHED
2.5	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 Action: PHED
Action 3	Protection of catchment area			
3.1	<i>In-situ</i> augmentation of medicinal plants and economic plantation at catchment			Completed Action: Forest
Action 4	Protection and prevention of Flood Plain Zone			
4.1	Protection and Improvement of River Bunds. 1,500 m for Nambul River 16,860 m in Imphal River 2,670 m in Kongba River 2,403 m in Thoubal River 317 m in Wangjing River 11,711 m in Manipur River		Before 2021	Status will be updated soon Action: WRD
4.2	Re-Sectioning of Rivers and Streams. 82,091 m in Imphal River. 15,480 m in Kongba River 89,100 m in Nambul and its tributaries. 1,900 m in Chakpi River		Before 2021	Status will be updated soon Action: WRD
4.3	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 Action: WRD

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

Action	Target Action	Target Quantity	Timeline	Status & Actor
Action 1	Solid Waste Management			
1.1	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 Action : MAHUD / ULBs
1.2	Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach	59 Municipal Wards 33.45 MT	1 year (June 2020)	
1.3	Installation of littering bins at suitable places	500 Nos. of Bins	1 year (June 2020)	
1.4	Setting up of waste processing site at Cluster Approach	5 Cluster Units	2 Year (June 2021)	
1.5	Construction of Public toilets at vulnerable points	59 Nos. (one each for every ward for 59 wards)	2 Year (June 2021)	
1.6	IEC / Public Awareness Activities	177 Nos. (3 times for every 59 Wards)	Ongoing	
1.7	Encouraging of home composting	10% of total household	Ongoing	
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation	Under survey	Ongoing	Completed Action : PHED
2.2	Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur	27.024 + 38.73 = 65.754 MLD	2 Years (June 2021)	DPR submitted to NRCDD, Ministry of Jal Shakti, Govt. of India Action : Environment & CC
2.3	Commissioning of the Imphal Sewerage Project Phase-II: 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 Action : PHED
Action 3	Protection of catchment Area of 1539 sq. km.			
3.1	<i>In situ</i> augmentation with economic plants	1539 sq. km.	2 Years (June 2021)	Status will be updated soon Action : Forest
3.2	Inventorisation and mapping of springs for protection and rejuvenation at catchment	8 rivers	1 Year (June 2020)	Status will be updated soon Action : Environment & CC

Action 4 Protection and prevention of Flood Plain Zone				
4.1	Protection and Improvement of River Bunds	1. 1500 m for Nambul River 2. 16860 m in Imphal River and its tributaries 3. 2670 m in Kongba River 4. 2403 m in Thoubal River 5. 317 m in Wangjing River 6. 11711 m in Manipur River	Before 2021	Status will be updated soon Action : WRD
4.2	Re-Sectioning of Rivers and Streams	1. 82091 m in Imphal River 2. 15480 m in Kongba River 3. 89100 m in Nambul and its tributaries 4. 1900 m in Chakpi River	Before 2021	
4.3	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	

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 20th November 2024

Overall status of the State:

I. Total Population:

	2011 Census	Projected as on 2020
Urban Population	8,34,154	10,47,135
Rural Population	17,36,236	21,79,541
Total	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

Details of under construction STPs in the State

No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
1	Maibam Leikai, Imphal West	16 MLD	100 %	NIL	Operational
2	Iroisemba, Imphal West	1 MLD	100%	NIL	Operational

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 construction of 3(three) ETPs at Takyelpat, Tera Urak & Kuraopokpi Industrial Estates of Manipur under PM Gatishakti schemes has been completed and trial run of the same has been done.

- 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)	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	Nil	1 (one) CETP of 400 Kilo Liter / Day at Nilakuthi Industrial Estate, Imphal Status: Functional

		generated (in TPD) inside the 3 (three) Industrial Estates of Manipur		
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Action taken report of the review meeting for compliances of Hon'ble NGT orders

Sl. No.	Agenda	ATR
1.	4(ii) PHED, TC&I and Health Department shall prepare a comprehensive action plan along with Blueprint for achieving zero untreated discharge of wastewater of the State by 5 th August, 2022.	i. The State Government is setting up Effluent Treatment Plant (ETP) inside the three (3) Industrial Estates. At present the MANDICO (Implementing Agency) have completed the work
2.	4(iv) The existing CETP of 400 KDL at Nilakuthi Food Park as the proposed amount of Rs. 1.77 Cr, which has already been allocated as additional fund by the State Planning Department for Development Corpus Fund (DCF) under Demand no. 30 BE 2022-23 for construction of drainage system form the industrial units to the CETP, shall referred to Finance Department for consideration and release at the earliest.	Construction of drainage system from the industrial units to the CETP is 100% completed as per the report submitted by MANIDCO & is fully functional.

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 : 144 TPD

[Managed by ULBs = 144 TPD

Managed at Source = 85.91 TPD

Total Managed = 229.45 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	Waste to Energy (WTE) and Composting	- Distribution of Twin Bins to households started. - Awareness campaign in various localities started for D2D collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of services from the corporation.
2	Lamshang MC	1	1.2	- Manual and machine assisted segregation - Aerobic composting	- Capacity building to achieve 100% collection - IEC campaigns - Tie ups with local clubs to reduce, recycle and reuse household waste
3	Samurou MC	5	3.56	Segregation shed cum transfer station with some composting pits therein.	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness, Manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap. - Suitable stateland not available within the jurisdiction.
4	Thongkhong	5	3.45	Segregation cum	In terms of ward wise, area wise Leikai wise coverage of

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
	Laxmi MC			transfer station and composting pits.	D2D collection, there is 100% coverage of D2D. • More awareness and behavioral change campaign with increase in manpower and SWM vehicles. • Setting up of own Solid Waste Management & Processing Facility.
5	Sekmai MC	1	1.2	• Home Composting is predominant in all wards. • Central Composting at Segregation Shed, Parao. • Mixed/Dry Waste disposed at Lamdeng SWM Plant.	• Engagement of local clubs/SHGs to achieve 100% segregation in management and processing. • Capacity enhancement in management and processing.
6	Lilong IW MC	1	1	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	3	0.9	• Composting (Home + Centralized) • Source segregation and Centralized segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC / Thoubal SWM Plant	13	6.5	• Segregation and composting	• Encouraging source segregation and home composting • Awareness generation to public. • Compactor machine and Segregation machine are installed.
9	Yairipok MC	1	1.6	• Wet waste gets processed at source itself as feed of poultry and piggery farms • Segregated	• Treatment facility at Thoubal Cluster

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 is sent to recycler	
10	Sikhong Sekmai MC	6	0.56	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	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.
11	Lilong Thoubal MC	1	1	Segregation Shed Composting Unit	More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirol MC	1	0.4	Transfer and Segregation station and Composting	- Treatment facilities at Thoubal Khunou (Cluster B). - Increase in manpower, Awareness drives & Engagement of Recyclers.
13	Wangjing Lamding MC	1	0.81	Segregation and transfer station	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower, Awareness drives & Engagement of Recyclers
14	Andro MC	1.07	0.83	- Wet waste is processed or consumed at source as poultry and piggery feeds - Aerobic Composting - Segregation and Recyclable waste sent to recycler	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower - Awareness drives & Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	17	6.5	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					availing any form of service from the council
16	Kakching Khunou MC	2.2	1.85	Composting, Segregation & Recycling	- Intensified IEC on Door-to-Door Waste Collection and Source Segregation. - Mandatory Submission of Payment Receipts of D2D waste collection at the time of availing any form of service from the Council.
17	Sugnu MC	1.2	0.6	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of service from the council. Transport of unrecyclable waste to Kakching Cluster.
18	Mayang Imphal MC	8	6	- Composting Pits and segregation Sheds/MRF are operational. - The remaining collected waste sent to treatment plant at Lamdeng Imphal - Segregated recyclable waste sent to recycler	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - The remaining waste is sent to the treatment plant at Lamdeng. - Segregated recyclable waste sent to recyclers - ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	1	1.25	Nil	- In terms of ward wise, area wise, leikai wise coverage of D2D collection. There is 100% D2D collection. - Encouraging home composting and source segregation. - More awareness and behavioral change campaign with increase manpower. - Setting up of a solid waste

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					management & processing facility.
20	Kumbi MC	1	1.29	Composting	- Now 80% D2D Collection - Land available 0.52 acre
21	Kwakta MC	1	0.45	Composting	Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster base is completed, the untreated waste shall be transferred to the cluster head for further processing
22	Moirang MC	4	2.99	Composting	- Segregation shed has constructed. - Composting plants have also been constructed, and it has commissioned. - IEC Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	5.5	1.7	Composting & sent back for re-cycling	Vigorous IEC campaign and implementation of stringent rules or byelaws.
24	Bishnupur MC	5	2.8	Sanitary Landfill	- Vigorous IEC campaign and implementation of stringent rules or by-laws - By-Laws are published and shall be implemented for closing the gap
25	Oinam MC	1.5	0.9	Composting	- Encouraging households to source segregated waste and practice home composting of wet waste. - Engaging recyclers for dry waste
26	Nambol MC	2	1.9	- Composting pit - Manual Segregation initiated at the segregation shed	- Increasing recovery of other recyclable materials apart from plastic bottles/waste. - Encouraging source segregation and home composting.
27	Jiribam MC	22.005	2.3	Composting, send back for recycling,	NIL

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				MRF	
	Total	211.5	144		

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 - 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 Table-3			
	No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills		5 (five) sanitary landfill and 9 controlled dumpsites - Annexure-Table 3	
	No. and area (in acres) of legacy waste within 1km buffer of both sides 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 Annexure – Table -1 and Table -2	

V. Bio-medical Waste Management November 2024:

Total Bio-medical generation	:	0.98 TPD	- Deep burial practiced at remote rural areas - DPR submitted to ministry for up-gradation of the existing CBMWTF - Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management
No. of Hospitals and Health Care Facilities	:	534 Nos. [i/c 420 PHSCs]	
Status of Treatment Facility CBMWTF	:	CBMWTF = 1 No. (Capacity-100 Kg/hr.) Captive Facility = 2 Nos. (Capacities-100 Kg/hr. & 105 Kg/hr.) Deep Burial = 391 Nos.	
Status of Treatment Facility ETPs	:	98 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	:	The Mines and Mineral (Regulation and Development) Act, 1957 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 and Mineral (Regulation and Development) Act and Rules framed 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 there under. Similarly, in Manipur, the mining activities belonging to minor minerals are regulated under the Manipur Minor Mineral Concession Rules, 2012 and amendments thereon. In order to check illegal mining, to regulate transportation and storage of minor minerals, The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) rules, 2018 has also been notified. In addition, The Manipur Mineral Policy 2021 is being framed.
XX. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	

A. Total Status of STPs in Imphal (as on 20th November, 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	8250			8250
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, 44.138 rm secondary lines]
- Total target connection is 9,564 households

INCREMENTAL STATUS OF UTILIZATION FOR 27MLD STP AT LAMPHELPAT, 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 th Nov. 2024	Gap
Household Connected	4000	250	250	60	10	30	0	50	280	356	8250	1314
Utilization in MLD	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	21.59 MLD	5.41 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	61.31 %	64.24 %	67.96 %	79.98 %	20.02 %
	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	May 2023	June 2023	July 2023	Aug 2023	Sept 2023		
Household Connected	800	50	14	150	20	50	0	0	0	0		
Utilization in MLD	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		
Utilization	76.32	76.85	76.99%	78.41	78.62	79.98	79.98	79.98	79.98	79.98		

in %	%	%		%	%	%	%	%	%	%		
	Oct. 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr. 2024	May 2024	June 2024	July 2024		
Household Connected	0	30	20	300	70	30	30	20	20	8190		
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD		
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %		
	August 2024	Sept 2024	Oct 2024	Nov 2024								
Household Connected	8210	8225	8235	8250								
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD								
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %								

B. In-situ Bio-remediation and others:

	Name of the Polluted River (P-V)	Total Length of the River	Length of Polluted stretches	BOD Range (mg/l)	Population at polluted zone	Status / Proposed for Treatment
1	Imphal	89.24 km	19.98 km	2.9 - 3.1	84,857	- Revised DPR for Imphal River along with Faecal 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 18th September 2021. - Revised DPR with full justification on the comments made by the Ministry will be submitted soon.
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/ Thongjaorok	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 th November, 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 93°54''58'E	2020	Operational	27	21.59 MLD	ASP	Inlet	8.6	7.1	130	380	34.8	150
										Outlet	2.4	7.3	30	40	11.8	130

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK**Takyel Industrial Estate, Imphal West Districts, Manipur.**

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	M/S Modern Foods	Nambul	T. Sanajaoba Singh	Noodles
2	M/S Hangle Industries	Nambul	H. Nabadeep Singh	Spices & Food Products
3	M/S Pera Fruit Products	Nambul	Kh. Sanayaima Singh	Fruit Processing
4	M/S Khudol	Nambul	K. Siddhanta Sharma	Food Processing
5	M/S Ratana Fruit	Nambul	L. Sarat Singh	Food items
6	M/S Universal Iodises Salt Industries	Nambul	P. Joychandra Singh	Food Items

Nilakuthi Food Park, Imphal East

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	Shree Balaji Flour Mill	Imphal	Mrs. Rangnamei Martha	Flour
2	KMU	Imphal	Wangkheirakpam Gobin Singh	Bakery
3	Thangjam Agro Industries Pvt. Ltd.	Imphal	Thangjam Joykumar Singh	Bakery

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

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP 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	42	27%	• Distribution of Twin bins to household started. • Awareness campaign in various localities started for D2D collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the corporation.
2	Lamshang MC	8,130	9,739	2.92	1.2	0.22	1	1.2	1.5	2.7	0.22	7.53%	• Capacity building to achieve 100% collection • IEC campaign to encourage home composting • Tie ups with local clubs to reduce, recycle and reuse household waste.
3	Samurou MC	16582	18,602	5.58	3.56	0.48	5	3.56	1.54	5.1	0.48	8.60%	• Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. • Increase in awareness &

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													increase in manpower and vehicles. • Allotment of Permanent land for management of solid waste has been proposed to DC. • And setting up of an own solid waste processing facility will help mitigating the gap. • Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	14,878	18,677	5.6	3.45	0.48	5	3.45	1.67	5.12	0.48	8.57%	• In terms of ward wise, area wise leikai wise coverage of D2D collection. • More awareness and behavioral change campaign with increase manpower and SWM vehicles. • Setting up of an own Solid waste management & Processing facility.
5	Sekmai MC	5,065	6,358	1.9	1.2	0.2	1	1.2	0.5	1.7	0.20	11%	• Engagement of local clubs/SHGs to achieve 100% segregation at source. • Capacity enhancement for management and processing.
6	Lilong IW MC	12,427	15,600	4.6	1	0.6	1	1	3	4	0.60	13%	• More composting pits, more

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													vehicles and manpower and encouraging source segregation and home composting. • 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	0	6%	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach).
8	Thoubal MC	45,947	57,678	17.30	7	0.3	13	6.5	10	16.5	0.8	5%	• Encouraging source segregation and home composting • Awareness generation to public. • Compactor machine Segregation machine is installed
9	Yairipok MC	9,569	12,012	3.6	1.60	0	1	1.6	2	3.6	0	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	0%	• The ULB shall try to create more facilities to augment the existing installed capacity of the SWM facility and try to procure machinery/equipment to effectively manage the segregation activities in a

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													scientific way.
11	Lilong TBL MC	24,900	31,258	9.37	2.00	2.80	1	1	6.5	7.5	1.9	19%	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirop MC	2,974	3,733	1.12	0.47	0	1	0.4	0.65	1.05	0.1	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers.
13	Wangjing Lamding MC	8,055	10,112	3.03	1	0	1	0.81	2.03	2.84	0.2	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
14	Andro MC	8,744	10,977	3.29	0.9	0	1.07	0.83	2.39	3.22	0.1	2.12%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
15	Kakching MC	32,138	40,344	12.1	8.58	0.14	17	6.5	3.38	9.88	2.2	18%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													of availing of any form of service from the council.
16	Kakching Khunou MC	11,379	14,284	4.28	2.00	0.76	2.2	1.85	1.52	3.37	0.9	21%	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of service from the council.
17	Sugnu MC	5,132	6,442	1.93	1.1	0.43	1.2	0.6	0.40	1	0.9	48%	- Intensified IEC on door-to-door waste collection and source segregation - 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
18	Mayang Imphal MC	24,239	34,428	10.33	6.0	1.02	8	6	3.31	9.31	1.0	15%	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - Remaining collected waste are sent to treatment plant at Lamdeng. - Segregated recyclable waste

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													are sent to recycler The ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	9,106	11,431	3.42	1.45	0	1	1.25	1.98	3.23	0.2	5.83%	- In terms of ward wise, area wise, leikai wise coverage of D2D collection, there is 100% coverage of D2D collection. - Encouraging source segregation and home composting. - More awareness and behavioral change campaign with increase in manpower and SWM vehicles. - Setting up solid waste management and processing facility.
20	Kumbi MC	9,546	11,983	3.59	2	0.08	1	1.29	1.51	2.8	0.8	22%	- Now 80% D2D collection - Land available 0.52 acre
21	Kwakta MC	8,579	10,769	3.23	1.13	0	1	0.45	2.10	2.65	0.6	17.96%	Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster basis is completed, the untreated

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													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	2.5	33%	- Segregation shed has constructed. Composting plans also been constructed. It has commissioned. - Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	13,078	16,417	5.0	2.2	0.3	5.5	1.7	2.5	4.2	0.8	16%	Vigorous IEC campaign and implementation of stringent rules or bye laws.
24	Bishnupur MC	12,167	15,274	4.58	3.48	0	5	2.8	1.1	3.9	0.7	14.8%	Vigorous IEC campaign and implementation of stringent rules or byelaws, Byelaws is published and shall be implemented for closing the gap.
25	Oinam MC	7,161	8,989	2.70	1.6	0.0	1.5	0.9	1.1	2	0.7	26%	- Encouraging households to source segregate waste and practice home composting of wet waste. - Engaging recyclers for dry waste.
26	Nambol MC	22,512	28,260	8.50	4.3	0	2	1.9	4.2	6.1	2.4	28%	Increasing recovery of other recyclable materials apart from plastic bottles/waste.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													Encouraging source segregation and home composting.
27	Jiribam MC	7,343	9,218	2.84	2.17	0	22	2.17	0.67	2.84	0	0%	NIL
Total		6,19,778	7,92,660	290	196	7.96	211.5	144	86.91	229.45	60.9		
PC to the generated wastes					68%	3%	73%	49%	30%	79%		21%	

Note : *1. Taking r=2.3 as annual Population growth rate [Ref.: MoUD, Gol] *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, NOVEMBER, 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	10%		Waste to Energy plant (WTE) and composting	70,000 twin bins had been purchased and started distribution in collaboration with the Imphal smart City Limited, NGOs and IMC. - Intensive Awareness on source segregation and home composting.
2	Lamshang MC	9	9	85%	9	70%	0	Aerobic composting	Continue IEC activities to emphasize Segregation at source
3	Samurou MC	11	11	100%	11	70%	0	Segregation cum transfer station with some composting pits therein.	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness. - Increase in Manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap. - Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	11	11	100%	11	70%	2.5	Segregation cum transfer station and composting pits.	- In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D - More awareness and behavioural change campaign required. - Increase of manpower and machinery. - Setting up of solid waste management and processing facility.

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 %			
5	Sekmai MC	9	9	100%	9	78%	0	- Home Composting is predominant in all wards. - Central Composting at Segregation Shed, Parao. - Dry Waste disposed at Lamdeng SWM Plant.	- IEC activities to emphasize segregation at Source. - Campaigns to reduce, recycle and reprocess
6	Lilong IW MC	9	9	100%	9	80%	0	- Segregation Shed for Material Recovery - Vermi composting	- More composting pits, more vehicles and manpower and encouraging source segregation and home composting. - Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	9	9	100%	9	78%	0.88	- Composting (Home +Centralised) - Source segregation and centralised segregation	- Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach). - Rigorous IEC activities.
8	Thoubal MC	18	18	78%	18	80%	6.7	Segregation and composting	- Engaging more workers in the composting plant. - Introduction of compactor and segregation machines.
9	Yairipok MC	9	9	100%	9	100%	2.2	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	Treatment facility at Thoubal cluster.
10	Sikhong Sekmai MC	9	9	100%	9	67%	0.62	- Wet waste gets processed at source as feed of poultry and piggery farms. - Segregated recyclable waste is sent to recycler	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.
11	Lilong TBL MC	9	9	100%	9	70%	0.313	- Segregation Shed - Composting Unit	More composting pits, more vehicles and manpower and encouraging source

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 %			
									segregation and home composting.
12	Heirok MC	9	9	100%	9	100%	2.084	• Transfer and Segregation Station and Composting	• Treatment facility at Thoubal Khunou (Cluster B)
13	Wangjing Lamding MC	9	9	100%	9	100%	1.46	• Segregation and transfer station	• Treatment facility at Thoubal Khunou (Cluster B)
14	Andro MC	12	12	85%	12	80%	0.96	• Bulk of wet waste is processed or consumed at source a poultry & piggery feeds • Aerobic Composting • Segregation & Recyclable waste sent to recycler	• Treatment facility at Thoubal Khunou (Cluster B) • More manpower and encouraging source segregation and home composting
15	Kakching MC	12	12	100%	12	95%	2	• Composting, segregation & recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical segregation (to be started shortly) and aerobic composting to mitigate the gap of generation and management.
16	Kakching Khunou MC	9	9	93%	9	81%	2	• Composting, segregation & Recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical Segregation (to be started shortly) and • Aerobic composting to mitigate the gap of generation and management
17	Sugnu MC	9	9	80%	9	70%	1	• Composting, Segregation & Recycling	• Transport of remaining unrecyclable segregated waste to Kakching cluster. • Engagement of recyclers • Intensified awareness on source segregation, manual segregation and composting to mitigate the gap of generation and management.

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	• Composting pits and segregation sheds/MRF are operational. • The remaining collected waste was sent to the treatment plant at Lamdeng Imphal. • Segregated recyclables are sent to recycler.	• Composting Pits and segregation Sheds/MRF are operational. • ULB shall manage to fill up the gap when the prevailing situation of the state is improving. • The remaining collected waste sent to treatment plant at Lamdeng Imphal • Segregated recyclables are sent to recyclers.
19	Wangoi MC	9	9	100%	9	71%	0	Nil	• More awareness and behavioural changes campaign. • Increase of manpower. • Allotment of SWM land. • Setting up of a SWM and processing facility of its own.
20	Kumbi MC	9	9	100%	9	80%	0.52	• Composting	
21	Kwakta MC	9	9	100%	9	65%	0.625	• Composting	• 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	12	12	100%	12	85%	5.1	• Composting	• Requested DC to allot land. • Rigorous IEC Campaign to be held for source segregation.
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

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 %			
25	Oinam MC	9	9	100%	9	70%	0	• Composting	• Encouraging households to source segregate waste and practice home composting of wet waste. • Engaging recyclers for dry waste.
26	Nambol MC	18	18	100%	18	88%	3.21	• Composting pit • Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers. • Increasing manpower, vehicles and machinery. • Extensive awareness drive. • Co-opting SHGs and CSOs in SWM.
27	Jiribam MC	10	10	100%	10	85%	6.02	• Composting, Send back for recycling, MRF	• Nil
Total		305	305		305		43.132		
In Percentage-Ward coverage				100%		100%			
Average Household coverage				97%		78%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, NOVEMBER, 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	Home composting and manual segregation of waste, dry waste. Dry waste sent to Lamdeng solid waste management plant.	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 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

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)		
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 recovery	Nil		Nil	Nil	Nil	Nil	Nil	Nil
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	Nil		1	2	Nil	Nil	Nil	Nil
17	Sugnu MC	0	NA	Nil		1	1	Nil	Nil	Nil	Nil
18	Mayang Imphal MC	0	Manual segregation of waste & composting construction completed.	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)		
19	Wangoi MC	0	Nil	Nil	0.03 acre (Khasland/stateland at Hao Salaam used for segregation shed yet to be allotted to Wangoi MC. Allotment request sent to DC.	Nil	Nil	Nil	Nil	Nil	Nil
20	Kumbi MC	0	Composting pit	Nil		1	0.52	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	0	Manual segregation and aerobic composting	Nil		Nil	Nil	1	2.5	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)		
	Village, Ward No. 12										
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
27	Jiribam MC	0	Manual segregation, Pit composting, Windrow composting and MRF, C&D waste processing unit	Nil				1	1.72	Nil	1
	Total	0				9	12.956	5	8.72		1

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 1st week of the next month i. e. Report for November will get on 1-10th 2024. Therefore, Water Quality Report for November will be reproduced in the MPR of December 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 November, 2024

1. Imphal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.4	7.4	3.1	6.8	55
Minutrhong	7.3	7.3	3.2	8.2	66
Mahabali	7.4	7.3	3.2	7.8	70

2. Iril River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.5	7.5	3.0	10.4	50
Porompat	7.5	7.4	3.1	8.2	55
Lilong	7.4	7.3	3.2	10.8	60

3. Manipur River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Yairipok	7.4	7.3	3.2	9.2	65
Sekmaiying	7.4	7.3	3.3	9.6	75
Ithai	7.5	7.4	3.1	8.8	70

4. Thoubal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Litan	NA	NA	NA	NA	NA

5. Wangjing River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Heirok	7.4	7.3	3.2	9.2	65
Wangjing	7.4	7.3	3.2	9.8	75

6. Khuga River

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

7. Khujairok River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Khujairok	NA	NA	NA	NA	NA

8. Lokchao River, Bishnupur

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	7.5	7.4	3.2	8.6	55

9. Nambul River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Samushang	7.1	7.2	4.1	15.0	125
Naoremthong	6.8	7.0	4.1	14.8	100
Hump Bridge	6.7	6.9	4.3	15.6	210
Heirangoithong	6.6	6.8	4.5	14.6	200
Singda Dam					

10. Kongba River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	6.5	7.2	4.1	14.0	125
Kongba Erong	6.2	7.2	4.1	9.2	135

11. Waisel Maril

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	6.4	7.2	4.1	12.4	160
Kha Sangenbam Mayai Leikai	7.2	7.3	4.1	12.1	85

12. Moirang River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	7.3	7.3	3.4	9.5	55

13. Sewage Treatment Plant Effluent

Location		Oil & Grease (mg/L)	pH	TSS mg/L	BOD mg/L	COD Mg/l	Fecal Coliform (MPN/100ml)
Langol	Inlet	2.4	7.3	30	11.8	40	130
	Outlet	8.6	7.1	130	34.8	380	150
	Standards		6.5 to 9.0	Less than 100	30.0		Less than 1000

Annexure – 5

Action Plan of the model river in Manipur

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
Action 1	Solid Waste Management			
1.1	Identification of garbage vulnerable point	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.2	Door to Door Collection, identify & register of missed out house hold, punitive action against litterer along the river	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.3	Formation of Tasks Force for proper implementation of waste management		Oct 2019	Constituted
1.4	Providing of household waste bins	19,863 bins	Oct 2020	80% completed Action: Environment & CC
1.5	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 Action: Environment & CC
1.6	Renovation of existing crematoria along the river stretch	56 Nos.	Apr 2021	Completed Action: Environment & CC
1.7	Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places	37 Nos.	Oct 2020	Completed Action: Environment & CC
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	Completed Action: Environment & CC
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly Action: Environment & CC
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation at Imphal town		Oct 2019	Completed Action: PHED
2.2	Interception and diversion 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 Action: Environment & CC
2.3	Treatment option and capacity : Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	85% Completed Action: Environment & CC
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned Action: PHED
2.5	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 Action: PHED
Action 3	Protection of catchment area			
3.1	<i>In-situ</i> augmentation of medicinal plants and economic plantation at catchment			Completed Action: Forest
Action 4	Protection and prevention of Flood Plain Zone			
4.1	Protection and Improvement of River Bunds. 1,500 m for Nambul River 16,860 m in Imphal River 2,670 m in Kongba River 2,403 m in Thoubal River 317 m in Wangjing River 11,711 m in Manipur River		Before 2021	Status will be updated soon Action: WRD
4.2	Re-Sectioning of Rivers and Streams. 82,091 m in Imphal River. 15,480 m in Kongba River 89,100 m in Nambul and its tributaries. 1,900 m in Chakpi River		Before 2021	Status will be updated soon Action: WRD
4.3	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 Action: WRD

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

Action	Target Action	Target Quantity	Timeline	Status & Actor
Action 1	Solid Waste Management			
1.1	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 Action : MAHUD / ULBs
1.2	Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach	59 Municipal Wards 33.45 MT	1 year (June 2020)	
1.3	Installation of littering bins at suitable places	500 Nos. of Bins	1 year (June 2020)	
1.4	Setting up of waste processing site at Cluster Approach	5 Cluster Units	2 Year (June 2021)	
1.5	Construction of Public toilets at vulnerable points	59 Nos. (one each for every ward for 59 wards)	2 Year (June 2021)	
1.6	IEC / Public Awareness Activities	177 Nos. (3 times for every 59 Wards)	Ongoing	
1.7	Encouraging of home composting	10% of total household	Ongoing	
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation	Under survey	Ongoing	Completed Action : PHED
2.2	Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur	27.024 + 38.73 = 65.754 MLD	2 Years (June 2021)	DPR submitted to NRCDD, Ministry of Jal Shakti, Govt. of India Action : Environment & CC
2.3	Commissioning of the Imphal Sewerage Project Phase-II: 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 Action : PHED
Action 3	Protection of catchment Area of 1539 sq. km.			
3.1	<i>In situ</i> augmentation with economic plants	1539 sq. km.	2 Years (June 2021)	Status will be updated soon Action : Forest
3.2	Inventorisation and mapping of springs for protection and rejuvenation at catchment	8 rivers	1 Year (June 2020)	Status will be updated soon Action : Environment & CC

Action 4 Protection and prevention of Flood Plain Zone				
4.1	Protection and Improvement of River Bunds	1. 1500 m for Nambul River 2. 16860 m in Imphal River and its tributaries 3. 2670 m in Kongba River 4. 2403 m in Thoubal River 5. 317 m in Wangjing River 6. 11711 m in Manipur River	Before 2021	Status will be updated soon Action : WRD
4.2	Re-Sectioning of Rivers and Streams	1. 82091 m in Imphal River 2. 15480 m in Kongba River 3. 89100 m in Nambul and its tributaries 4. 1900 m in Chakpi River	Before 2021	
4.3	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	

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 20th December 2024

Overall status of the State:

I. Total Population:

	2011 Census	Projected as on 2020
Urban Population	8,34,154	10,47,135
Rural Population	17,36,236	21,79,541
Total	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

Details of under construction STPs in the State

No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
1	Maibam Leikai, Imphal West	16 MLD	100 %	NIL	Operational
2	Iroisemba, Imphal West	1 MLD	100%	NIL	Operational

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 construction of 3(three) ETPs at Takyelpat, Tera Urak & Kuraopokpi Industrial Estates of Manipur under PM Gatishakti schemes has been completed and trial run of the same has been done.

- 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)	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	Nil	1 (one) CETP of 400 Kilo Liter / Day at Nilakuthi Industrial Estate, Imphal Status: Functional

		generated (in TPD) inside the 3 (three) Industrial Estates of Manipur		
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Action taken report of the review meeting for compliances of Hon'ble NGT orders

Sl. No.	Agenda	ATR
1.	4(ii) PHED, TC&I and Health Department shall prepare a comprehensive action plan along with Blueprint for achieving zero untreated discharge of wastewater of the State by 5 th August, 2022.	i. The State Government is setting up Effluent Treatment Plant (ETP) inside the three (3) Industrial Estates. At present the MANDICO (Implementing Agency) have completed the work
2.	4(iv) The existing CETP of 400 KDL at Nilakuthi Food Park as the proposed amount of Rs. 1.77 Cr, which has already been allocated as additional fund by the State Planning Department for Development Corpus Fund (DCF) under Demand no. 30 BE 2022-23 for construction of drainage system form the industrial units to the CETP, shall referred to Finance Department for consideration and release at the earliest.	Construction of drainage system from the industrial units to the CETP is 100% completed as per the report submitted by MANIDCO & is fully functional.

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 : 196.48 TPD (Collected by ULBs)

- Existing Management / treatment facility : 211.5 TPD
- Utilization of MSW processing : 143.54 TPD

[Managed by ULBs = 143.54 TPD

Managed at Source = 85.91 TPD

Total Managed = 229.45 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	Waste to Energy (WTE) and Composting	- Distribution of Twin Bins to households started. - Awareness campaign in various localities started for D2D collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of services from the corporation.
2	Lamshang MC	1	1.2	- Home composting is predominant in all wards - Mixed/dry waste disposed of at Lamdeng SWM plant	*Capacity building to achieve 100% collection *IEC campaigns to encourage home composting. *Tie-ups with local clubs to reduce, recycle and reuse household waste.
3	Samurou MC	5	3.56	Segregation shed cum transfer station with some composting pits therein.	Presently collected waste, after segregation of recyclable plastic waste and cardboard, is being transferred to Lamdeng Solid Waste Management Plant. Increase in awareness. Increase in Manpower and vehicles. Allotment of Permanent land for management of solid waste has been proposed to DC. And setting up of an own solid waste processing facility will help mitigating the gap. Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	5	3.45	Segregation cum transfer station and	In terms of ward wise, area wise Leikai wise coverage of

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				composting pits.	D2D collection, there is 100% coverage of D2D. • More awareness and behavioral change campaign with increase in manpower and SWM vehicles. • Setting up of own Solid Waste Management & Processing Facility.
5	Sekmai MC	1	1.2	• Home Composting is predominant in all wards. • Central Composting at Segregation Shed, Parao. • Mixed/Dry Waste disposed at Lamdeng SWM Plant.	• Engagement of local clubs/SHGs to achieve 100% segregation in management and processing. • Capacity enhancement in management and processing.
6	Lilong IW MC	1	1	• Segregation Shed for Material Recovery • Vermi composting	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting. • Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	3	0.9	• Composting (Home + Centralized) • Source segregation and Centralized segregation	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC / Thoubal SWM Plant	13	6.5	• Segregation and composting	• Encouraging source segregation and home composting • Awareness generation to public. • Compactor machine and Segregation machine are installed.
9	Yairipok MC	1	1.6	• Wet waste gets processed at source itself as feed of poultry and piggery farms • Segregated	• Treatment facility at Thoubal Cluster

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 is sent to recycler	
10	Sikhong Sekmai MC	6	0.56	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	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.
11	Lilong Thoubal MC	1	1	Segregation Shed Composting Unit	More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirol MC	1	0.4	Transfer and Segregation station and Composting	- Treatment facilities at Thoubal Khunou (Cluster B). - Increase in manpower, Awareness drives & Engagement of Recyclers.
13	Wangjing Lamding MC	1	0.81	Segregation and transfer station	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower, Awareness drives & Engagement of Recyclers
14	Andro MC	1.07	0.83	- Wet waste is processed or consumed at source as poultry and piggery feeds - Aerobic Composting - Segregation and Recyclable waste sent to recycler	- Treatment facilities at Thoubal Khunou (Cluster B) - Increase in manpower - Awareness drives & Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	17	6.5	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					availing any form of service from the council
16	Kakching Khunou MC	2.2	1.85	Composting, Segregation & Recycling	- Intensified IEC on Door-to-Door Waste Collection and Source Segregation. - Mandatory Submission of Payment Receipts of D2D waste collection at the time of availing any form of service from the Council.
17	Sugnu MC	1.2	0.6	Composting, Segregation & Recycling	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of service from the council. Transport of unrecyclable waste to Kakching Cluster.
18	Mayang Imphal MC	8	6	- Composting Pits and segregation Sheds/MRF are operational. - The remaining collected waste sent to treatment plant at Lamdeng Imphal - Segregated recyclable waste sent to recycler	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - The remaining waste is sent to the treatment plant at Lamdeng. - Segregated recyclable waste sent to recyclers - ULB shall manage to fill up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	1	1.25	Nil	- In terms of ward wise, area wise, leikai wise coverage of D2D collection. There is 100% D2D collection. - Encouraging home composting and source segregation. - More awareness and behavioral change campaign with increase manpower. - Setting up of a solid waste

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					management & processing facility.
20	Kumbi MC	1	1.29	Composting	- Now 80% D2D Collection - Land available 0.52 acre
21	Kwakta MC	1	0.45	Composting	Untreated waste is dumped at uncontrolled dumpsite as a short time measure. Once the cluster base is completed, the untreated waste shall be transferred to the cluster head for further processing
22	Moirang MC	4	2.99	Composting	- Segregation shed has constructed. - Composting plants have also been constructed, and it has commissioned. - IEC Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	5.5	1.7	Composting & sent back for re-cycling	Vigorous IEC campaign and implementation of stringent rules or byelaws.
24	Bishnupur MC	5	2.8	Sanitary Landfill	- Vigorous IEC campaign and implementation of stringent rules or by-laws - By-Laws are published and shall be implemented for closing the gap
25	Oinam MC	1.5	0.9	Composting	- Encouraging households to source segregated waste and practice home composting of wet waste. - Engaging recyclers for dry waste
26	Nambol MC	2	1.9	- Composting pit - Manual Segregation initiated at the segregation shed	- Increasing recovery of other recyclable materials apart from plastic bottles/waste. - Encouraging source segregation and home composting.
27	Jiribam MC	22.005	2.3	Composting, send back for recycling,	NIL

SN	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				MRF	
	Total	211.5	144		

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 - 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 Table-3			
	No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills		5 (five) sanitary landfill and 9 controlled dumpsites - Annexure-Table 3	
	No. and area (in acres) of legacy waste within 1km buffer of both sides 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 Annexure – Table -1 and Table -2	

V. Bio-medical Waste Management December 2024:

Total Bio-medical generation	:	0.98 TPD	- Deep burial practiced at remote rural areas - DPR submitted to ministry for up-gradation of the existing CBMWTF - Action Plan submitted to the State Pollution Control Board by the Directorate Health Service for BMW management
No. of Hospitals and Health Care Facilities	:	534 Nos. [i/c 420 PHSCs]	
Status of Treatment Facility CBMWTF	:	CBMWTF = 1 No. (Capacity-100 Kg/hr.) Captive Facility = 2 Nos. (Capacities-100 Kg/hr. & 105 Kg/hr.) Deep Burial = 391 Nos.	
Status of Treatment Facility ETPs	:	98 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	:	Enclosed as Annexure
XIV. Plantation activities along the rivers	:	No plantation taken up on the riverbanks of the 9 (nine) Polluted River stretches until the time reported upon.
XV. Development of biodiversity park	:	No biodiversity park have been developed so far.
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	:	The Mines and Mineral (Regulation and Development) Act, 1957

		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 and Mineral (Regulation and Development) Act and Rules framed 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 there under. Similarly, in Manipur, the mining activities belonging to minor minerals are regulated under the Manipur Minor Mineral Concession Rules, 2012 and amendments thereon. In order to check illegal mining, to regulate transportation and storage of minor minerals, The Manipur Minerals (Prevention of Illegal Mining, Storage and Transportation) rules, 2018 has also been notified. In addition, The Manipur Mineral Policy 2021 is being framed.
XX. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	

Annexure - 1

A. Total Status of STPs in Imphal (as on 20th December, 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	8270			8270
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, 44.138 rm secondary lines]
- Total target connection is 9,564 households

INCREMENTAL STATUS OF UTILIZATION FOR 27MLD STP AT LAMPHELPAT, 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 th Dec. 2024	Gap
Household Connected	4000	250	250	60	10	30	0	50	280	356	8270	1294
Utilization in MLD	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	21.59 MLD	5.41 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	61.31 %	64.24 %	67.96 %	79.98 %	20.02 %
	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023	Mar. 2023	May 2023	June 2023	July 2023	Aug 2023	Sept 2023		
Household Connected	800	50	14	150	20	50	0	0	0	0		

Utilization in MLD	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		
Utilization in %	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		
Household Connected	0	30	20	300	70	30	30	20	20	8190		
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD		
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %	79.98%	79.98 %	79.98 %	79.98%		
	August 2024	Sept 2024	Oct 2024	Nov 2024	Dec 2024							
Household Connected	8210	8225	8235	8250	8270							
Utilization in MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD	21.59 MLD							
Utilization in %	79.98 %	79.98 %	79.98 %	79.98 %	79.98 %							

B. In-situ Bio-remediation and others:

	Name of the Polluted River (P-V)	Total Length of the River	Length of Polluted stretches	BOD Range (mg/l)	Population at polluted zone	Status / Proposed for Treatment
1	Imphal	89.24 km	19.98 km	2.9 - 3.1	84,857	- Revised DPR for Imphal River along with Faecal 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 18th September 2021. - Revised DPR with full justification on the comments made by the Ministry will be submitted soon.
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 th December, 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 93°54''58'E	2020	Operational	27	21.59 MLD	ASP	Inlet	8.7	7.0	128	300	36.2	155
										Outlet	2.3	7.2	32	42	11.6	135

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK**Takyel Industrial Estate, Imphal West Districts, Manipur.**

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	M/S Modern Foods	Nambul	T. Sanajaoba Singh	Noodles
2	M/S Hangle Industries	Nambul	H. Nabadeep Singh	Spices & Food Products
3	M/S Pera Fruit Products	Nambul	Kh. Sanayaima Singh	Fruit Processing
4	M/S Khudol	Nambul	K. Siddhanta Sharma	Food Processing
5	M/S Ratana Fruit	Nambul	L. Sarat Singh	Food items
6	M/S Universal Iodises Salt Industries	Nambul	P. Joychandra Singh	Food Items

Nilakuthi Food Park, Imphal East

Sl. No.	Name of unit	Nearest River	Proprietor	Name of Products
1	Shree Balaji Flour Mill	Imphal	Mrs. Rangnamei Martha	Flour
2	KMU	Imphal	Wangkheirakpam Gobin Singh	Bakery
3	Thangjam Agro Industries Pvt. Ltd.	Imphal	Thangjam Joykumar Singh	Bakery

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

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP 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	42	27%	• Distribution of Twin bins to household started. • Awareness campaign in various localities started for D2D collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing any form of service from the corporation.
2	Lamshang MC	8,130	9,739	2.92	1.2	0.22	1	1.2	1.5	2.7	0.22	7.53%	• Capacity building to achieve 100% collection • IEC campaign to encourage home composting • Tie ups with local clubs to reduce, recycle and reuse household waste.
3	Samourou MC	16582	18,602	5.58	3.56	0.48	5	3.56	1.54	5.1	0.48	8.60%	• Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. • Increase in awareness &

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													increase in manpower and vehicles. • Allotment of Permanent land for management of solid waste has been proposed to DC. • And setting up of an own solid waste processing facility will help mitigating the gap. • Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	14,878	18,677	5.6	3.45	0.48	5	3.45	1.67	5.12	0.48	8.57%	• In terms of ward wise, area wise leikai wise coverage of D2D collection. • More awareness and behavioral change campaign with increase manpower and SWM vehicles. • Setting up of an own Solid waste management & Processing facility.
5	Sekmai MC	5,065	6,358	1.9	1.2	0.2	1	1.2	0.5	1.7	0.20	11%	• Engagement of local clubs/SHGs to achieve 100% segregation at source. • Capacity enhancement for management and processing.
6	Lilong IW MC	12,427	15,600	4.6	1	0.6	1	1	3	4	0.60	13%	• More composting pits, more vehicles and manpower and

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													encouraging source segregation and home composting. • 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	0	6%	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach).
8	Thoubal MC	45,947	57,678	17.30	7	0.3	13	6.5	10	16.5	0.8	5%	• Encouraging source segregation and home composting • Awareness generation to public. • Compactor machine Segregation machine is installed
9	Yairipok MC	9,569	12,012	3.6	1.60	0	1	1.6	2	3.6	0	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	0%	• The ULB shall try to create more facilities to augment the existing installed capacity of the SWM facility and try to procure machinery/equipment to effectively manage the segregation activities in a scientific way.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
11	Lilong TBL MC	24,900	31,258	9.37	2.00	2.80	1	1	6.5	7.5	1.9	19%	• More composting pits, more vehicles and manpower and encouraging source segregation and home composting.
12	Heirop MC	2,974	3,733	1.12	0.47	0	1	0.4	0.65	1.05	0.1	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers.
13	Wangjing Lamding MC	8,055	10,112	3.03	1	0	1	0.81	2.03	2.84	0.2	6%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
14	Andro MC	8,744	10,977	3.29	0.9	0	1.07	0.83	2.39	3.22	0.1	2.12%	• Treatment facilities at Thoubal Khunou (Cluster B) • Increase in manpower. • Awareness drives & Engagement of recyclers
15	Kakching MC	32,138	40,344	12.1	8.58	0.14	17	6.5	3.38	9.88	2.2	18%	• Intensified IEC on door-to-door waste collection and source segregation. • Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													service from the council.
16	Kakching Khunou MC	11,379	14,284	4.28	2.00	0.76	2.2	1.85	1.52	3.37	0.9	21%	- Intensified IEC on door-to-door waste collection and source segregation. - Mandatory submission of payment receipts of D2D waste collection at the time of availing of any form of service from the council.
17	Sugnu MC	5,132	6,442	1.93	1.1	0.43	1.2	0.6	0.40	1	0.9	48%	- Intensified IEC on door-to-door waste collection and source segregation - 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
18	Mayang Imphal MC	24,239	34,428	10.33	6.0	1.02	8	6	3.31	9.31	1.0	15%	- Treatment Plant/Composting Pits and segregation Sheds/MRF are operational. - Remaining collected waste are sent to treatment plant at Lamdeng. - Segregated recyclable waste are sent to recycler - The ULB shall manage to fill

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
													up the gap when the prevailing situation of the state is improving.
19	Wangoi MC	9,106	11,431	3.42	1.45	0	1	1.25	1.98	3.23	0.2	5.83%	- In terms of ward wise, area wise, leikai wise coverage of D2D collection, there is 100% coverage of D2D collection. - Encouraging source segregation and home composting. - More awareness and behavioral change campaign with increase in manpower and SWM vehicles. - Setting up solid waste management and processing facility.
20	Kumbi MC	9,546	11,983	3.59	2	0.08	1	1.29	1.51	2.8	0.8	22%	- Now 80% D2D collection - Land available 0.52 acre
21	Kwakta MC	8,579	10,769	3.23	1.13	0	1	0.45	2.10	2.65	0.6	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.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
22	Moirang MC	19,893	24,972	7.49	5.4	0.09	4	2.99	2	4.99	2.5	33%	- Segregation shed has constructed. Composting plans also been constructed. It has commissioned. - Campaign has organised for proper 100% source segregation.
23	Ningthoukhong MC	13,078	16,417	5.0	2.2	0.3	5.5	1.7	2.5	4.2	0.8	16%	Vigorous IEC campaign and implementation of stringent rules or bye laws.
24	Bishnupur MC	12,167	15,274	4.58	3.48	0	5	2.8	1.1	3.9	0.7	14.8%	Vigorous IEC campaign and implementation of stringent rules or byelaws, Byelaws is published and shall be implemented for closing the gap.
25	Oinam MC	7,161	8,989	2.70	1.6	0.0	1.5	0.9	1.1	2	0.7	26%	- Encouraging households to source segregate waste and practice home composting of wet waste. - Engaging recyclers for dry waste.
26	Nambol MC	22,512	28,260	8.50	4.3	0	2	1.9	4.2	6.1	2.4	28%	- Increasing recovery of other recyclable materials apart from plastic bottles/waste. - Encouraging source segregation and home composting.

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Waste Collected (TPD)	Gap between Generated and (Collected + Managed at	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	Total	GAP TPD	Gen-Man Gap= [(Gen-Man)/Gen] x 100	
27	Jiribam MC	7,343	9,218	2.84	2.17	0	22	2.17	0.67	2.84	0	0%	NIL
Total		6,19,778	7,92,660	290	196	7.96	211.5	144	86.91	229.45	60.9		
PC to the generated wastes					68%	3%	73%	49%	30%	79%		21%	

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, DECEMBER, 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	10%		Waste to Energy plant (WTE) and composting	70,000 of twin bins had been purchased and started distribution within the Imphal Smart City Ltd, NGOs and IMC . Intensive awareness on source segregation and home composting.
2	Lamshang MC	9	9	85%	9	70%	0	Manual and machine assisted segregation, Aerobic composting	IEC activities to emphasize Segregation at Source, subscription to Municipal waste Collection.
3	Samurou MC	11	11	100%	11	70%	0	Segregation cum transfer station with some composting pits therein.	- Presently collected waste after segregation of recyclable plastic waste and cardboard is being transferred to Lamdeng Solid Waste Management Plant. - Increase in awareness. - Increase in Manpower and vehicles. - Allotment of Permanent land for management of solid waste has been proposed to DC. - And setting up of an own solid waste processing facility will help mitigating the gap. - Suitable state land not available within the jurisdiction.
4	Thongkhong Laxmi MC	11	11	100%	11	70%	2.5	Segregation cum transfer station and composting pits.	- In terms of Ward-wise, Region-wise, Area-wise, Leikai-wise, Leirak-wise coverage of D2D collection, there is 100% coverage of D2D - More awareness and behavioural change campaign required. - Increase of manpower and machinery. - Setting up of solid waste management and processing facility.

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 %			
5	Sekmai MC	9	9	100%	9	78%	0	- Home Composting is predominant in all wards. - Central Composting at Segregation Shed, Parao. - Dry Waste disposed at Lamdeng SWM Plant.	- IEC activities to emphasize segregation at Source. - Campaigns to reduce, recycle and reprocess
6	Lilong IW MC	9	9	100%	9	80%	0	- Segregation Shed for Material Recovery - Vermi composting	- More composting pits, more vehicles and manpower and encouraging source segregation and home composting. - Cluster basis facilities at Lamdeng SWM Plant.
7	Lamlai MC	9	9	100%	9	78%	0.88	- Composting (Home +Centralised) - Source segregation and centralised segregation	- Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach). - Rigorous IEC activities.
8	Thoubal MC	18	18	78%	18	80%	6.7	Segregation and composting	- Engaging more workers in the composting plant. - Introduction of compactor and segregation machines.
9	Yairipok MC	9	9	100%	9	100%	2.2	- Wet waste gets processed at source itself as feed of poultry and piggery farms - Segregated recyclable waste is sent to recycler	Treatment facility at Thoubal cluster.
10	Sikhong Sekmai MC	9	9	100%	9	67%	0.62	- Wet waste gets processed at source as feed of poultry and piggery farms. - Segregated recyclable waste is sent to recycler	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.
11	Lilong TBL MC	9	9	100%	9	70%	0.313	- Segregation Shed - Composting Unit	More composting pits, more vehicles and manpower and encouraging source segregation and home composting.

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 %			
12	Heirol MC	9	9	100%	9	100%	2.084	• Transfer and Segregation Station and Composting	• Treatment facility at Thoubal Khunou (Cluster B)
13	Wangjing Lamding MC	9	9	100%	9	100%	1.46	• Segregation and transfer station	• Treatment facility at Thoubal Khunou (Cluster B)
14	Andro MC	12	12	85%	12	80%	0.96	• Bulk of wet waste is processed or consumed at source a poultry & piggery feeds • Aerobic Composting • Segregation & Recyclable waste sent to recycler	• Treatment facility at Thoubal Khunou (Cluster B) • More manpower and encouraging source segregation and home composting
15	Kakching MC	12	12	100%	12	95%	2	• Composting, segregation & recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical segregation (to be started shortly) and aerobic composting to mitigate the gap of generation and management.
16	Kakching Khunou MC	9	9	93%	9	81%	2	• Composting, segregation & Recycling	• Intensified awareness on source segregation. • Manual segregation • Mechanical Segregation (to be started shortly) and • Aerobic composting to mitigate the gap of generation and management
17	Sugnu MC	9	9	80%	9	70%	1	• Composting, Segregation & Recycling	• Transport of remaining unrecyclable segregated waste to Kakching cluster. • Engagement of recyclers • Intensified awareness on source segregation, manual segregation and composting to mitigate the gap of generation and management.

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	- Composting pits and segregation sheds/MRF are operational. - The remaining collected waste was sent to the treatment plant at Lamdeng Imphal. - Segregated recyclables are sent to recycler.	- Composting Pits and segregation Sheds/MRF are operational. - ULB shall manage to fill up the gap when the prevailing situation of the state is improving. - The remaining collected waste sent to treatment plant at Lamdeng Imphal - Segregated recyclables are sent to recyclers.
19	Wangoi MC	9	9	100%	9	71%	0	Nil	- More awareness and behavioural changes campaign. - Increase of manpower. - Allotment of SWM land. - Setting up of a SWM and processing facility of its own.
20	Kumbi MC	9	9	100%	9	80%	0.52	• Composting	
21	Kwakta MC	9	9	100%	9	65%	0.625	• Composting	- 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	12	12	100%	12	85%	5.1	• Composting	- Requested DC to allot land. - Rigorous IEC Campaign to be held for source segregation.
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

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 %			
25	Oinam MC	9	9	100%	9	70%	0	• Composting	• Encouraging households to source segregate waste and practice home composting of wet waste. • Engaging recyclers for dry waste.
26	Nambol MC	18	18	100%	18	88%	3.21	• Composting pit • Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers. • Increasing manpower, vehicles and machinery. • Extensive awareness drive. • Co-opting SHGs and CSOs in SWM.
27	Jiribam MC	10	10	100%	10	85%	6.02	• Composting, Send back for recycling, MRF	• Nil
Total		305	305		305		43.132		
In Percentage-Ward coverage				100%		100%			
Average Household coverage				97%		78%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, DECEMBER, 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	NIL	Nil		Nil	Nil	1	Nil	Nil	Nil
2	Lamshang MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
3	Samurou MC	NA	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
4	Thongkhong Laxmi MC	NA	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
5	Sekmai MC	0	NIL	Nil		0	0	Nil	Nil	Nil	Nil
6	Lilong IW MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
7	Lamlai MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
8	Thoubal MC	0	NIL	Nil		Nil	Nil	1	2	Nil	Nil
9	Yairipok MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
10	Sikhong Sekmai MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
11	Lilong TBL MC	0	NIL	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)		
12	Heirok MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
13	Wangjing Lamding MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
14	Andro MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
15	Kakching MC	0	NIL	Nil		1	2	1	2.5	Nil	Nil
16	Kakching Khunou MC	0	NIL	Nil		1	2	Nil	Nil	Nil	Nil
17	Sugnu MC	0	NIL	Nil		1	1	Nil	Nil	Nil	Nil
18	Mayang Imphal MC	0	NIL	Nil		Nil	Nil	Nil	Nil	Nil	Nil
19	Wangoi MC	0	NIL	Nil	0.03 acre (Khaasland/stateland at Hao Salaam used for segregation shed yet to be allotted to Wangoi MC. Allotment request sent to DC.	Nil	Nil	Nil	Nil	Nil	Nil
20	Kumbi MC	0	NIL	Nil		1	0.52	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)		
21	Kwakta MC	0	NIL	Nil		1	0.016	Nil	Nil	Nil	Nil
22	Moirang MC	0	NIL	Nil		1	2.5	Nil	Nil	Nil	Nil
23	Ningthoukhong MC	0	NIL	Nil		1	1.31	Nil	Nil	Nil	Nil
24	Bishnupur MC, multi-segregation shed at Chothe Village, Ward No. 12	0	NIL	Nil		Nil	Nil	1	2.5	Nil	Nil
25	Oinam MC	0	NIL	Nil		1	0.4	Nil	Nil	Nil	Nil
26	Nambol MC	0	NIL	Nil		1	3.21	Nil	Nil	Nil	Nil
27	Jiribam MC	0	NIL	Nil				1	1.72	Nil	1
	Total	0				9	12.956	5	8.72		1

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 1st week of the next month i. e. Report for November will get on 1-10th 2024. Therefore, Water Quality Report for November will be reproduced in the MPR of December 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 December, 2024

1. Imphal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.4	7.4	3.0	6.5	50
Minutrhong	7.4	7.3	3.1	8.2	50
Mahabali	7.3	7.3	3.2	7.7	65

2. Iril River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.4	7.5	3.0	10.2	50
Porompat	7.4	7.4	3.1	8.4	50
Lilong	7.4	7.4	3.2	10.4	60

3. Manipur River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Yairipok	7.4	7.4	3.2	9.0	55
Sekmaiying	7.3	7.4	3.3	9.2	65
Ithai	7.5	7.3	3.2	8.6	70

4. Thoubal River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Litan	Nil	Nil	Nil	Nil	Nil

5. Wangjing River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Heirolk	7.4	7.3	3.3	9.1	50
Wangjing	7.3	7.4	3.3	9.7	55

6. Khuga River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
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Churachandpur Bazar	Nil	Nil	Nil	Nil	Nil
Khuga Dam	Nil	Nil	Nil	Nil	Nil

7. Khujairok River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Khujairok	Nil	Nil	Nil	Nil	Nil

8. Lokchao River, Bishnupur

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	7.4	7.3	3.2	8.7	60

9. Nambul River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Samushang	6.9	7.2	4.2	15.3	120
Naoremthong	6.6	7.1	4.1	14.6	110
Hump Bridge	6.2	7.0	4.2	15.8	220
Heirangoithong	6.4	6.9	4.4	14.8	230
Singda Dam					

10. Kongba River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	6.0	7.2	4.3	13.8	140
Kongba Erong	5.4	7.2	4.2	10.8	150

11. Waisel Maril

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	6.2	7.1	4.2	12.2	170
Kha Sangenbam Mayai Leikai	7.1	7.2	4.2	12.3	90

12. Moirang River

Location	DO	pH	BOD mg/L	COD mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	7.2	7.2	3.6	9.4	65

13. Sewage Treatment Plant Effluent

Location		Oil & Grease (mg/L)	pH	TSS mg/L	BOD mg/L	COD Mg/l	Fecal Coliform (MPN/100ml)
Langol	Inlet	8.7	7.0	128	36.2	300	155
	Outlet	2.3	7.2	32	11.6	42	135
	Standards		6.5 to 9.0	Less than 100	30.0		Less than 1000

Annexure – 5

Action Plan of the model river in Manipur

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Timeline	Status
Action 1	Solid Waste Management			
1.1	Identification of garbage vulnerable point	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.2	Door to Door Collection, identify & register of missed out household, punitive action against litterer along the river	12 Municipal Wards	Oct 2019	Completed Action: MAHUD / IMC
1.3	Formation of Tasks Force for proper implementation of waste management		Oct 2019	Constituted
1.4	Providing household waste bins	19,863 bins	Oct 2020	80% completed Action: Environment & CC
1.5	High rise fencing of grilling and netting at vulnerable zones of both the river banks to protect throwing solid waste into the river	5 km	Apr 2021	Completed Action: Environment & CC
1.6	Renovation of existing crematoria along the river stretch	56 Nos.	Apr 2021	Completed Action: Environment & CC
1.7	Installation of secondary waste collection bins / community bins / dumper placer containers / transfer bins / littering bins at suitable places	37 Nos.	Oct 2020	Completed Action: Environment & CC
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	Completed Action: Environment & CC
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly Action: Environment & CC
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation at Imphal town		Oct 2019	Completed Action: PHED
2.2	Interception and diversion 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 Action: Environment & CC
2.3	Treatment option and capacity : Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	85% Completed Action: Environment & CC
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned Action: PHED
2.5	Commissioning of the Imphal Sewerage Project Phase-II of 41 MLD		Apr 2022	DPR Submitted, waiting for approval

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

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

Action	Target Action	Target Quantity	Timeline	Status & Actor
Action 1	Solid Waste Management			
1.1	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 Action : MAHUD / ULBs
1.2	Door to Door Collection and transportation of Municipal solid wastes with source segregation through Cluster Approach	59 Municipal Wards 33.45 MT	1 year (June 2020)	
1.3	Installation of littering bins at suitable places	500 Nos. of Bins	1 year (June 2020)	
1.4	Setting up of waste processing site at Cluster Approach	5 Cluster Units	2 Year (June 2021)	
1.5	Construction of Public toilets at vulnerable points	59 Nos. (one each for every ward for 59 wards)	2 Year (June 2021)	
1.6	IEC / Public Awareness Activities	177 Nos. (3 times for every 59 Wards)	Ongoing	
1.7	Encouraging of home composting	10% of total household	Ongoing	
Action 2	Channelization, treatment, utilization and disposal of treated domestic sewage			
2.1	Identification of location and estimation of liquid waste generation	Under survey	Ongoing	Completed Action : PHED
2.2	Treatment option through phytoremediation technique in consultation with NEERI (National Environmental Engineering Research Institute), Nagpur	27.024 + 38.73 = 65.754 MLD	2 Years (June 2021)	DPR submitted to NRCD, Ministry of Jal Shakti, Govt. of India Action : Environment & CC
2.3	Commissioning of the Imphal Sewerage Project Phase-II: 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 Action : PHED
Action 3	Protection of catchment Area of 1539 sq. km.			
3.1	<i>In situ</i> augmentation with economic plants	1539 sq. km.	2 Years (June 2021)	Status will be updated soon Action : Forest
3.2	Inventorisation and mapping of springs for protection and rejuvenation at catchment	8 rivers	1 Year (June 2020)	Status will be updated soon Action : Environment & CC

Action 4 Protection and prevention of Flood Plain Zone				
4.1	Protection and Improvement of River Bunds	1. 1500 m for Nambul River 2. 16860 m in Imphal River and its tributaries 3. 2670 m in Kongba River 4. 2403 m in Thoubal River 5. 317 m in Wangjing River 6. 11711 m in Manipur River	Before 2021	Status will be updated soon Action : WRD
4.2	Re-Sectioning of Rivers and Streams	1. 82091 m in Imphal River 2. 15480 m in Kongba River 3. 89100 m in Nambul and its tributaries 4. 1900 m in Chakpi River	Before 2021	
4.3	CC / RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable riverbanks	Along Nambul, Imphal, Thoubal, Kongba, Iril and other major rivers	Before 2021	

FOREST DEPARTMENT, MANIPUR

MONTHLY PROGRESS STATUS OF TARGETED ACTION PLAN FOR REJUVINATION 9(NINE)
POLLUTED STRETCHES OF RIVER-PRIORITY II & V TILL THE MONTH OF DECEMBER, 2024

	State	Nine Polluted River Stretches	Status		Line Department	Remark
			Plantation achieved so far in hectare	Cumulative achievement till the month of December, 2024		
F. Maintaining minimum e-flow of river	Manipur	Nambul (Priority - II)	15.8	18.6	Forest Department, Manipur	completed
		Imphal (Priority - V)	273.8	276.3		completed
		Iril (Priority - V)	768	775		completed
		Khuga (Priority - V)	685.4	685.4		completed
		Khujairok (Priority - V)	30	30		completed
		Lokchao (Priority - V)	0	0		completed
		Manipur (Priority - V)	70	70		completed
		Thoubal (Priority - V)	1405.8	1405.8		completed
		Wangjing (Priority - V)	50.747	50.747		completed
G. Plantation along river banks of the 9 (nine) rivers	Manipur	No plantation taken up on the river banks of the 9(nine) until the time reported upon.		Forest Department, Government of Manipur		
H. Development of Biodiversity Park	Manipur	No Biodiversity Park have been developed so far. However, 2(two) Biodiversity Parks are namely 1. Khonghampat Biodiversity Park, Khonghampat, Central Forest Division (approved) 2. Wakha Biodiversity Park, Wakha Laima Ching, Central Forest Division (approved)		Forest Department, Government of Manipur		

(Vikram Suresh Nadhe, IFS)
DFO Central and Nodal Officer,
River Rejuvenation Committee,
Forest Department, Manipur

ACTION PLAN FOR IMPROVEMENT OF e-FLOW AND ESTABLISHMENT OF BIODIVERSITY PARK BY FOREST DEPARTMENT, GOVERNMENT OF MANIPUR

TENTATIVE PLANTATION TARGET FOR THE YEAR 2024-25

Sl. No.	River Stretch	Plantation activity in Hac	Status	Office of Forest Department responsible for the work	Time Frame for completion
1.	Nambul (Priority-II)	41	Proposed under State plan fund	DFO Central	31.03.2025
2.	Imphal (Priority-V)	56	Proposed under State plan fund	DFO Central & DFO Kangpokpi	31.03.2025
3.	Iril (Priority-V)	371	Proposed under GIM, State Plan fund CAMPA & NBM	DFO Central, DFO Kangpokpi, DFO Senapati & DFO Thoubal	31.03.2025
4.	Khuga (Priority-V)	120	Proposed under all schemes	DFO Churachandpur	31.03.2025
5.	Khujairok (Priority-V)	0	-	-	-
6.	Lokchao (Priority-V)	0	-	-	-
7.	Manipur (Priority-V)	50	Proposed under CAMPA, State Plan fund	DFO Thoubal	31.03.2025
8.	Thoubal (Priority-V)	2169.3	Proposed under CAMPA, State Plan fund, GIM & KFW	DFO Thoubal & DFO Ukhrul	31.03.2025
9.	Wangjing (Priority-V)	20	Proposed under State Plan fund	DFO Thoubal	31.03.2025

PROPOSED BIODIVERSITY PARK

Sl. No.	Activity	Status	Responsibility	Time frame
1.	Creation of Biodiversity Park	Proposal of 2(two) biodiversity park namely: (i) Peter Biodiversity Park (ii) Lakhamai Biodiversity Park	DFO Senapati	31.03.2025