National Mission for Clean Ganga

Format for submission of Monthly Progress Report for the month of November 2021 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 2021

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	28,55,794	35,84,951

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 : 13. 27 MLD
- MLD of sewage being treated through alternate technology : NIL
- Gap in Treatment Capacity in MLD : 13.73 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	13.27 MLD	Operational (49.14%)	Complying

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	88 %	NIL	31.03. 2022
2	Iroisemba, Imphal West	1 MLD	50 %	NIL	31.03. 2022

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	DPR sent to NDB for external funding	---

III. Details of Industrial Pollution:

No. of industries in the State : 1011 Nos.
943 outside Industrial Estate
68 inside Industrial Estate

No. of water polluting industries in the State : 34 Units (**Annexure - 2**)

Quantity of effluent generated from the industries in : 0.93 KLD (estimated) in case of the 4

MLD		units located within Nilakuthi Food Park, Imphal East
Quantity of Hazardous Sludge generated from the Industries in TPD	:	Data not available
Number of industrial units having ETPs	:	Nil
Number of industrial units connected to CETP	:	4 (four)
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	:	Nil
Proposed	:	Nil

Town	**Existing ETP Capacity**	**CETP Proposed, if any**	**Status (DPR/ tendering/ under construction etc.)**
Imphal	400 KLD capacity	Nil	Nil

- 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 Litre / Day at Nilakuthi Industrial Estate, Imphal **Status : Non-functional** The State Government has been requested for an amount of Rs. 1.77 crore as proposed by M/s MANIDCO be made available through excess authorization as no funds are available for the said works in BE 2021-22. Relevant file is with the State Finance Department

IV. **<u>Solid Waste Management:</u>**

- Total Urban Local Bodies (ULBs) : 27 ULBs
- Population of ULBs : 6,15,344 (2011 Census)
  : 7,92,734 (2020 projected population)
- Current Municipal Solid Waste Generation : 309 MTD
  (as on 2020 projected population)
- Waste Collected : 190 TPD
- Existing Management / treatment facility : 116 TPD
- Utilization of MSW processing : 111 TPD
- Segregated Waste landfilled / dumped : 0 TPD

- Number, installed capacity and utilization of existing MSW processing facilities in TPD bifurcated by type of processing e.g. Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), bio-methanation, MRF, etc.

Sl N0	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 and Composting	• 100% D2D by December, 2021 • Waste to energy by December 2021
2	Lamshang NP		2	Home composting and waste to power and waste to manure at Lamdeng SWM Plant	• Vigorous IEC campaign and implementation of stringent rules or bye- laws
3	Samurou MC	0.5	2.82	Segregation cum transfer station	• 100% D2D by Dec 2021 presently collected waste after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • [0.5 TPD FACILITY is segregation cum transfer station] • Increase in awareness • Increase in Manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong Laxmi MC	0.5	2.66	Segregation cum transfer shed/ station	• 100% D_2D by Dec 2021 • 0.5 TPD FACILITY is segregation cum transfer station • More Awareness campaign capacity building of manpower • By acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019 & 02.08.2021 to allocate a suitable SWM site for the ULB but yet to be allocated till now)
5	SEKMAI NP	1	1.3	• Home Composting is predominant in all wards • Central Composting at Segregation Shed, Parao • Mixed/ Dry Waste disposed at Lamdeng SWM Plant	• QR Code system of D2D monitoring operatinalized • Target to complete QR tagging of all units by 15-12-2021 • Engagement of local clubs/SHGs in registration and IEC activities. • Installation of 100 pairs of 60L/100L capacity in commercial and residential areas to be completed by 30-11-2021 • Augmentation of machinery by adding a 709 Tata Tipper in pipeline
6	Lilong IW MC	0	0.5	• Composting	• Distribution of home composting bins, more vehicles and manpower by Dec 2021 • Cluster basis facilities at Lamdeng SWM Plant
7	Lamlai MC	1	0.8	• Composting (Home+Centralised) • Source segregation and centralised	• 1TPD FACILITY is segregation cum transfer station and composting. • Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)

Sl N0	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
				segregation	
8	Thoubal MC / Thoubal SWM Plant	2	0.5	• Segregation and composting	• 100% D2D by March 2022 • Hiring of Staffs for segregation and composting
9	Yairipok MC		0	• Composting	• 67% D2D at present and 100% D2D by Dec 2021 • Segregation shed & composting unit by Dec 2021 • Treatment Facility at Thoubal Cluster
10	Sikhong Sekmai MC	1.03	0.97	• Home Composting, Segregated plastic waste sent to recycler	• [Facility is transfer station, segregation and Composting pit/ aerobic] • 100% D2D by Dec 2021 • Treatment facilities at Thoubal cluster
11	Lilong Thoubal		0.5	• Composting	• 100% D2D and Composting Unit by Dec. 2021 • Treatment facilities at Thoubal cluster
12	Heirok NP		0.2	• Transfer and Segregation Station and Composting	• More composting unit by Dec 2021
13	Wangjing Lamding MC		0.5	• Segregation and transfer station	• More composting unit by Dec 2021
14	Andro MC	0.07	0.5	• Composting, Segregation and Recycling	• [0.07 TPD facility is manual segregation and composting] • 1 0 0 % D2D by Dec 2021 and transport of remaining segregated waste to Thoubal Cluster • Engagement of Recyclers
15	Kakching MC/ Kakching SWM Plant	6	2.3	• Composting & manual segregation of waste	• Purchase of 4 TATA 407; • Engagement of recyclers • IEC activities and Behavioral changes
16	Kakching Khunou MC	0.07	0.5	• Composting segregation & Recycling	• [0.07 TPD facility is manual segregation and composting] • 100% D2D by Dec. 2021 and transport of remaining segregated waste to Kakching cluster • Engagement of recyclers
17	Sugnu MC	0.05	0.5	• Composting, Segregation & Recycling	• [0.07 TPD facility is manual segregation and composting] • 1 0 0 % D2D by December 2021 and transport of remaining segregated wasted to Kakching cluster • Engagement of recyclers
18	Mayang Imphal MC	0	0	• Segregated plastic waste sent to recycler • Home Composting	• 1 0 0 % D2D by Dec 2021 • Composting plant targeted by Dec 2021 • Segregation shed to be operational by Dec 2021
19	Wangoi MC	0	0	• Composting	• 0
20	Kumbi MC	0	1.5	• Composting	• Land Available 0.27 Acre
21	Kwakta MC	0	0	• Composting	• Composting unit, by Dec. 2021
22	Moirang MC	0	0	• Composting	• Segregation at shed by Sept. 2021 • Composting plant by Oct 2021 • Competed Ready for commissioning • IEC Campaign to be organised for proper

Sl N0	Name of MSW processing unit	Installed capacity	Utilization (in TPD)	Type of processing	Action plan to bridge Gap between utilization and installed facility
					and 100% Source Segregation
23	Ningthoukhong MC	0	0.2	• Composting & sent back for re-cycling	• 100% D2D by Dec 2021 • Composting unit by Dec 2021
24	Bishnupur MC	0	0	• Sanitary Landfill	• 80% D2D (present) and 100% D2D by Dec 2021 • Exist 10 TPD capacity of landfill
25	Oinam MC	0	0	• Composting	• Composting plant by December 2021
26	Nambol MC	0	0	• Composting pit delayed due to ongoing Covid 2nd wave • Manual Segregation initiated at the segregation shed	• 100% D2D by Dec 2021 • Manual Segregation initiated at the segregation shed
27	Jiribam MC	4	2.61	• Composting, Send back for recycling, MRF	• Nil
	Total	116	111		

• 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 – 5 TPD
• Total No. of wards	305 Wards
• No. of wards having door to door collection service	290 Wards
• No. of wards practicing segregation at source	225 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	• **12** (twelve) uncontrolled dumpsite of **11** ULBs / **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	• No data
• Status of ULB wise Management of Solid waste	• At **Annexure – Table -1 and Table-2**

V. Bio-medical Waste Management:

Total Bio-medical generation	:	0.69 TPD	**Remarks :** • 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-25 Kg/hr.) Captive Facility = 2 Nos. (capacities-100 Kg/hr. & 105 kg./hr.) Deep Burial = 391 Nos.	
Status of Treatment Facility ETPs	:	14 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 March 2021

VII. Plastic Waste Management:

Total Plastic Waste generation	:	22.7 TPD
Treatment / Measures adopted for reduction or management of plastic waste	:	Plastic waste utilized for waste to energy plant, road construction and for recycling

Details of Alternate Treatment Technology being adopted by the State/UT	:	Nil
Identification of including drains contributing to river pollution and action as per NGT order on in-situ treatment	:	Joint survey was conducted and the report was submitted in January, 2020 Completed
Details of Nodal Officer appointed by Chief Secretary in the State / UT	:	• Shri M.H. Khan Additional Chief Secretary Forest and Environment Govt. of Manipur as Chairman, State level Monitoring Mechanism • Dr. T. Brajakumar Singh Joint Director, Directorate of Environment and Climate Change as Nodal Officer for appearing / VC / submission / compiling of reports before NGT/CPCB/CMC • Dr. W. Roshan Singh Executive Engineer Manipur Pollution Control Board
VIII. Details of meetings carried under the in the State/UT	:	• Last meeting under Chairmanship Chief of Secretary, Govt. of Manipur was held on 17th November 2021 • Once or twice in every month by Addl. Chief Secretary (Forest and Environment), Government of Manipur
IX Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river	:	At **Annexure – 4**

IX.	Ground water regulation	:	Nil
X.	Good irrigation practices being adopted by the State	:	1. Irrigation from Barrages and Dams through Canals 2. Loktak Lift Irrigation through open canals 3. River Lift Irrigation schemes by Minor Irrigation Department 4. Ground water Irrigation schemes through tube wells and dug wells by Minor Irrigation Department 5. Surface Minor Irrigation through Canals
XI.	Rain Water Harvesting	:	Nil
XII.	Demarcation of Floodplain and removal of illegal encroachments	:	1. The Manipur Flood Plain Zoning Act, 1987 has been enacted for zoning of flood plains of rivers in the State of Manipur 2. Boundaries and limits of the major rivers of the State were declared in 1988, by the Irrigation and Flood Control Dept, Manipur (now Water Resources Dept.) 3. Eviction and removal of illegal encroachments is being carried out from time to time. 4. Eviction along rivers in Imphal East & West was initiated in January, 2021. It is kept on hold due to Covid 19 pandemic. 5. Proposal for eviction along major rivers in Imphal area has been sent to the Flood Zoning Authority.
XIII.	Maintaining minimum e-flow of river	:	I. Maintaining minimum e-flow of river taken up by Forest Department is at **Annexure-6** II. Water is released from the Dams and reservoirs from time to time to maintain e-flow of various rivers in the state. III. For other rivers without reservoir or dam, no activities are taken up in the upper catchment for maintenance of e-flow as it is beyond the scope of Flood Division, WRD
XIV.	Plantation activities along the rivers	:	• No plantations taken up on the river banks of the 9 (nine) until the time reported upon
XV.	Development of biodiversity park	:	• No biodiversity parks have been developed so far. However, there are plans to develop such parks in the future as part of Forest Clearance proposals of different projects
XVI.	Reuse of Treated Water	:	• Nil
XVII.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards	:	• Nambul River (Priority – II) Targeted Action for achieving the bathing quality standards as at **Annexure - 5**
XVIII.	Status of Preparation of Action Plan by the 13 Coastal States	:	NA
XIX.	Regulation of Mining Activities in the State / UT	:	i. Final DSR for 9 (nine) districts have been submitted to Trade, Commerce & Industries for onward submission to SEIAA (State Level Environment Impact Assessment Authority) ii. DSR has been published by the concerned DCs for public consultation iii. Details for preparation of DSR for the

			remaining 7 (seven) districts were sought from all the DC. Senapati & Ukhrul DCs have submitted the details and draft DSR is being prepared
XX.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	:	Nil

Annexure - 1

A. Total Status of STPs in Imphal (as on 20th July 2021)

Particular	Unit	Phase I	Phase II	Ongoing NRCD Project	Total
Capacity of STP	MLD	27	49	17	93
Capacity of STP Utilized	MLD	13.27			13.27
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	4,700			4,700
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 12000 Nos. to 9,564 because 2,436 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 km sewer pipeline [25,291 km primary lines, 44.14 km secondary lines]
- Total target connection is 9,564 households
- Incremental status of utilization for 27 MLD at Lamphel Pat, Imphal West

	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Cumu-lative as on 20 Nov. 2021	Gap
Household Connected	4000	250	250	60	10	30	0	0	0	0	50	50	4700	4864
Utilization in MLD	9 MLD	9.5 MLD	10 MLD	10.26 MLD	10.28 MLD	10.35 MLD	10.35 MLD	10.35 MLD	10.35 MLD	10.35 MLD	13.13 MLD	13.27 MLD	13.27 MLD	13.735 MLD
Utilization in %	33%	35%	38%	38%	38%	38%	38%	38%	38%	38%	49%	49.14%	49.14%	50.86 %

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.
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 (July 2021)

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.	Consent status	Compliance Status (Source : Manipur Pollution Control Board			
											pH	TSS mg/l	COD mg/l	BOD mg/l
1	Imphal	1	Lamphel	24◦49''45'N 93◦54''58'E	2020	Operational	27	13.27 MLD	ASP		7.3	25	39	12

Annexure – 2

LIST OF WATER POLLUTING INDUSTRIES REGISTERED UNDER THE FACTORIES ACT, 1948 LOCATED OUTSIDE OF INDUSTRIAL ESTATE/FOOD PARK

Sl. No.	F/L	Name of unit	Location of factory	Factory area	Factory Type	Nearest River	District	Occupier/Proprietor	SEC
1	257	Shiva Oil Mill	Singjamei Chingamakha Chongtham Leikai	Singjamei	OilMill	Imphal	Imphal West	Chongtham Manglem Singh	85
2	322	Elija's Resting Center	Singjamei Mayengbam Leikai	Singjamei	Soap/Detergent	Imphal	Imphal West	Smt Irom (O) Manju Devi	85
3	35	Si Hou	Singjamei Makha Waikhom Leikai	Singjamei	Spices	Imphal	Imphal West	Sougaijam Homendro Singh	85
4	227	RKB Enterprises	Mayengbam Leikai, Singjamei	Singjamei	Spices	Imphal	Imphal West	Rajkumar Bishwajit Singh	85
5	136	MA Poultry Rearing & Feed Production	Takhel Mamang Leikai	Takhel	Poultry Feed	Iril	Imphal East	Khuraijam Mohendra Singh	2m(i)
6	236	Mnihara Beson Mill	Wangoi Thounaojam Leikai	Wangoi	Beson	Manipur	Imphal West	Longjam Boss Meitei	85
7	264	Manihar Oil Mill	Wangoi Thounaojam Leikai	Wangoi	Oil Mill	Manipur	Imphal West	L. Manihar Singh	85
8	268	Dish & Detergent Making Industry	Thoubal Achouba (Mela Ground)	Thoubal	Soap/Detergent	Manipur	Thoubal	Thounaojam Premila Devi	85
9	59	Tet (Tyre, Engine, Gas Body)	Uripok Khoisnam Leikai	Uripok	Automobile Workshop	Nambul	Imphal West	A Satyaranjan Sharma	85
10	103	Mohon Motor Works	Naoremthong Khullen Leikai	Naoremthong	Automobile Workshop	Nambul	Imphal West	Maibam Dian Mohan	2m(i)
11	303	Surjit Motor Works	Uripok yambem Leikai	Uripok	Automobile Workshop	Nambul	Imphal West	Soubam Surjit Singh	85
12	141	Para Fruit Products Pvt Ltd	Sagolband Nepra Menjor Leikai	Sagolband	Fruit Processing	Nambul	Imphal West	Kh Sanayaima Singh	2m(i)
13	276	Ratana Fruit	Uripok Polem Leikai	Uripok	Fruit Processing	Nambul	Imphal West	Longjam Sharatchandra Singh	85
14	337	Deba Food Industries	Sagolband Tera Khuraijam Leirak	Sagolband	Fruit Processing	Nambul	Imphal West	Keithellakpam Rasheshwori Devi	85
15	36	Kissan Oil Mill	Sagolband Khamnam Leikai	Sagolband	Oil Mill	Nambul	Imphal West	Sagolsem Vikram Singh	85
16	48	Ahanthem Oil Mill	Pishumthong, Oinam Leikai	Pishum	Oil Mill	Nambul	Imphal West	Ahanthem Arunkumar Singh	85

17	75	Imocha Oil Mill	Keishampat Thokchom Leikai	Keishampat	Oil Mill	Nambul	Imphal West	Thangjam Imocha Singh	85
18	89	Sharma Oil Mill	Uripok Achom Leikai	Uripok	Oil Mill	Nambul	Imphal West	Sijagurumayum Brajamani Sharma	85
19	317	Natural Spices	Uripok Sinam Leikai	Uripok	Spices	Nambul	Imphal West	Thokchom Sheela Devi	85
20	342	Roma Spices	Sagolband Nepra Menjor Leikai	Sagolband	Spices	Nambul	Imphal West	Nepram (O) Roma Devi	85
21	321	Athokpam Oil Mill	Wangbal Lamboithong	Wangbal	Oil Mill	Thoubal	Thoubal	Athokpam Bolai Singh	85
22	242	Bimolchand Oil Mill	Yairipok Poiroukhongjin	Yairipok	Oil Mill	Wangjing	Imphal East	Konthoujam Bimolchand Singh	85
23	210	Oinam Motors Maruti Suzuki Workshop	Yairipok Bishnunaha Pukhri Mapal	Yairipok	Automobile Workshop	Wangjing	Thoubal	Oinam Ananta Singh	85
24	294	Ingocha Tractor Repairing Centre	Yairipok Bishnunaha	Yairipok	Automobile Workshop	Wangjing	Thoubal	Takhelambam Ingocha Singh	85
25	126	Miranda Oil Mill	Wangjing Sorokhaibam Leikai	Wangjing	Oil Mill	Wangjing	Thoubal	Khundrakpam Miranda Devi	85

LIST OF WATER POLLUTING FACTORIES LOCATED WITHIN INDUSTRIAL ESTATE/FOOD PARK

Takyel Industrial Estate, Imphal West District, Manipur.

Sl No.	Name of unit	NearestRiver	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	NearestRiver	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 Private Limited	Imphal	Thangjam Joykumar Singh	Bakery

Annexure – 3

TABLE 1 : SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT - ULB WISE IN MANIPUR, NOVEMBER 2021

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Gap between Generated and (Collected + Managed at source)	Waste Collected (TPD)	Managed/Treated (in TPD)					
		2011 Census	2021 Projected				Facilities (TPD)	Managed / Treated	processed at source	Total	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*	2,65,573	3,50,050	158	125	16.5	100	90	16	106	33%	• 100% D2D by Dec 2021 • Waste to energy by December 2021
2	Lamshang NP	8,130	9813	3.43	2	1	0	2	0.43	2.43	29.15%	• Vigorous IEC campaign and implementation of stringent rules or bye-laws
3	Samurou MC	14818	18602	6.51	2.82	1.88	0.5	2.82	1.81	4.63	29%	• 100% D2D by Dec 2021 presently collected waste after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • [0.5 TPD FACILITY is segregation cum transfer station] • Increase in awareness. Increase in Manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong Laxmi MC	14,878	18,677	6.54	2.66	2.08	0.5	2.66	1.8	4.46	32%	• 100% D2D by Dec 2021 • 0.5 TPD facility is segregation cum transfer station • More Awareness campaign • Capacity building of manpower • By acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019 & 02.08.2021 to allocate a suitable SWM site for the ULB but yet to be allocated

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Gap between Generated and (Collected + Managed at source)	Waste Collected (TPD)	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	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
												till now)
5	Sekmai NP	5,065	6,358	2.23	1.6	0.36	1	1.3	0.27	1.57	30%	• QR Code system of D2D monitoring operatinalized Target to complete QR tagging of all units by 15-12- 2021 • Engagement of local clubs/SHGs in registration and IEC activities • Installation of 100 pairs of 60L/100L capacity in • commercial and residential areas to be completed by 30-11-2021 • Augmentation of machinery by adding a 709 Tata Tipper in pipeline
6	Lilong IW MC	12,427	15,600	5.46	1.5	1.96	0	0.5	2	2.5	54%	• Distribution of home composting bins, more vehicles and manpower by Dec 2021 • Cluster basis facilities at Lamdeng SWM Plant
7	Lamlai MC	4,601	5,776	2.02	1	0.02	1	0.8	1	1.8	11%	• 1TPD FACILITY is segregation cum transfer station and composting • Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach)
8	Thoubal MC	45,947	57,678	20.2	9	7.19	2	0.5	4	4.5	78%	• 100% D2D by March 2022 • Hiring of Staffs for segregation and composting
9	Yairipok MC	9,569	12,012	4.2	2	1.3	0	0	0.9	0.9	79%	• 67% D2D at present and 100% D2D by Dec 2021 • Segregation shed & composting unit by Dec 2021 • Treatment Facility at Thoubal Cluster

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Gap between Generated and (Collected + Managed at source)	Waste Collected (TPD)	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	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
10	Sikhong Sekmai MC	7,390	9,277	3.25	0.97	0	1.03	0.97	2.28	3.25	0%	• [Facility is transfer station, segregation and Composting pit/ aerobic] • 100% D2D by Dec 2021 • Treatment facilities at Thoubal cluster
11	Lilong TBL	24,900	31,258	10.9	2	5.74	0	0.5	3.2	3.7	66%	• 100% D2D and Composting Unit by Dec. 2021 • Treatment facilities at Thoubal cluster
12	Heirok NP	2,974	3,733	1.31	0.6	0.41	0	0.2	0.3	0.5	62%	• More composting unit by Dec 2021
13	Wangjing Lamding MC	8,055	10,112	3.54	1.5	1.34	0	0.5	0.7	1.2	66%	• More composting unit by Dec 2021
14	Andro NP	8,744	10,977	3.84	1.2	0.44	0.07	0.5	2.2	2.7	29.69%	• [0.07 TPD facility is manual segregation and composting] • 100% D2D by Dec 2021 and transport of remaining segregated waste to Thoubal Cluster • Engagement of Recyclers
15	Kakching MC	32,138	40,344	14.1	6.21	4.87	6	2.3	3.02	5.32	62.27%	• Purchase of 4 TATA 407 • Engagement of recyclers • IEC activities and Behavioral changes
16	Kakching Khunou MC	11,379	14,284	5	1.6	0.7	0.07	0.5	2.7	3.2	36%	• [0.07 TPD facility is manual segregation and composting] • 100% D2D by Dec 2021 and transport of remaining segregated wasted to Kakching cluster • Engagement of recyclers
17	Sugnu MC	5,132	6,442	2.25	1	0.15	0.05	0.5	1.1	1.6	28.89%	• [0.07 TPD facility is manual segregation and composting] • 100% D2D by Dec 2021 and transport of remaining segregated wasted to

No.	Name of ULB	Population		Solid Waste Generated (MTD)	Gap between Generated and (Collected + Managed at source)	Waste Collected (TPD)	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	Gen-Man Gap= [(Gen-Man)/ Gen] x 100	
												Kakching cluster • Engagement of recyclers
18	Mayang Imphal MC	24,239	34,428	10.7	4	5.65	0	0	1	1	91%	• 100% D2D by Dec 2021 • Composting plant targeted by Dec 2021 • Segregation shed to be operational by Dec 2021
19	Wangoi MC	9,106	11,431	4	1.1	1.4	0	0	1.5	1.5	63%	•
20	Kumbi MC	9,546	11,983	4.19	1.5	0.19	0	1.5	2.5	4	5%	• Land Available 0.27 Acre
21	Kwakta MC	8,579	10,769	2.94	1.28	0.32	0	0	1.34	1.34	54%	• Composting unit, by Dec 2021
22	Moirang MC	19,893	24,972	8.74	6.54	1	0	0	1.2	1.2	86%	• Segregation at shed by Sept 2021 • Composting plant by Oct 2021 • Completed, Ready for commissioning • IEC Campaign to be organised for proper 100% Source Segregation
23	Ningthoukhong MC	13,078	16,417	4.75	2	0.5	0	0.2	2.25	2.45	48%	• 100% D2D by Dec 2021 • Composting unit, by Dec 2021
24	Bishnupur MC	12,167	15,274	5.35	3.4	1.15	0	0	0.8	0.8	85%	• 80% D2D (present) and • 100% D2D by Dec 2021 • Exist 10 TPD capacity of landfill
25	Oinam MC	7,161	8,989	3.15	2	0.85	0	0	0.3	0.3	90%	• Composting plant by December 2021
26	Nambol MC	22,512	28,260	9.89	3	5.89	0	0	1	1	90%	• 100% D2D by Dec 2021 • Manual Segregation initiated at the segregation shed
27	Jiribam MC*	7,343	9,218	3.23	2.61	0	4	2.61	0.62	3.23	0%	Nil
Total		6,15,344	7,92,734	309	190	62.89	116	111	56.2	167.08		
PC to the generated wastes				61%	20%	38%	36%	18%	54%	**46%**		

Note : ***1.** Taking r=2.3 as annual Population growth rate [Ref : MoUD, GoI] *2. Waste generated is estimated including floating population @10%

TABLE 2 : SOLID WASTES GENERATION, COLLECTION AND MANAGEMENT – WARDWISE OF ULBs IN MANIPUR, NOVEMBER 2021

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 and Composting	• 100% by Dec 2021
2	Lamshang NP	9	9	80%	9	70%	0	Home composting and waste to power and waste to manure at Lamdeng SWM Plant	• Vigorous IEC campaign and implementation of stringent rules or bye- laws • D2D will be 100% implemented once Covid restriction is reduced and hindrance is solved
3	Samurou MC	11	11	52%	11	29%	0	Segregation cum transfer station	• 100% D2D by Dec 2021 presently collected after segregation of recyclable plastic waste is being transferred to Lamdeng SWM plant • Increase in awareness • Increase in Manpower and vehicles • Allotment of permanent land for management of solid waste is proposed to DC
4	Thongkhong Laxmi MC	11	11	65%	11	25%	0	Segregation cum transfer shed/station	• 100% D2D by Dec 2021 • More Awareness campaign • Capacity building of manpower • By acquiring a permanent sanitary landfill/SWM site (ULB has requested vide letter of even No. dated 18.05.2019 & 02.08.2021 to allocate a suitable SWM site for the ULB but yet to be allocated)
5	Sekmai Nagar Panchayat	9	9	65%	9	7%	0	• Home Composting is predominant in all wards • Central Composting at Segregation Shed , Parao • Mixed/ Dry Waste disposed at Lamdeng SWM Plant	• Mission mode Registration of households for D2D to achieve (i)90% units by 30-11-2021 (ii) 100% by 31-12-2021
6	Lilong IW NP	9	9	80%	8	80%	0	• Composting	• More composting unit by Dec 2021 • Plastic shredders machine and engagement of recyclers by Dec 2021
7	Lamlai MC	9	9	100%	9	100%	0.9	• Composting (Home +Centralised) • Source segregation and	• Treatment facilities at Lamdeng Waste to energy Plant (Cluster Approach) • Rigorous IEC activities

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 %			
								centralised segregation	
8	Thoubal MC	18	18	90%	18	30%	6.7	• Segregation and composting	• Collection to be done through NGOs and SHGs
9	Yairipok MC	9	7	86%	4	30	2.19	• Composting	• 100% D2D by Dec 2021 • Segregation shed & composting unit by Dec 2021 • Capacity building of manpower & Awareness Drive
10	Sikhong Sekmai MC	9	9	100%	9	100.0%	0.62	• Home Composting, Segregated plastic waste sent to recycler	• Treatment facilities at Thoubal Cluster
11	Lilong TBL	9	7	60%	6	66%	0	• Composting	• More composting Unit by Dec. 2021 • Plastic Shreders machine and Engagement of recyclers by Dec. 2021
12	Heirok NP	9	9	100%	3	15%	0	• Transfer and Segregation Station and Composting	• More composting unit by December 2021
13	Wangjing Lamding MC	9	9	100%	9	25%	0	• Segregation and transfer station	• More composting unit by Dec 2021
14	Andro NP	12	12	95%	12	80%	0.96	• Composting, Segregation and Recycling	• 100% D2D by December 2021 and transport of remaining segregated waste to Thoubal Cluster • Engagement of Recyclers.
15	Kakching MC	12	12	100%	12	100%	5	• Composting & manual segregation of waste	• Engagement of SHGs • Construction of another segregation shed and aerobic composting unit
16	Kakching Khunou MC	9	9	90%	9	80%	2	• Composting segregation & Recycling	• 100% D2D by Dec 2021 and transport of remaining segregated wasted to Kakching cluster. • Engagement of recyclers
17	Sugnu MC	9	9	95%	9	80%	1	• Composting, Segregation & Recycling	• 100% D2D by October 2021 and transport of remaining segregated wasted to Kakching cluster • Engagement of recyclers
18	Mayang Imphal MC	13	13	70%	7	60%	1.25	• Segregated plastic waste sent to recycler • Home Composting	• Segregation shed & composting unit by Dec 2021 • IEC Activities • Increasing vehicles/ Machineries

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 %			
									• Involvement of SHGs in D2D collection
19	Wangoi MC	9	5	50%	5	50%	0	• Composting	• More composting unit by December 2021
20	Kumbi MC	9	9	10%	0	0%	0.27	• Composting	•
21	Kwakta MC	9	9	100%	9	44%	0.625	• Composting	• Composting unit by Dec 2021
22	Moirang MC	12	12	93%	0	0%	0	• Composting	• Requested DC to allot land • Regorous IEC campaign to be held for source segregation
23	Ningthoukhong MC	14	14	80%	6	60%	1.31	• Composting & sent back for re-cycling	• Completion of composting Unit by Dec 2021
24	Bishnupur MC	12	12	81%	12	26%	5	• Sanitary Landfill	• Composting plant at 2.5 Acre
25	Oinam MC	9	9	100%	1	5%	0	• Composting	• 100% by Dec 2021
26	Nambol MC	18	11	27%	0	0%	3.21	• Composting pit delayed due to ongoing Covid 2nd wave. • *Manual Segregation initiated at the segregation shed	• Capacity building of sanitary Workers • Increasing manpower, vehicles and machinery • Awareness drive • Involvement of SHGs and active participation of CSOs in SWM
27	Jiribam MC	10	10	100%	10	100%	6.02	• Composting, Send back for recycling, MRF	• Nil
Total		305	290		225		36.435		
	In Percentage			95%		74%			

Table-3 : SOLID WASTES PROCESSING AND MANAGEMENT – WARDWISE OF ULBS IN MANIPUR, NOVEMBER 2021

Sl No.	Name of ULB or Name of Processing Unit	Processing unit Under Construction		Uncontrolled Dumpsite		Sanitary Landfill/ Controlled Dumpsite		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)		
1	Imphal MC and Lamdeng SWM Plant [Extension]	100	Composting, Waste to Energy plant and C&D	Nil	Nil	Nil	Nil	Nil	Nil
2	Lamshang NP	NA	Composting and manual segregation of waste. Waste to power and waste to manure at Lamdeng SWM plant	Nil	Nil	Nil	Nil	Nil	Nil
3	Samurou MC	0	Segregation cum transfer station [Completed]	Nil	Nil	Nil	Nil	Nil	Nil
4	Thongkhong Laxmi MC	0	Segregation cum transfer station [completed]	Nil	Nil	Nil	Nil	Nil	Nil
5	Sekmai NP	0	Aerobic, Composting and composting [completed]	0	0	Nil	Nil	Nil	Nil
6	Lilong IW NP	0.5	Manual segregation, composting	Nil	Nil	Nil	Nil	Nil	Nil
7	Lamlai MC	0	Composting and manual segregation of waste at the Lamlai Municipal Council Office [temporary/COMPLETED]	Nil	Nil	Nil	Nil	Nil	Nil
8	Thoubal MC	0	Manual Segregation & composting pit [completed]	1	2	Nil	Nil	Nil	Nil
9	Yairipok MC	1	Composting and manual segregation of waste	Nil	Nil	Nil	Nil	Nil	Nil
10	Sikhong Sekmai MC	0	Composting pit/ aerobic [Capacity of 0.03 completed]	Nil	Nil	Nil	Nil	Nil	Nil
11	Lilong TBL	0.5	Composting and manual segregation of waste	Nil	Nil	Nil	Nil	Nil	Nil
12	Heirok NP	0.2	Composting pit	Nil	Nil	Nil	Nil	Nil	Nil
13	Wangjing Lamding MC	0.3	Composting pit [proposed]	Nil	Nil	Nil	Nil	Nil	Nil
14	Andro NP	0	Manual segregation & composting [completed]	1	0.96	Nil	Nil	Nil	Nil
15	Kakching MC	2	Manual Segregation of waste & Aerobic	2	4.5	Nil	Nil	Nil	Nil

Sl No.	Name of ULB or Name of Processing Unit	Processing unit Under Construction		Uncontrolled Dumpsite		Sanitary Landfill/ Controlled Dumpsite		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)		
			composting[proposed]						
16	Kakching Khunou MC	0	Manual segregation, composting	1	2	Nil	Nil	Nil	Nil
17	Sugnu MC	0	Manual segregation, composting	1	1	Nil	Nil	Nil	Nil
18	Mayang Imphal MC	4	Manual segregation of waste & composting	Nil	Nil	Nil	Nil	Nil	Nil
19	Wangoi MC	0	Nil	Nil	Nil	Nil	Nil	Nil	Nil
20	Kumbi MC	nil	nil	1	0.27	Nil	Nil	Nil	Nil
21	Kwakta MC	0.25	composting pit	Nil	Nil	Nil	Nil	Nil	Nil
22	Moirang MC	6	Segregation (5), Composting (1) and recovery of reusable wastes	1	2.5	Nil	Nil	Nil	Nil
23	Ningthoukhong MC	0.6	Aerobic, composting and Segregation and recovery of reusable wastes	1	1.31	Nil	Nil	Nil	Nil
24	Bishnupur MC, Multi-Segregation shed at Chothe Village, Ward No. 12	5	Anaerobic	1	2.5	1	2.5	Nil	Nil
25	Oinam MC	1	Composting	1	0.4	Nil	Nil	Nil	Nil
26	Nambol MC	0.1	Manual Segregation, Aerobic and vermi-composting	1	3.21	Nil	Nil	Nil	Nil
27	Jiribam MC*	0	Manual segregation, Pit composting & Windrow Composting & MRF	Nil	Nil	1	1.72	Nil	1

Annexure – 4

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 October will get on 1-10th November. Therefore, Water Quality Report for October will be reproduced in the MPR of November.

STATUS OF WATER QUALITY OF IMPHAL RIVER, IRIL RIVER, MANIPUR RIVER, THOUBAL RIVER, WANGJING RIVER, KHUGA RIVER, KHUJAIROK RIVER, LOKCHAO RIVER AND NAMBUL RIVER FOR THE MONTH OF OCTOBER, 2021

1. Status of Water Quality of Imphal River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Koirengei	7.4	7.2	2.9	5.5	45
Minutrhong	7.4	7.4	3.1	7.7	60
Mahabali	7.4	7.4	3.1	6.9	70

2. Status of Water Quality of Iril River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Kangla Siphai	7.6	7.6	2.8	7.7	40
Porompat	7.5	7.5	2.9	7.4	45
Lilong	7.3	7.5	3.0	8.5	60

3. Status of Water Quality of Manipur River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Yairipok	7.3	7.6	3.1	8.0	65
Sekmaijing	7.4	7.2	3.1	7.9	70
Ithai	7.3	7.2	3.1	9.8	80

4. Status of Water Quality of Thoubal River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Litan	7.5	7.8	2.8	8.1	35

5. Status of Water Quality of Wangjing River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Heirok	7.2	7.4	3.2	8.2	55
Wangjing	7.2	7.4	3.1	9.5	85

6. Status of Water Quality of Khuga River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Churachandpur Bazar	7.2	7.4	3.0	8.5	80
Khuga Dam	7.5	7.6	2.0	8.1	25

7. Status of Water Quality of Khujairok River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Khujairok	7.2	7.5	3.2	9.6	175

8. Status of (Bishnupur) Water Quality of Lokchao River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Lokchao Bridge near Bishnupur Bazar	7.3	7.3	3.0	8.1	70

9. Status of Water Quality of Nambul River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Samushang	6.4	6.96.8	3.9	14.7	120
Naoremthong	6.2	7.1	3.6	14.6	135
Hump Bridge	4.4	6.8	4.6	13.1	250
Heirangoithong	4.5	6.9	4.6	14.1	275
Singda	4.5	7.4	2.9	7.5	25

10. Status of Water Quality of Kongba River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Kongba Eranpham	5.1	7.1	4.3	13.0	175
Kongba Erong	4.9	7.3	4.4	8.9	150

11. Status of Water Quality of Waisel Maril

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Meijrao Bridge, Hiyangthang	5.3	6.9	4.5	12.8	275
Kha Sanjenbam Mayai Leikai	6.8	7.3	3.6	12.1	105

12. Status of Water Quality of Moirang River

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Laikhurembi, Moirang Bazar	7.1	7.2	3.6	8.6	85

13. Status of Water Quality of Sewage Treatment Plant Effluent

Location	DO	pH	BOD Mg/L	COD Mg/L	Fecal Coliform (MPN/100ml)
Langol	2.4	7.55	22	13	40

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
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
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	60% completed
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	Covered 1 km
1.6	Renovation of existing crematoria along the river stretch	56 No.	Apr 2021	Completed 10 units
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 10 Nos.
1.8	Construction of Public toilets at vulnerable points	35 Nos. by IMC 20 Nos. under NRCD	Apr 2021	2 No. Completed
1.9	IEC / Public Awareness Activities	14 No. (one each in every ward)	Every month	Conducted regularly
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
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	
2.3	**Treatment option and capacity :** Installation of 2 (two) Sewage Treatment Plants (STPs) of 16 MLD and 1 MLD		Apr 2022	
2.4	Commissioning of the Imphal Sewerage Project Phase-I of 27 MLD		Dec 2019	Commissioned
2.5	Commissioning of the Imphal Sewerage Project Phase-II of 41 MLD		Apr 2022	
Action 3	**Protection of catchment area**			
3.1	In-situ augmentation of medicinal plants and economic plantation at catchment			Completed
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	
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	

Action	Target Action	Priority – II : Nambul River		
		Target Quantity	Time Line	Status
4.3	CC/RCC Retaining Walls with and without piles to be provided at the most eroded and vulnerable river banks.		Before 2021	