NGT MATTER
URGENT

No.8/151/2019-MPCB
GOVERNMENT OF MANIPUR
SECRETARIAT: FOREST & ENVIRONMENT DEPARTMENT

Imphal, the 21st July, 2020

To,

The Secretary, Ministry of Jal Shakti,
Dept. of Water Resources, River Dept. & Ganga Rejuvenation,
Sharam Shakti Bhawan, Rafi Marg, New Delhi-110 001New Delhi

Sub. :- Monthly Progress Report (MPR) for the Polluted River Stretches of Manipur in respect to the Hon'ble NGT's order in OA No. 673 of 2018-Reg.

Sir,

Reference is invited to the enclosed Letter No. 4/124/2019 (RRP) / DoE dated 10-07-2020 from Director, Envt. & CC-cum-Chairman, River Rejuvenation Committee, Manipur with regard to Monthly Progress Report (MPR) for the Polluted River Stretches of Manipur for the month of June, 2020 in compliance with the direction of Hon'ble NGT under its Order dt 06-12-2019 in OA No. 673/2018.

In this context, I am directed to submit herewith a copy of the afore mentioned **"Monthly Progress Report"** with a copy endorsed to the Apex Pollution Monitoring Body, CPCB; and to request you kindly to take further necessary action at your end.

Encl. : As above

Yours faithfully,

(A. Heera Singh)
Under Secretary to the Government of Manipur

Copy to:

1. Staff Officer to Chief Secretary, Govt. of Manipur
2. PS to Addl. Chief Secretary (For & Envt.), Govt. of Manipur
3. Joint Secretary (MAHUD), Govt. of Manipur
4. DH, WQM-I Division, Central Pollution Control Board,
   Parivesh Bhawan, East Arjun Nagar, Delhi-110032. **This is with reference to Letter No. A- 14011/O.A.673/2020-WQM-I dt. 04-02-2020.**
5. Director, Envt. & CC-cum-Chairman, River Rejuvenation Committee, Manipur
6. Member Secretary, Manipur Pollution Control Board
7. Guard file

MONTHLY PROGRESS REPORT (MPR) W.R.T. HON'BLE NGT OA 673/2018 FOR THE MONTH OF JUNE 2020 FOR THE STATE OF MANIPUR

Overall status of the State:

I. Total Population:

II. Estimated Sewage Generation (MLD) : 114.054 MLD

III. Sewage Treatment Plant :

- Total Sewage Generation (MLD) : 114.054 MLD
- Total Existing Treatment Capacity (MLD) : 27 MLD
- Capacity Utilization:

Town	Existing STP Capacity	Capacity Being Utilized	Whether Complying or not	STP Proposed, if any	Status (DPR/ tendering/ under construction/ ETC etc.)
Imphal	27 MLD	8 MLD	No	17 MLD	• Sanctioned under NRCD • Completed tender process • Execution under progress
				49 MLD	Prepared DPR for Imphal Sewerage Project Phase II, looking for funding

IV. Industrial:

- Total No. of industries/ industrial estates : 72 Nos. Inside Industrial Estate / Food Parks
- Total Industrial discharge : NIL
- Total No. of industries having ETPs : NIL
- Total existing CETPs : 1 No. [Nilakuthi Food Park]
- Total no. of GPIs/ SPIs : NIL
- No. of industries having OCEMS : NIL

Town	Existing ETP Capacity	Whether Complying or not	CETP Proposed, if any	Status (DPR/ tendering/ under construction etc.)
Imphal	400 Kilo Liter / day	Yes	3 (three) CETP proposed, viz. i. Talyel Industrial Estate ii. TeraUrak Industrial Estate iii. Kuraopopi Industrial Estate	Under preparation of DPR, completing by December 2020

V. Solid Waste Management:

- Total Municipal Solid Waste generation (MTD) : 284.33 MTD
- Existing facilities (MTD) :177.91 MTD
  [121.31 MTD for processed
  56.60 MTD for Landfill]

STATUS OF POLLUTED RIVER STRETCHES IN THE STATE:

I. Total No. of Polluted River Stretches : 9 (nine)

II. In-situ Bio-remediation : Survey work is undergoing, sanctioned by the State Govt. under Plan to start work

III. Sewage Treatment Plant :

- Total Sewage Generation (MLD) : 109.75 MLD
- Total Existing Treatment Capacity (MLD) : 27 MLD
- Capacity Utilization:

Town	Existing STP Capacity	Capacity Being Utilized	Whether Complying or not	STP Proposed, if any	Status (DPR/ tendering/ under construction/ ETC etc.)
Imphal	27 MLD	8 MLD	Complying	49 MLD	• Prepared DPR for Imphal Sewerage Project Phase II, looking for funding
				17 MLD	• Sanctioned under NRCD • Completed tender process • Execution under progress
				16.75 MLD	• Proposed for Phyto-remediation • Works will start under state plan during 2020-21

IV. Industrial:

- Total No. of industries/ industrial estates : No any polluting industry nearby the Polluted River Stretches
- Total Industrial discharge : NIL
- Total no. of industries having ETPs : NIL
- Total existing CETPs : 1 No. [Nilakuthi Food Park]
- Total No. of GPIs/ SPIs : NIL
- No. of industries having OCEMS : NIL

Town	Existing ETP Capacity	Whether Complying or not	CETP Proposed, if any	Status (DPR/ tendering/ under construction/ ETC etc.)
Imphal	400 Kilo Liter / day	Yes	2 (two) CETPs proposed, viz. i. Talyel Industrial Estate ii. TeraUrak Industrial Estate	Under preparation of DPR, completing by December 2020

iii. Solid Waste Management:

- Total Municipal Solid Waste generation (MTD) : 46.471 MTD
- Existing facilities (MTD) : 60 MTD [waste to energy]

iv. Bio-medical/ Hazardous/ Plastic Waste Management:

- Total Bio-medical/ Hazardous/ Plastic Waste generation: 0.70 TPD [Bio-medical waste]
  1.17 TPD [Hazardous Waste]
  22.7 TPD [Plastic Waste]
- Total no. of hospital and bio-medical waste generation/ treatment : 0.65 TPD
- Total of units generating Hazardous waste/ treatment facility : NIL

v. Ground water regulation : NIL

vi. Maintaining minimum e-flow of river : Afforestation at catchment area is undergoing for maintaining e-flow

vii. Plantation along river : Continuing

viii. Development of biodiversity park : No any biodiversity park at the river bank, however, few garden have been developed at the river bank where land is available under NRCD project

ix. Reuse of Waste water : NIL

NATIONAL MISSION FOR CLEAN GANGA
FORMAT FOR SUBMISSION OF MONTHLY PROGRESS REPORT BY STATES/UTS
(Hon'ble NGT in the matter of OA No. 673/2018 dated 06.12.2019)

Sl.No.	Activity to be monitored	Timeline	Submission of Progress by State/UT-Compliance Status
1	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	Initiated in this current financial year 2020-21 under State Plan
	Commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured	31.03.2020	17 MLD with connecting 72 drains under construction through NRCD fund [target year April 2022]
2	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning	31.03.2021	• 27 MLD already commissioned [status enclosed at **Annexure - 1**] • 17 MLD with connecting 72 drains under construction [target for completion in April 2022] • 49 MLD DPR ready, waiting for fund
5	Chief Secretaries may set up appropriate monitoring mechanism at State level • Specifying accountability of nodal authorities not below the Secretary level • Chief Secretaries may have an accountable person attached in their office for this purpose.	22.01.2020	• RRC has constituted under Chairmanship of Director (Environment and Climate Change), Govt. of Manipur; • Prepared Action Plan of the 9 (nine) Polluted River Stretches in Manipur (1 under Priority II and 8 under Priority V); • Action Plan for Priority II River has already been recommended by CPCB and the Action Plan for Priority V rivers also been recommended by the CPCB; • RRC had been reviewing the follow up activities of the directions from Hon'ble NGT OA 673 of 2018; • Constituted on 23rd January, 2020 and monitored by State Level Monitoring Mechanism Committee under Chairmanship of Commissioner (PHE), Govt. of Manipur
	• Monitoring at State level must take place	Fortnightly Commencing 21.12.2019	Yes

Sl.No.	Activity to be monitored	Timeline	Submission of Progress by State/UT-Compliance Status
6	Progress report may be furnished by the States/UTs to • Secretary, Ministry of Jal Shakti • Member Secretary, CPCB	Monthly (preferably before 20th of every month)	
6.1	Progress Report may be comprised of details along with completion timelines on: i. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment ii. <u>Status of STPs, I&D and sewerage networks</u> a. Details of Existing Infrastructure, b. Gap Analysis, c. Proposed along with completion timeline iii. <u>Status of CETPs</u> a. Details of Existing CETP and ETP Infrastructure, b. Gap Analysis, c. Proposed along with completion timeline, d. No. of industries and complying status iv. <u>Status of Solid Waste Management & Details of Processing Facilities</u> a. Details of Existing Infrastructure, b. Gap Analysis, c. Proposed along with completion timeline		Identification of Polluting Sources : • Detail survey is under progress • Disturbed in progress due to lockdown and rainy season • Target to complete in 31st August 2020 Status of STPs and I&D • 27 MLD of AWS technology under Imphal Sewerage Project Phase I of PHED; • 17 MLD of MBBR is under progress [ongoing NRCD project] • 14.55 km pipeline for I & D under progress [ongoing NRCD project]; • Completed 69.44 km meters pipeline for sewerage network under Imphal Sewerage Project Phase I of PHED; • Out of target 12,000 households, 3000 households had already been connected to the existing sewer network under Imphal Sewerage Project Phase I of PHED;; • DPR for 49 MLD has already been prepared by PHED, looking for funding agency Status of Solid Waste Management • Total waste generated in Manipur State is 284.33 MTD • Existing facilities of 177.91 MTD [121.31 MTD for processed, 56.60 MTD for Landfill] • No gap • Already progress

Sl.No.	Activity to be monitored	Timeline	Submission of Progress by State/UT-Compliance Status
	v. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;		Latest Water Quality of polluted rivers is enclosed at **Annexure – 2;**
	vi. Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.		Preventing dumping of waste and scientific waste management has been continuing effectively;
	vii. Ground water regulation		No regulation of ground water
	viii. Adopting good irrigation practices,		Not adopting good irrigation practices, except from river or rain water harvesting
	ix. Protection and management of Flood Plain Zones (FPZ)		Protection and management of Flood Plain Zones (FPZ) has been enforced and removing all the illegal encroachers time to time by the Water Resources Department
	x. Rain water harvesting,		No any rain water harvesting practices as of yet;
	xi. Maintaining minimum environmental flow of river		Environmental flow of river has been maintained through afforestation at degraded catchment;
	xii. Plantation on both sides of the river		Plantation on both sides of the river has been continuing time to time;
	xiii. Setting up biodiversity parks on flood plains by removing encroachment		No any biodiversity parks at river bank since not getting any land;

ANNEXURE – 1

FORMAT FOR SEWAGE TREATMENT PLANTS AND UTILIZATION OF SEWAGE

Sr. No.	City / Town	No. of STP	Location of STP	Coordinates of STP	STP Comm-issioned in (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 (In mg / Lit except pH)			
											pH	TSS	COD	BOD
1	Imphal	1	Lamphel	$24^0$49″45″ N $93^0$54′58″ E	2020	Operational	27	8	ASP	---	6.9	1.3		1.2

PHASE - I		
Sl. No	**Particular**	**Remark**
1	Capacity of STP	27 MLD
2	Sewer Pipe (Total Length)	
	i) Primary (Main Pipe)	25291 Rm
	ii) Secondary (Sub-main Pipe)	44138 Rm
		69429 Rm
		≈ 69.43 Km
3	Targetted Connection	12000 Nos. so far connected 3000 Nos.
4	Lift Station	5 Nos.
5	Method of Treatment	ASP (Activated Sludge Process)/ EAP (Extended Aeration Process)
6	Population	1.73 lakhs

PHASE - II (DPR Completed and FIB Approved)		
Sl. No	**Particular**	**Remark**
1	Capacity of STP	49 MLD
2	Sewer Pipe (Total Length)	277289 Rm
		≈ 277.29 Km
3	Targetted Connection	72500 Nos. through domestic connection.
4	Lift Station	21 Nos.
5	Method of Treatment	SBR (Sequencing Batch Reactor)
6	Population	4,33,414 heads by 2035 AD
7	Area to be covered	Approx. 35 Sqkm (Covering 16 IMC and fringe areas)

*** FIB (Foreign Investment Board)**

ANNEXURE - I

MANIPUR POLLUTION CONTROL BOARD
Imphal West D.C. Office Complex
Lamphelpat, Imphal- 795 004
e-mail: pcb-man@nic.in

STATUS OF WATER QUALITY REPORT (JANUARY, 2020–MAY, 2020)

1. Manipur River

D.O. in (mg/L), BOD in (mg/L) & FC in MPN/100 ml

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Yairipok	7.5	7.0	3.2	45	7.4	6.8	3.02	30	7.3	6.5	3.3	45	7.3	6.2	3.7	25	7.2	6.6	3.3	50
Sekmaijing	7.8	7.09	2.8	35	7.7	74	2.9	25	7.9	7.2	3	40	8.0	7.1	3.1	45	7.5	7.3	2.4	40
Ithai	7.3	7.6	3.3	30	7.2	7.4	3.4	20	7.2	.2	3.3	40	7.1	7.1	3.4	35	7.5	7.6	3.1	45

2. Thoubal River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Litan	7.2	7.1	3.8	10	7.2	6.8	3.7	5	7.3	6.7	3.6	20	7.4	6.6	3.6	10	7.8	6.5	3.3	Nil

3. Wangjing River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Heirok	7.7	7.4	3.6	40	7.6	7.2	3.7	30	7.4	6.8	3.6	40	7.2	6.5	3.6	30	7.1	6.8	3.4	30

MANIPUR POLLUTION CONTROL BOARD
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Lamphelpat, Imphal- 795 004
e-mail: pcb-man@nic.in

4. Imphal River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Koirengei	7.7	8.1	2.62	45	7.5	.9	2.84	30	7.5	7.5	2.8	35	7.4	7.2	2.9	25	7.5	7.3	2.8	45
Minuthong	7.4	7.4	3.4	30	7.3	6.9	3.6	35	7.2	6.6	3.6	40	7.3	6.4	3.7	45	7.4	6.5	3.2	55
Mahabali	7.2	6.7	3.02	25	7.3	6.4	3.2	25	7.2	6.2	3.3	35	7.1	6.1	3.4	15	7.3	6.8	3.2	25

5. Iril River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Kangla Siphai	7.7	7.09	2.2	15	7.6	7.0	2.9	10	7.6	6.8	3.0	20	7.5	6.7	3.2	5	7.3	7.1	3.2	25
Porompat	7.9	7.7	3.4	15	7.8	7.4	3.3	10	7.5	6.9	3.5	20	7.2	6.5	3.8	10	7.4	7.1	3.3	30
Lilong	7.2	7.29	3.4	35	7.1	6.9	3.5	30	7.2	6.5	3.6	45	7.3	6.1	3.8	40	7.6	7.0	3.2	50

6. Khuga River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Khuga River Chura-chandpur	7.2	7.69	3.04	25	7.3	7.3	3.1	25	7.3	7.0	3.4	40	7.2	6.8	3.7	35	7.4	7.0	3.3	55
Khuga Dam	7.3	7.7	3.4	Nil	7.3	7.2	3.5	Nil	7.2	7.0	3.4	5.0	7.2	6.9	3.5	Nil	7.4	7.1	3.0	Nil

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7. Khujairok River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Moreh Bazar	7.8	7.42	3.4	95	7.5	7.2	3.6	85	7.4	7.1	3.6	100	7.5	7.0	3.6	135	7.7	7.2	32	100

8. Lokchao River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Lokchao bridge at Bishnupur	7.1	6.8	3.7	20	7.0	6.6	3.6	25	No Flow	No Flow	No Flow	No Flow	No Flow	No Flow	No Flow	No Flow	7.1	7.2	3.1	20

9. Nambul River

	January				February				March				April				May			
	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC	pH	D.O.	BOD	FC
Singda	7.2	8.1	2.8	Nil	7.1	7.8	3.0	Nil	7.1	7.7	3.0	10	7.2	7.6	3.1	Nil	7.5	7.5	3.4	Nil
Samushang	6.4	5.3	4.6	95	6.5	4.9	4.9	90	6.5	4.8	4.8	170	6.6	4.9	4.7	180	6.6	4.8	5.5	225
Naorem-thong	6.9	5.3	3.9	65	6.8	5.1	4.03	69	6.8	5.1	4.1	115	6.9	5.2	4.2	100	7.1	5.5	4.6	136
Hum bridge	6.8	3.6	5.6	115	6.7	3.2	5.7	130	6.7	3.1	5.9	150	6.6	3.1	6.2	175	6.9	3.3	6.5	200
Heirangoi-thong	6.8	4.1	5.4	185	6.7	3.7	6.2	188	6.7	3.5	6.3	210	6.7	3.3	6.4	200	7.1	3.4	6.8	235