

Meghalaya State Pollution Control Board

Forests & Environment Department, Government of Meghalaya

'ARDEN' Lumpyngngad, Shillong - 793014

Website : <http://megspcb.gov.in>



No. MPCB/GEN-285/ANNEXED- IX B)/2023-2024/6

Dated Shillong the 08th May 2023

To,

The Secretary
Government Of India
Ministry of Jal Shakti
Department of Water Resources, River Development & Ganga Rejuvenation
Shram Shakti Bhawan
Rafi Marg, New Delhi -110001
(Email: ruby.raju@nmcg.nic.in)

Sub: Submission of Monthly Progress Report for ensuring compliance to the Hon'ble NGT matter OA No 673/2018 for the month of January to March 2023.

Sir

With reference to the above, please find enclosed herewith the Monthly Progress Report for the month of January to March 2023 for favour of your kind information & necessary action.

Enclo : As stated

Yours faithfully


(SHRI. R. NAINAMALAI, IFS)
MEMBER SECRETARY
MSPCB, SHILLONG

Memo. No. MPCB/GEN-285/(Annexed -IX B)/ 2023-2024/6A Dated Shillong the 08th May 2023

Copy to:-

1. Shri. P.K.Mishra, DH, WQM-I, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 for his kind information. Email: eepkm.cpcb@nic.in/suniti.cpcb@gov.in
2. The Addl Principal Chief Conservator of Forest (Climate Change ,Research & Training) cum Chairman of River Rejuvenation Committee ,Meghalaya, Shillong-793001 for his kind information
3. The Director of Urban Affairs cum Member Convener of the RRC ,Meghalaya, Shillong for information


(SHRI. R. NAINAMALAI, IFS)
MEMBER SECRETARY
MSPCB, SHILLONG



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 MONTH OF JANUARY TO
MARCH 2023 FOR THE STATE OF MEGHALAYA

Overall status of the State:

- I. Total Population: Urban Population & Rural Population : (5,95,450 & 23,71,439)29,64,007
- II. Estimated Sewage Generation (MLD)(2021) : 51 MLD in Urban areas
- III. **Details of Sewage Treatment Plant** :
- Existing no of STPs and Treatment Capacity (MLD) : 9
 - Capacity Utilization of existing STPs (MLD) : 2.005
 - MLD of Sewage being treated through alternate technology : 9.1 (propose for treatment by septage plant under SBM)
 - Gap in treatment Capacity in MLD : 22.98 (Propose by other forms of treatment under SBM)
 - No of operational STPs : 9
 - No of complying STPs : 9
 - No of Non-complying STPs : -

Details of Each Existing STP in the State

No.	Location	Existing STP Capacity MLD	Capacity being utilised MLD	Operational Status of STP	Compliance status of STP
1.	Residential colony of Meghalaya Cements Ltd., Thangskai, East Jaintia Hills District	0.1	0.06	Operational	Complying
2.	Residential colony of Star Cements Ltd., Lumshnong, East Jaintia Hills District	0.4	0.239	Operational	Complying
3.	North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Mawdiangdiang	1.0	1.0	Operational	Complying
4.	Residential colony of M/S Lafarge Umiam Mining Pvt. Ltd., Nongtra	0.12	0.03	Operational	Complying
5.	Residential School –JNV, Mawphlang	0.1	0.02	Operational	Complying
6.	Polo Market ,Shillong	0.05	0.05	Operational	Complying

7.	Green valley industries Ltd ,Nongsning,EJH	0.03	0.03	Operational	Complying
8.	Dalmia Cement (Bharat) Ltd,Thangskai,EJH	0.05	0.04	Operational	Complying
9.	Septage Treatment plant,Shillong	0.115	0.06	Operational	Complying
10.	i.Faecal Sludge &Septage management ,Khliehriat ii.Purchase order for 3000 litres cess pool car has been placed with TATA Motors,	0.04	100 %		To be made operational.

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.	FSSM,Shillong	0.35	90% physical progress		The estimated date of completion is June 2023
	5 nos of On- site treatment plant,Shillong	13.42	60 % physical progress		
2.	FSSM,Jowai	0.05	85% physical progress.		The estimated date of completion is July, 2023

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.				
City Sanitation Action Plan for the Municipal Boards of Jowai, Tura, Baghmara, Resubelpara, and Williamnagar have been approved by the SLTC under SBM 2.0 and Ministry approved and sanction is currently awaited.				

IV. Details of Industrial Pollution

- No. of industries in the State : **1559**
- No. of water polluting industries in the state : **260**
- Quantity of effluent generated from the industries in MLD : **3.5**
- Quantity of hazardous sludge generated from the industries in TPD : **1.3105**

- No. of industrial units having ETPs : **255**
- No of Industrial units connected to CETPs : **Nil**
- Compliance status of the ETPs : **Complying**
- No and total capacity of CETPs (details of existing/under construction /proposed) : **Nil**
-

Town	No of Industries	Industrial discharge (MLD)	Status of ETPs	Status of CETPs(existing, under construction &proposed)
Shillong	130	1.7585	Complying	-
Byrnihat	29	0.676	Complying	-
Nongstoin and Mairang	37	0.276	Complying	-
Ladrymbai&Khliehriat	12	0.029	Complying	-
Jowai	20	0.40	Complying	-
Khliehriat,Myndihati&Lumshnong	11	0.15	Complying	-
Tura	16	0.20	Complying	
Umiam	5	0.135	Complying	-

STATUS OF ULB WISE MANAGEMENT OF SOLID WASTE

V. Solid Waste Management

- Total number of Urban Local Bodies and their Population : **10 Nos , 3,75,930**
- Current Municipal Solid Waste Generation : 245 TPD
- Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg. Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), bimethanation, MRF etc.: Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap> 20%):

EXISTING SWM PLANTS IN MEGHALAYA						
SN	Town	Facility Type	Installed Capacity	Nos.	Utilization	Action Plan to utilise installed capacity
1	Shillong	Waste to Recovery centre	8 TPD	4	12.72 TDP (6.00 TPD Organic	3 nosOperational. 1 completed and yet to be made operational (training of operator in progress

					Compost + 6.72 Recyclables)	
2.	Tura	Waste to Compost	50 TPD	1	0 TPD	Yet to be made operational
3	Nongpoh	Waste to Compost	15 TPD	1	0 TPD	Yet to be made operational
4	Shillong	Waste to Compost	170 TPD	1		The plant is 100% operational
5	Khliehriat	Composting Plant	0.1 TPD	1		Completed and is on trial stage.

- No. And capacity of C & D waste processing plants in TPD (Existing, proposed and under construction):
None
- Total no. Of wards, having door to door collection service, no. Of wards practicing segregation at source:**64 wards have door to door collection service; 36 wards practicing segregation at source.**
- Details of MSW treatment facilities proposed and under construction (no. Capacity, and technology):

PROPOSED SWM PLANTS IN MEGHALAYA				
SN	Town	Facility type	Proposed capacity	Nos.
1.	Shillong	Waste to Energy	100 TPD	1
2.	Tura	Waste to Energy	50 TPD	1
		Waste Recovery Centre	2 TPD	1
3.	Nongpoh	Waste Recovery Centre	2 TPD	1
4.	Jowai	Waste Recovery Centre	2 TPD	1
5.	Williamnagar	Waste Recovery Centre	2 TPD	1
6.	Baghmara	Waste Recovery Centre	2 TPD	1
7.	Resubelpara	Waste Recovery Centre	2 TPD	1
8.	Nongstoin	Waste Recovery Centre	2 TPD	1
9.	Mairang	Waste Recovery Centre	2 TPD	1
10.	Khliehriat& Jowai	Solid Waste processing & Disposal Facility to cater to both Jowai &Khliehriat .	10 TPD	1

- No. And area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills:

- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers: **8.94 acres (a MOU has been signed with CHAMHANA GW INDIA PVT.LTD on 22nd June 2020 which will include the setting up of waste to Energy plant at Tura and Shillong of 10TPD and 100 TPD capacities respectively. These plants will remediate the existing legacy waste at the present dumping grounds) For the Tura Plant, trial runs are underway and operator will scale up operation thereafter.**
- No. Of drains falling into rivers and no. Of drains having floating racks/screens installed to prevent solid waste from falling into the rivers: **Garbage traps have been installed in 6 nos of drains connecting to the rivers and one oil grease trap of 5 Kld installed in one drain of Umkhras river in Shillong City**

VI. Bio-medical Waste Management:

- Total Bio-medical generation: **1276.24 Kg/day**
- No. of Hospitals and Health Care Facilities: **554**
- Status of Treatment Facility/CBMWTF:

a) Common Bio-Medical waste treatment is completed and is in operation.

b) The Urban Affairs has procured three Bio-medical Wastes vehicles solely for transport of Bio-medical Wastes

VII. Hazardous Waste Management:

- Total Hazardous Waste generation: **498.4434 KL/annum**
- No. of Industries generating Hazardous waste: **19 (Nineteen)**
- Treatment Capacity of all TSDF's: **Not available**
- Avg. Quantity of Hazardous waste reaching the TSDF's and Treated : **Nil**
- Details of on-going or proposed TSDF: **None**

VIII. Plastic Waste Management:

- Total Plastic Waste generation: **9.16 TPD**
- Treatment/Measures adopted for reduction or management of plastic waste:

(a) The plastic wastes are collected as municipal waste. The plastic waste was segregated from the dry waste at the dumpsite and collected for compaction and baling and send to Cement Plants for co-processing to be used as Fuel.

(b) Used for roadmaking in some parts of Tura, and Nongstoin.

IX. Details of Alternate Treatment Technology being adopted by the State/UT:

X. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment:

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: The Government has constituted a Monitoring Committee under the chairmanship of the Principal Secretary to the

Govt.of Meghalaya,Forests & Environment Department vide no.ENV.4/2018/426 DatedShillong the 19th June 2020

- XII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:
- XIII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river:**Enclosed asII A to Annexure IX B**
- XIV. Ground water regulation: **For Domestic purpose –District Level Committee Ground Water Resource(Deputy commissioner of respective District as Chairman and official of Water resources as Member Secretary) looks after it and grant NOCFor Commercial purpose - State Level Committee Ground Water Resource(Commissioner & Secretary, Water Resources as Chairman and Regional Director, CGWB, NER, as Member Convener) looks after it and grant NOC.**
- XV. Good irrigation practices being adopted by the State:**Traditional Bamboo Drip Irrigation**
- XVI. Rain Water Harvesting:**(a) Rain water harvesting implemented for Schools and government buildings.(b) Incorporated as one of the condition while giving permission for any house construction**
- XVII. Demarcation of Floodplain and removal of illegal encroachments:**(a)Network design including the proposed additional installation submitted.Field Survey report ofUmkhrah,Nonbah ,Umtrew and Myntduhave been submitted and various inputs for catchment models have also been prepared .80% of the work have been completed.**
(b) Setting up of HO stations was completed .Hydro-meteorological data from the installed instruments have been collected and compiled for the month of July
(c) The rain gauges and staff gauges have been installed in all the four study river basins and data collection was initiated from 1st May 2022.
(d) Flood models of Umkhrah,Nonbah ,Umtrew and Myntdu have been simulated for 2,5,10,25,50, and 100 years return period floods and team is reviewing the results.
(e)Calibration of flood models for different flood events have been started .Method to estimate areal rainfall from observed point rainfall is being analysed.
(f) Major work of Draft Feasibility Study Report is completed in July 2022.
(g) Flood inundation scenarios with and without considering the flood protection at various locations in Umkhrah,Nonbah ,Umtrew and Myntdu have been generated .
(h) Draft report on Flood Plain Zoning and Flood Mitigation Measures has been submitted and is under review by the Department
- XVIII. Maintaining minimum e-flow of river:**Perennial rivers**
- XIX. Plantation activities along the rivers: Sanction approved for treatment of 48.58 ha (preliminary works for creation of plantations and creation of 94.5 polypot nursery beds for future plantations)

- XX. Development of Biodiversity Park:**No proposal for setting due to non-availability of Government land.**
- XXI. Reuse of Treated Water:**Stand-alone ETPs are operational in 260number of hotels/guesthouse/health care centers /Industries and treated wastewater are reuse for gardening/cleaning purpose.**
- XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:**Nonbah river**
- XXIII. Status of Preparation of Action Plan by the 13 Coastal States:**Not applicable to the State of Meghalaya**
- XXIV. Regulation of Mining Activities in the State/UT:**Mining activities in the State is being regulated under the following acts and rules**
- a) **Mines and Minerals (Development and Regulation) Act 1957 and its subsequent amendments**
 - b) **EIA notification ,2006 and its subsequent amendments**
 - c) **Meghalaya Minor mineral Concession Rules 2016 and its subsequent amendments**
 - d) **EP Acts,1986**
 - e) **The Air (Prevention and Control of Pollution)Act,1981 and the Water (Prevention and Control of Pollution)Act,1974**
- XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring:
- a) **Units which failed to comply to the consent conditions have been issued directions,show cause notice and closure notices**
 - b) **Units which have been operating without consent from the Pollution Control Board have been issued closure notices under relevant Acts and Rules**
 - c) **Filing of Complaints to the District Courts**

POLLUTED RIVERSTRETCHES

I.	Total No. of Pollution River Stretches	7(Umkhrah&Umshyrpi river –Priority I:Umtrew,Nonbah&Kyrhukhla river –Priority IV: Myntdu&Lukha –Priority V)						
		Umkhrah	Umshyrpi	Umtrew	Nonbah	Kyrhukhla	Myntdu	Lukha
II.	In-situ Bio-remediation	Work completed in 5 drains .			Phycoremediation has already started for Kyrhukhla river. and Lukha river 10% of the Bio-remediation work completed in 3 drains in Myntdu river .			
III.	Sewage Treatment Plant							
	Total Sewage Generation (MLD)	33.52	15.47	0.36	3.10	0.8	3.07	0.5
	Total Existing Treatment Capacity (MLD)	0.165				0.04		
	Capacity Utilization	0.11						

Note: Garbage traps have been installed in 6 nos. of drains connecting to the rivers and one oil grease trap of 5kld installed in one drain of Umkhrah River.

Town	Existing STP	Capacity Being Utilized	Whether Complying or not	STP Proposed if any	Status (DPR/tendering/under construction/ETC etc.)
Shillong (catchment of Umkhrah&Umshyrpi river)	0.165 MLD	0.11	-		90 % physical progress for 0.35 MLD FSSM,Shillong 60% physical progress for 13.42 MLD (5 nos) of On-site treatment plant,Shillong 0.115 MLD FSSM is completed and functional
Faecal Sludge Treatment Plant,Khliehriat	0.04 MLD				Completed and yet to be make operational

Jowai catchment of	-	-	-	FSSM	35% physical progress for 0.05 MLD FSSM,Jowai.			
Byrnihat(catchment of Umtrew river)					Safe sanitary latrine under Swachh Bharat mission (Gramin) for 364 households			
Nongstoin (catchment of Nonbah river)					Safe sanitary latrine under Swachh Bharat Mission (urban) for 424 households			
Khliehriat,Ladrymbaietc (catchment of Kyrhukhla river)					Safe sanitary latrine under Swachh Bharat mission (Gramin) for 220 households			
Myndihati, Khliehriat&Lumshnongetc (catchment of Lukha River)					Safe sanitary latrine under Swachh Bharat mission (Gramin) for 366 households.			
IV.	Industrial	Umkhrah	Umshyrpi	Umtrew	Nonbah	Kyrhukhla	Myntdu	Lukha
•	Total No. of industries/industrial estates	121	9	29	34	12	20	11
•	Total Industrial discharge	1.3035	0.455	0.676	0.276	0.029	0.40	0.15
•	Total No. of industries having ETPs	121	9	29	34	12	20	11
•	Total existing CETPs	None	None	None	None	None	None	None
•	Total No. of GPIs/SPIs	None	None	1	None	None	None	None
•	No. of industries having OCEMS	None	None	None	None	None	None	None

Town	Existing ETP	Whether Complying or	CETP Proposed if	Status (DPR/tendering/under
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	Capacity(MLD)	not	any	construction/ETC etc.)
Shillong	1.8	Complying	-	-
Byrnihat	1.0	Complying	-	-
Nongstoin	0.41	Complying	-	-
Ladrymbai&Khliehriat	0.1	Complying	-	-
Jowai	0.45	Complying	-	-
Khliehriat,Myndihati&Lumshnong	0.615	Complying	-	-

V.	Solid Waste Management	Umkhrah	Umshyrpi	Umtrew	Nonbah	Myntdu	Kyrhukhla	Lukha
	Total Municipal Solid Waste generation (TPD)	164.81		1.16	10.05	9.95	2.6	1.6

	Existing facilities (TPD)	Chain link fencing has been installed at strategic garbage points. Penalty is imposed on habitual offenders. b) Additionally, Garbage traps have been installed in 6 nos of drains connecting to the rivers and one oil grease trap of 5 Kld installed in one drain of Umkhras River. 170 TPD Compost Plant at Marten is completed and under testing of trial run. There are 4nos of decentralised compost plants. Out of these, 3 are operational and 1 is yet to be made operational.	15.0 I no of waste to compost plant of 15TPD is yet to made operational	Collection, segregation and transportation of wastes has been done by the SLRM team under SBM (Urban) .In some households the biodegradable wastes are treated by composting method in compost pit	Door to door collection and transportation coverage is being done by the Jowai Municipal Board. Segregation at source is in place.	i) Waste management soak pit household waste water management & soak pit household waste water management & organic waste compost for 112 households under SBM (G) ii) Construction of 0.1 TPD compost plant completed and on trial run.	Waste management soak pit household waste water management & organic waste compost pit for 366 households under SBM (G)
						Materials recovery centres have been set up in 61 villages	
	Proposed	Waste to energy of 100 TPD capacity and the proposed investment is INR 24.5 crores. MoU has been signed on 22 nd June 2020 between the Department of Urban Affairs ,Government of Meghalaya and	Proposed for soak pit household waste water management & organic waste compost for 112	Land has been identified and a compost plan has been sanctioned under SBM (Urban)	Solid Waste processing & Disposal Facility of 10 TPD to cater to both Jowai &Khliehriat . -		

		CHAMHANA GW India Pvt .Ltd on a Build, Own and Operate (BOD) basis for a period of 25 years. There is however ,delay in starting the project due to ongoing pandemic for transportation of equipments and other related matters to human resources .	households under SBM (G)		
	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river	Enclosed as Annexures			

VI.	Bio-medical/Hazardous/Plastic Waste Management(in TPD)	Umkhrah	Umshyrpi	Umtrew	Nonbah	Kyrhukhla	Myntdu	Lukha
	Total Bio-medical Waste generation	1.0597		0.0021	0.029	0.00608	0.41	Nil

VIII.	Maintaining minimum e-flow of river	Perennial	
IX.	Protection and management of Flood Plain Zones (FPZ)	(a) Network design including the proposed additional installation submitted. Field Survey report of Umkhrach, Nonbah, Umtrew and Myntdu have been submitted and various inputs for catchment models have also been prepared. 80% of the work have been completed. (b) Setting up of HO stations was completed. Hydro-meteorological data from the installed instruments have been collected and compiled for the month of July and August 2022. (c) The rain gauges and staff gauges have been installed in all the four study river basins and data collection was initiated from 1st May 2022. (d) Flood models of Umkhrach, Nonbah, Umtrew and Myntdu have been simulated for 2, 5, 10, 25, 50, and 100 years return period floods and team is reviewing the results. (e) Calibration of flood models for different flood events have been started. Method to estimate areal rainfall from observed point rainfall is being analysed. (f) Major work of Draft Feasibility Study Report is completed in July 2022. (g) Flood inundation scenarios with and without considering the flood protection at various locations in Umkhrach, Nonbah, Umtrew and Myntdu have been generated. (h) Draft report on Flood Plain Zoning and Flood Mitigation Measures has been submitted and is under review by the Department	
X.	Rain water harvesting	i. Rain water harvesting implemented for Schools and government buildings ii. Incorporated as one of the condition while giving permission for any house construction	
XI.	Plantation along river	Creation of Temporary nursery and preliminary works completed for the catchment area of Nonbah river.	No proposal was made since there is a Reserve Forest and

		1800 sapplings planted in the catchment of Umkhras covering an area of 3.5 km 500 sapplings planted in the catchment area of Umtrew river covering an area of 0.5 Ha.	green cover on both sides of the river
XII.	Development of biodiversity park on flood plains by removing encroachment	Matter of encroachment is pending in the Supreme Court.Biodiversity parks in existence.	No proposal for setting up of Bio-Diversity Park due to non-availability of Government land.
XIII.	Reuse of Waste water	Treated wastewater are reuse for gardening/cleaning purpose	

ANNEXURE

WATER QUALITY DATA OF POLLUTED RIVER STRETCHES –JANUARY 2023

Stations→ Parameters↓	Umshyrpi		Umkhrah				Umtrew at Byrnihat	Nonbah at Nongstoin	Myntdu at Jowai	Lunar River (Tributary of Lukha River) at Myndihati	Kyrhuhkhla River
	Near Law College	Umshyrpi Bridge	Demthring	Umkaliar	Near Slaughter House	Mawpdang					
pH	6.8	7.2	6.9	7.2	7.0	7.1	7.5	6.9	6.7	3.0	3.3
Dissolved Oxygen(mg/l)	1.0	4.4	1.4	6.2	1.4	2.4	8.2	7.6	7.4	7.0	7.0
Bio-chemical Oxygen Demand (mg/l)	42.0	16.0	30.0	7.8	39.0	32.0	1.9	2.0	2.1	2.7	2.1
Faecal Coliform (MPN/100ml)	33000	4800	27000	4600	43000	39000	330	700	280	<1.8	<1.8
Total Coliform (MPN/100ml)	130000	27000	63000	31000	120000	110000	2400	3800	1400	<1.8	<1.8
Faecal Streptococci (MPN/100m	6300	2300	4700	1700	7000	6300	210	280	170	<1.8	<1.8

WATER QUALITY DATA OF POLLUTED RIVER STRETCHES – FEBRUARY 2023

Stations→ Parameters↓	Umshyrpi		Umkhrah				Umtrew at Byrnihat	Nonbah at Nongstoin	Myntdu at Jowai	Lunar River (Tributary of Lukha River) at Myndihati	Kyrhuhkhla River
	Near Law College	Umshyrpi Bridge	Demthring	Umkaliar	Near Slaughter House	Mawpdang					
pH	6.9	7.0	7.1	7.3	7.2	7.1	7.6	7.0	7.1	3.0	3.2
Dissolved Oxygen(mg/l)	0.5	3.0	1.2	5.0	NIL	NIL	7.8	7.3	7.1	7.4	7.2
Bio-chemical Oxygen Demand (mg/l)	46.0	23.0	35.0	8.2	49.0	47.0	2.0	2.3	2.2	2.5	2.3

Faecal Coliform (MPN/100ml)	38000	4900	31000	4900	46000	44000	430	790	330	<1.8	<1.8
Total Coliform (MPN/100ml)	150000	31000	70000	33000	140000	130000	2700	4300	1700	<1.8	<1.8
Faecal Streptococci (MPN/100m)	7900	2400	5800	2100	11000	9400	230	350	210	<1.8	<1.8

WATER QUALITY DATA OF POLLUTED RIVER STRETCHES – MARCH 2023

Stations→ Parameters↓	Umshyrpi		Umkhrah				Umtrew at Byrnihat	Nonbah at Nongstoin	Myntdu at Jowai	Lunar River (Tributary of Lukha River) at Myndihati	Kyrhuhkhla River
	Near Law College	Umshyrpi Bridge	Demthring	Umkaliar	Near Slaughter House	Mawpdang					
pH	7.0	7.3	7.4	7.6	7.4	7.3	7.0	6.9	6.6	2.9	3.6
Dissolved Oxygen(mg/l)	NIL	1.8	NIL	3.4	NIL	NIL	7.1	7.0	6.8	7.1	6.9
Bio-chemical Oxygen Demand (mg/l)	50.0	30.0	45.0	16.0	52.0	50.0	2.3	2.6	2.2	2.2	2.4
Faecal Coliform (MPN/100ml)	46000	7900	38000	6300	70000	63000	490	840	380	<1.8	<1.8
Total Coliform (MPN/100ml)	210000	43000	94000	39000	240000	230000	3100	4800	2200	<1.8	<1.8
Faecal Streptococci (MPN/100m)	11000	3100	7000	2700	17000	13000	280	430	230	<1.8	<1.8