



**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	Time line	Submission of Progress by State/UT-Compliance Status
1	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	Director of Urban Affairs has written a letter (Enclosed as Annexure I) to the State Government to approve the selection of Consultant Viz M/S Trinity Implex International engaging them to prepare the DPR for bio-remediation of the two rivers of priority I. On approval of the Government work order will be issued .It is to inform that the order will be issued before the 31.03.2020
	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	
2	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning	31.03.2021	Urban Affairs Department awarded the contract to M/S Wapcos LTD for preparation of DPR for setting up of STP
5	Chief Secretaries may set up appropriate monitoring mechanism at State level <ul style="list-style-type: none"> • 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 22.01.2020	
	<ul style="list-style-type: none"> • Monitoring at State level must take place 	Fortnightly Commencing 21.12.2019	
6	Progress report may be furnished by the States/UTs to <ul style="list-style-type: none"> • Secretary, Ministry of Jal Shakti • Member Secretary, CPCB 	Monthly (preferably before 20 th of every month)	
6.1	<i>Progress Report may be comprised of details alongwith completion timelines on:</i>		
	(i) Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in situ treatment		List of drains enclosed as Annexure II
	(ii) <u>Status of STPs, I & D and sewerage</u>		

	<u>networks</u> Details of Existing Infrastructure, Gap Analysis, Proposed alongwith completion timeline			
(iii)	<u>Status of CETPs</u> Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed alongwith completion timeline, No. of industries and complying status		Umkhrah catchment	Umshyrpi Catchment
			No. of Red Category-6	No. of Red Category-2
			Complying-4 Non complying-2	Complying-1 Non complying-1
			No. of Small Scale-115	No. of Small Scale-7
			Complying-115 Non complying-nil	Complying-7 Non complying-nil
(iv)	<u>Status of Solid Waste Management & Details of Processing Facilities</u> Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline		For treatment of the bio-degradable waste, a 170 TPD Compost Plant is under Construction at Marten, Shillong which is proposed to be commissioned by 31 th March 2020. For Scientific disposal of waste a 6500 sqm sanitary landfill site has been developed at Marten, Shillong. An additional 15000 sqm sanitary landfill site is also completed	
(v)	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river		List Enclosed as annexure III A to III C for Umkhrah & IV A to IV C for Umshyrpi	
(vi)	Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing wastes processing, including waste generated from hotels, ashrams, etc.		1. The Shillong Municipal Board collects solid wastes at an average of 44.86 MT on a daily basis. Door-to-door collection has been introduced in all the wards so as to minimize littering.	

			<p>2. For Bio-medical wastes deep burial is being carried till upgradation of existing treatment facilities is completed</p> <p>3. The plastic Waste was collected as municipal waste into dry waste and wet waste. The plastic waste was segregated from the dry waste at the dumpsite and collected for compaction and bailing</p>
	(vii) Ground water regulation		State Level Committee on Ground Water resource
	(viii) Adopting good irrigation practices		
	(ix) Protection and management of Flood Plain Zones (FPZ)		No declared flood Plain Zone
	(x) Rain water harvesting		<p>1. Rain water harvesting implemented for Schools and government buildings</p> <p>2. Incorporated in building By-laws & implemented</p>
	(xi) Maintaining minimum environmental flow of river		Perennial
	(xii) Plantation on both sides of the river		Fund available under CAMPA
	(xiii) Setting up biodiversity parks on flood plains by removing encroachment		Matter of encroachment is pending in the Supreme Court.

IDENTIFIED DRAINS/STREAMS CONTRIBUTING TO POLLUTION OF UMKHRAH RIVER

Sl.No	DRAIN/STREAM	FLOW(MLD)
1.	Wah Demthring Stream	1.4
2.	Lapalang Stream near Bridge	12.7
3.	Lapalang Stream	4.8
4.	Umpling Drain	0.5
5.	Umpling Stream	0.5
6.	Gora Line Stream	2.4
7.	Wah Kdait Drain	3.5
8.	Wah Thangsniang stream	6.2
9.	Pomdngiem Stream	9.2
10.	Oakland Drain	0.95
11.	Lawmali Drain	2.6
12.	Wahingdoh- Raimohan Drain	12.4
13.	Riatsamthiah, Wahingdoh	1.72
14.	Jaiaw Drain	2.4
15.	Mawlai Drain	0.86
16.	Mawlai Phudmuri Stream	1.9
17.	Jaiaw Lumsyntiew Drain	0.35
18.	Wah Disoi Drain	6.2
19.	Polo Drain1	1.3
20.	Polo Drain2	0.95

IDENTIFIED DRAINS CONTRIBUTING TO POLLUTION OF UMSHYRPI RIVER

Sl. No.	DRAIN/STREAM	FLOW(MLD)
1.	Stream at Fish Dale	2.6
2.	Drain Near Woodland Hospital	3.5
3.	Wahkdait at Malki	4.3
4.	Malki Stream (near Seven Set School)	1.72
5.	Wah Risa Stream	0.86
6.	Wah Kynrud stream	4.3
7.	Umsohkhlur Stream	5.2
8.	Wah Mawlong Stream	0.86
9.	Umjasai stream	1.72
10.	Lummawbah Stream	0.86
11.	Mawprem Drain	0.86

WATER QUALITY DATA OF UMKHRAH RIVER, SHILLONG – FEBRUARY 2020

Parameters	Umkhrah River at Demthring	Umkhrah River at Umkaliar	Umkhrah River near Slaughter House	Umkhrah River at Mawpdang Mawlai
<i>pH</i>	7.1	7.5	7.4	7.3
<i>DO mg/L</i>	3.3	6.1	3.0	3.4
<i>BOD mg/L</i>	29.0	13.8	32.0	26.0
<i>Feacal Coliform MPN/100ml</i>	24000	11000	36000	28000
<i>Total Coliform MPN/100ml</i>	54000	27000	110000	92000
<i>Fecal Streptococci MPN/100ml</i>	4900	4300	15000	14000

Annexure III B

WATER QUALITY DATA OF DRAINS DISCHARGING INTO THE UMKHRAH RIVER – FEBRUARY 2020

Parameters→ Stream/Drain ↓	Ph	Dissolved Oxygen(mg/l)	BOD(mg/l)	Total Coliform(mg/l)	Faecal Coliform(mg/l)	Zn(mg/l)	Cr(mg/l)	Ni(mg/l)	Cu(mg/l)	As(mg/l)
<i>Wah Demthring Source - Demthring, Nongthymmai, Madanriting</i>	7.2	2.8	12.0	14000	8400	BDL	BDL	BDL	BDL	BDL
<i>Lapalang stream -Lapalang</i>	7.2	4.0	10.0	8400	5400	BDL	BDL	BDL	BDL	BDL
<i>Umpling Drain</i>	6.7	4.2	9.0	7900	4700	BDL	BDL	BDL	BDL	BDL
<i>Umpling stream</i>	7.1	4.2	10.0	5400	2500	BDL	BDL	BDL	BDL	BDL
<i>Goraline Stream (Laitumkhrah, Nongrim Hills)</i>	7.0	1.7	21.0	39000	23000	BDL	BDL	BDL	BDL	BDL
<i>Wah Kdait Drain Mawpat, Nongmysong</i>	7.0	4.5	8.5	9400	5400	BDL	BDL	BDL	BDL	BDL
<i>Wah Thangsniang Stream Lawjynriew, Lumpynggad, Jingkieng, Nongthymmai, Nongrim Hills, MES, Nongrimbah, Nongrimmaw, Demsieniong</i>	7.2	2.0	18.0	33000	25000	BDL	BDL	BDL	BDL	BDL
<i>Pomdngiew stream</i>	7.1	2.1	19.0	24000	17000	BDL	BDL	BDL	BDL	BDL

Laitumkhrach Lower Lachumiere, Laitumkhrach										
Oakland Drain Botanical Garden, Ward's Lake, Oakland, Jail Road Bazar	7.2	1.6	28.0	41000	27000	BDL	BDL	BDL	BDL	BDL
Wahingdoh Raimohan Drain Keating Road, Mawlonghat, Bara Bazar (Motphran), Mawkhar, Police Bazar,Umsohsun, Jail Road, Wahiingdoh	6.9	0.8	48.0	84000	43000	BDL	BDL	BDL	BDL	BDL
Lawmali Drain Ganesh Das Hospital, Pasteur Institute	6.9	1.6	26.0	32000	21000	BDL	BDL	BDL	BDL	BDL
Raitsamthiah Wahiingdoh Drain	6.9	1.0	42.0	49000	27000	BDL	BDL	BDL	BDL	BDL
Jaiaw Drain Raitsamthiah	7.2	1.2	34.0	46000	23000	BDL	BDL	BDL	BDL	BDL
Mawlai Stream Mawlai Phudmawri, Nongmali	7.3	1.5	32.0	21000	12000	BDL	BDL	BDL	BDL	BDL
Mawlai Phudmawri Drain- Mawlai Phudmawri, Slaughter House Areas wastes and	7.4	2.0	30.0	63000	34000	BDL	BDL	BDL	BDL	BDL
Jaiaw lumsyntiew drain K.J.P	7.2	1.4	34.0	27000	17000	BDL	BDL	BDL	BDL	BDL

Synod Hospital, Jaiaw										
Wah Disoi Drain Mawprem, Garikhana, Lama Villa, Jaiaw Langsning, Slaughter House Area, Naspatighari	7.1	1.9	29.0	41000	21000	BDL	BDL	BDL	BDL	BDL
Polo Drain 1	7.3	0.8	50.5	110000	43000	BDL	BDL	BDL	BDL	BDL
Polo drain 2	7.2	1.0	48.0	79000	38000	BDL	BDL	BDL	BDL	BDL

GROUND WATER QUALITY IN THE CATCHMENT OF UMKHRAH RIVER, SHILLONG – FEBRUARY 2020

Sampling Locations→	<i>Drinking Water Norms as per IS 10500:2012</i>	Borewell Wahingdoh	Deep Tube Well Dong Kamon, Nongmynsong	Well Forest Rest House, Forest Colony, Polo
Parameters ↓				
<i>pH</i>	6.5-8.5	6.1	6.5	6.3
<i>Conductivity (mg/l)</i>	-	180.0	120.0	115.0
<i>Turbidity (NTU)</i>	1.0	1.0	1.0	1.0
<i>Chloride (mg/l)</i>	250.0	23.0	16.0	23.0
<i>Alkalinity (mg/l)</i>	200.0	32.0	44.0	32.0
<i>Total Hardness (mg/l)</i>	200.0	60.0	52.0	62.0
<i>Nitrate-N (mg/l)</i>	45.0	3.8	2.0	7.0
<i>Iron (mg/l)</i>	0.3	1.0	0.34	0.36
<i>Total Coliform (MPN/100ml)</i>	Shall not be detectable	9	<1.8	430
<i>Faecal Coliform (MPN/100ml)</i>	Shall not be detectable	<1.8	<1.8	280
<i>Zn (mg/l)</i>	5.0 mg/l	BDL	BDL	BDL
<i>Cr (mg/l)</i>	0.05	BDL	BDL	BDL
<i>Ni (mg/l)</i>	0.02	BDL	BDL	BDL
<i>Cu (mg/l)</i>	0.05	BDL	BDL	BDL
<i>As (mg/l)</i>	0.01	BDL	BDL	BDL
<i>Lead (mg/l)</i>	0.01	BDL	BDL	BDL
<i>Nickel (mg/l)</i>	0.02	BDL	BDL	BDL
<i>Cadmium(mg/l)</i>	0.003	BDL	BDL	BDL
<i>Manganese(mg/l)</i>	0.1	BDL	BDL	BDL

WATER QUALITY DATA OF RIVER UMSHYRPI, SHILLONG – FEBRUARY 2020

Parameters	River Umshyrpi near Law college at Dhankheti	River Umshyrpi near Umshyrpi bridge
<i>pH</i>	6.8	7.2
<i>DO mg/L</i>	3.2	5.9
<i>BOD mg/L</i>	27.0	14.8
<i>Feacal Coliform MPN/100ml</i>	25000	12000
<i>Total Coliform MPN/100ml</i>	70000	38000

WATER QUALITY DATA OF DRAINS/STREAMS DISCHARGING INTO THE UMSHYRPI RIVER- FEBRUARY 2020

Parameters→ Stream/Drain ↓	pH	Dissolved oxygen (mg/l)	BOD (mg/l)	Total Coliform (MPN/100ml)	Feacal Coliform (MPN/100ml)	Zn (mg/l)	Cr (mg/l)	Ni (mg/l)	Cu (mg/l)	As (mg/l)
<i>Stream at Fish Dale(Drain from Fire Brigade & Streamlet behind Fishery Office -Fruit Garden)</i>	7.0	5.5	15.0	5800	2100	BDL	BDL	BDL	BDL	BDL
<i>Woodland Hospital drain from Laitumkhras</i>	7.2	1.8	60.0	94000	37000	BDL	BDL	BDL	BDL	BDL
<i>Wahkdait at Malki</i>	7.1	4.6	16.0	11000	4900	BDL	BDL	BDL	BDL	BDL
<i>Malki stream near Seven Set school (from RF-Malki Mission – Nongshilliang)</i>	7.1	4.8	12.0	27000	13000	BDL	BDL	BDL	BDL	BDL
<i>Um Risa stream from RF-Nongmalki-Crinoline Falls</i>	7.1	7.2	2.6	4400	2100	BDL	BDL	BDL	BDL	BDL
<i>Umkyrud stream from Lumparing village</i>	7.1	4.7	10.0	14000	5800	BDL	BDL	BDL	BDL	BDL
<i>Umsokhlur stream from Kench's Trace-Raid Laban</i>	7.1	4.2	33.0	38000	21000	BDL	BDL	BDL	BDL	BDL
<i>Ummawlong stream from Lawsohtun-Sericulture farm</i>	7.0	5.0	17.0	17000	8400	BDL	BDL	BDL	BDL	BDL
<i>Umjasai stream from Lawsohtun -Mahadev Khola (Defence land)</i>	7.1	5.0	19.0	21000	9400	BDL	BDL	BDL	BDL	BDL
<i>Stream from Lummawbah & Upper Shillong)</i>	6.9	2.4	32.0	23000	11000	BDL	BDL	BDL	BDL	BDL
<i>Mawprem Drain(Mawbah drain, Barapathar - Reid Chest Hospital</i>	7.0	1.8	45.0	79000	38000	BDL	BDL	BDL	BDL	BDL

GROUND WATER QUAKITY IN THE CATCHMENT OF UMSHYRPI RIVER AT, SHILLONG – FEBRUARY 2020

Sampling Locations→ Parameters ↓	<i>Drinking Water Norms as per IS 10500:2012</i>	Laban, Shillong Borewell	Deep Tube Well at Last Stop, Laban, Shillong
<i>pH</i>	6.5-8.5	6.1	4.5
<i>Conductivity (mg/l)</i>	-	130	68.0
<i>Turbidity (NTU)</i>	1.0	2.1	1.8
<i>Chloride (mg/l)</i>	250.0	9.0	5.0
<i>Alkalinity (mg/l)</i>	200.0	16.0	18.0
<i>Total Hardness (mg/l)</i>	200.0	28.0	10.0
<i>Nitrate-N (mg/l)</i>	45.0	2.5	1.3
<i>Iron (mg/l)</i>	0.3	0.80	0.56
<i>Total Coliform (MPN/100ml)</i>	Shall not be detectable	4	<1.8
<i>Faecal Coliform (MPN/100ml)</i>	Shall not be detectable	<1.8	<1.8
<i>Zn (mg/l)</i>	5.0 mg/l	BDL	BDL
<i>Cr (mg/l)</i>	0.05	BDL	BDL
<i>Ni (mg/l)</i>	0.02	BDL	BDL
<i>Cu (mg/l)</i>	0.05	BDL	BDL
<i>As (mg/l)</i>	0.01	BDL	BDL
<i>Lead (mg/l)</i>	0.01	BDL	BDL
<i>Nickel (mg/l)</i>	0.02	BDL	BDL
<i>Cadmium(mg/l)</i>	0.003	BDL	BDL
<i>Manganese(mg/l)</i>	0.1	BDL	BDL