National Mission for Clean Ganga
Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020) For the State of Karnataka

Name of the River	**Arkavathi River**
Polluted river stretch	**Tippagondanahalli reservoir to Kanakapura Town**
Priority	**III**
Status as on	**31st December 2022**

Overall status of the State:

Particulars		**CMC Ramanagara**	**CMC Kanakapura**	**Total**
I.	Total Population: Urban Population & Rural Population separately	95167	54014	149181
II.	Estimated Sewage Generation (MLD):	10.0	4.4	14.4

III. Details of Sewage Treatment Plant:

Particulars	**CMC Ramanagara**	**CMC Kanakapura**	**Total**
Existing no. of STPs and Treatment Capacity (in MLD):	No. of STPs- 1 Treatment Capacity- 7.5 MLD	No. of STPs- 1 Treatment Capacity-6.29 MLD	No. of STPs- 2 Treatment Capacity-13.79 MLD
Capacity Utilization of existing STPs:	6.0	3.8	9.8
MLD of sewage being treated through Alternate technology:	4.0(Through Septic tank & Soak Pit)	0.6(Through Septic tank & Soak Pit)	4.6(Through Septic tank & Soak Pit)
Gap in Treatment Capacity in MLD:	4.0	0.6	4.6
No. of Operational STPs:	1	1	2
No. of Complying STPs:	0	0	0
No. of Non-complying STPs:	1*	1*	2

a. Details of each existing STP in the State

Name of the Local Body	**Location**	**Existing STP Capacity**	**Capacity Being Utilized**	**Operational Status of STP**	**Compliance Status of STP**
CMC Ramanagara	12°43'24.94"N 77°16'59.69"E	7.5 MLD	6.0 MLD	Operational	Non-complying
CMC Kanakapura	12°32'26.83"N 77°25'4.99"E	6.29 MLD	3.8 MLD	Operational	Non-complying
Total		13.79 MLD	9.8 MLD		

b. Details of under construction STPs in the State

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
CMC Ramanagara	12°43'24.94"N 77°16'59.69"E	Nil	NIL	11 drains carrying sullage effluent is to be connected to wet well before Micro STP. **No Work Progress**	31.12.2021 DPR has been prepared and submitted to Govt. by the KUWS & DB for the amount of Rs.220.17 Crores for connecting missing links, wet well conditioning and up gradation of STP.
CMC Kanakapura	12°32'26.83"N 77°25'4.99"E	Nil	NIL	05 drains carrying sullage effluent is to be connected to STPs. **No Work Progress**	31.12.2021 DPR has been prepared and submitted to Govt by the KUWS&DB for the amount of Rs.30.0 Crores for connecting missing links and up gradation of STP by retro fitting using Bio-remediation and Special Aeration system.
Total					

c. Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
CMC Ramanagara	NA	NIL	NIL	NIL
CMC Kanakapura	NA	NIL	NIL	NIL
Total				

IV. Details of Industrial Pollution:

Particulars	CMC Ramanagara	CMC Kanakapura	Arkavathi Polluted River stretch		Total
			Arkavathi River stretch	V Valley catchment area	
No. of industries in the State:	0	0	2 industries (both Red category)	181 industries (Red-30, Orange-52, Green-96, White-03)	183
No. of water polluting industries in the State:	0	0	2 industries (both Red category)	181 industries (Red-30, Orange-52, Green-96, White-03)	183
Quantity of effluent generated from the industries in MLD:	0	0	• 0.6027 (From 2 industries namely M/s Senapathy Whiteley Limited & Lakshmanan Isola Limited, Acchalu Village, Ramanagar Taluk, both Red categories) in operation. • The sewage of 0.0245 MLD is being disposed to individual septic tank and soak pits. • The trade effluent of about 0.578 MLD is being treated and completely recycled. • Both the industries are complying to consent conditions. • There is no discharge of any type of effluent from these two industries to Arkavathi river. • Barring little sewage from un sewered area of TMC- Bidadi, CMC-Ramanagar and CMC-Kanakapura	**Total generation-8.008MLD (Sewage generation-3.309MLD**, of which 0.1716MLD of sewage is treated in Septic tank & Soak pit, 3.137MLD of sewage is treated in 30 numbers of STPs and 1.079MLD of treated sewage is completely recycled and 2.058MLD is discharged to on land for gardening. **Trade effluent-4.699MLD**, About 0.0186 MLD of effluent from 17 industries is being sent to Common ETPs for treatment and disposal of which. About 4.680MLD of trade effluent is treated in 33 numbers of ETPs (including combined ETPs) and 3.321MLD of treated effluent is completely recycled and 1.358MLD is discharged to on land for gardening. There are no common ETPs in the Arkavathi catchment area.	8.6107

			Town. • River Arkavathi is polluted mainly because of discharge of untreated effluents and sewage from urban areas upstream of Thippagondana Halli Reservoir of Bangalore Urban District and the untreated effluents and sewage discharged to Vrishabhavathi Valley which originates from Bangalore Urban/BBMP area.		
**River Arkavathi is polluted mainly because of discharge of untreated effluents and sewage from urban areas upstream of Thippagondana Halli Reservoir of Bangalore Urban District and the untreated effluents and sewage discharged to Vrishabhavathi Valley which originates from Bangalore Urban/BBMP area.					
Quantity of Hazardous Sludge generated from the Industries in TPD:	0	0	2.565 MTPA	2680.152 MTPA	2682.717
Number of industrial units having ETPs:	0	0	2	31	33
Number of industrial units connected to CETP:	0	0	0	14	14
Number and total capacity of ETPs (details of existing/ under construction / proposed)	0	0	No-2 & Capacity-	31	33
Compliance status of the ETPs:	0	0	Complied	Complied	0
Number and total capacity of	0	0	0	0	0

CETPs (details of existing/ under construction / proposed)					

d. Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
CMC Ramanagara	NIL	NIL	NIL	NIL
CMC Kanakapura	NIL	NIL	NIL	NIL
Total				

V. **Solid Waste Management:**

Particulars	CMC Ramanagara	CMC Kanakapura	Total
• **Total number of Urban Local Bodies and their Population**	CMC Ramanagara-95167	CMC Kanakapura-54014	2-149181
• Current Municipal Solid Waste Generation	40.0	24.0	64
1. Quantity of MSW generated (TPD)	35.0	20.0	55
2. Quantity of MSW Collected(TPD)	35.0	12.0	47
3. Quantity of MSW segregated & transported (TPD)	15.0	10.0	25
4. Quantity of MSW Processed(TPD)	20.0	7.0	27
5. Quantity of MSW disposed in secured landfill site(TPD)	20.0	7.0	27
6. Gap in Solid Waste Management UTs(TPD)	20	17	37

- 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), biomethanation, MRF etc

Name of the ULB	Composting		Vermi Composting		Bio-Methanation		Refuse Derived Fuel		W2E		Combustible waste supplied to cement plant
	Waste Processed	Product Produced	Waste Processed	Product Produced	Waste Processed	Product Produced	Waste Processed	Product Produced	Waste Processed	Product Produced	
CMC-Ramanagara	10	2	4.0	0.8	1.0	10 KVA	Nil	Nil	Nil	Nil	Nil

CMC-Kanakapura	10	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

• Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	Instructions have been given to ULB's to ensure that the existing MSW processing facility is used to its fullest capacity		
• No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	0	0	0
• Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	31	31	62
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	3 Vermi composting units under construction	1 under construction(will be completed by 31.03.2021)	4
No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	NIL	NIL	NIL
No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers	NIL	NIL	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	11	5	17

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
CMC Ramanagara	40	15	18.0	18.0	SWM DPR prepared under swaccha Bharath Mission is approved and action is being taken up as per DPR.
CMC Kanakapura	24	10	24	10	Under construction
Total	64	25	42	28	

VI. Bio-medical Waste Management:

Particulars	CMC Ramanagara	CMC Kanakapura	Total
Total Bio-medical generation:	0.2043TPD	0.00684 TPD	0.21114 TPD
No. of Hospitals and Health Care Facilities:	454	152	606
Status of Treatment Facility/ CBMWTF:	complying	complying	-

VII. Hazardous Waste Management:

Particulars	CMC Ramanagara	CMC Kanakapura	Arkavathi polluted river stretch
Total Hazardous Waste generation:	0	0	Land Fillable -1576.89 MTPA Incinerable – 1018.86 MTPA Recyclable – 1298.4 MTPA Utilizable - 138.51 MTPA Total- 4032.66 MTPA
No. of Industries generating Hazardous waste	0	0	92.0
Treatment Capacity of all TSDFs	NA	NA	
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	NA	NA	
Details of on-going or proposed TSDF	NA	NA	

VIII. Plastic Waste Management:

Particulars	CMC Ramanagara	CMC Kanakapura	Total
Total Plastic Waste generation:	2.0TPD	1.25 TPD	3.25 TPD
Treatment/ Measures adopted for reduction or management of plastic waste:	NA	NA	NA

Particulars		CMC Ramanagara	CMC Kanakapura	Total
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:	11Drains identified and monitored periodically	5 Drains identified and monitored periodically	16 Drains identified and monitored periodically
XI.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	-		
XII.	Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:	NA		
XIII.	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;	**Annexure-1**		
XIV.	Ground water regulation:	As per the details submitted by Sr. Geologist, District Ground Water Authority, Ramanagara District for the month of August 2020, as per the circular KGA/NOC/2019-20 dated 29-05-2019 with reference to Karnataka Act 2011 U/s 17 (K), so as to fulfill the objectives of the Act, in notified taluks and non notified taluks for NOC for the purpose of industrial, commercial, entertainment, infrastructure, mining and others is made compulsory. This subject was discussed in District Ground Water Authority meeting. In this regard, as per the directions, a notice has been issued to obtain NOC for extracting groundwater from Karnataka Ground Water Authority / District Ground Water Authority. **Status of Ground Water Resource Assessment in Annexure-2**		
XV.	Good irrigation practices being adopted by the State:	The Dept. of Agriculture and Horticulture have submitted action plan for implementation of following measures. • Farmers are made aware to use water optimally. I. By adopting Micro irrigation system(Sprinkler And Drip) in agricultural crops .		
XVI.	Rain Water Harvesting:	As per the details submitted by Sr. Geologist, District Ground Water Authority, Ramanagara for the month of August 2020, to improve the ground water situation rain water harvesting structure and some of the other artificial recharge structures are recommended to be constructed in their premises while giving the permission to extract ground water from the authority.		
XVII.	Demarcation of Floodplain and removal of illegal encroachments:	The tahasildars of the concerned taluk have furnished replies that they are in the process of obtaining the details on encroachment of lands of flood plain and upon receipt of the same they would initiate further needful action		

XVIII. Maintaining minimum e-flow of river:	The Cauvery Neeravari Nigam Ltd., is requested to submit the action plan as per MoEF & CC norms during monsoon seasons and same is not submitted
XIX. Plantation activities along the rivers:	The Forest Department has submitted action plan for plantation of saplings on the banks of polluted river stretch of Arkavathi which specifies the plantation of saplings and creation of eco park etc for that they have ear marked Rs.13.49 crores. This will be completed by them within time frame of **March 2024**, their letter reads.
XX. Development of biodiversity park:	
XXI. Reuse of Treated Water:	Treated water is being utilized for onland for Gardening/ Irrigation/Recycled for process/Toilet Flushing
XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	NA
XXIII. Status of Preparation of Action Plan by the 13 Coastal States:	NA
XXIV. Regulation of Mining Activities in the State/UT:	Nil
XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	Nil
XXVI. Overall progress of the month: Please provide overall progress achieved in terms of all the above points compared to previous month.	

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Details of Water Quality Monitoring locations as per NWMP	Year	DO(mg/l)	BOD(mg/l)	Fecal Coliform (MPN/100 ml)	Total Coliform (MPN/100 ml)
1	Thippagondanahalli reservoir	**Dceember-2022**	Results awaited			
2	Downstream of Kanakapura	**November-2022**	5.0	4.0	490	16000

XIV Status of Ground Water Resource Assessment in Annexure-1

Sl.No	Village	Well Type	Sampling Date	Fe	EC	pH	NO3	Cl	F	TH
1	Kailancha Village, Ramanagara Tq & District	Dug Well	11/10/2020	0.03	1230	8.29	14	210	0.55	304
2	Ramanagara Town, Ramanagara Distrcit	Bore Well	11/10/2020	0.06	1370	8.14	66	176	1.03	328
3	Harohalli, Village Kanakapura Taluk	Dug Well	--	--	--	--	--	--	--	--
4	Kanakapura Town, Ramanagara District	Bore Well	--	--	--	--	--	--	--	--

Sd/-
Environment Officer
Regional Office-Ramanagara

Format for submission of monthly Progress report by States/ UTs for the Month December-2022
(Hon'ble NGT in the matter of OA No. 673/2018, Dated: 06/12/2019)
(Tamadaddi village to Chikkapdasalagi Village – 33 Kms stretch of Krishna River, Bagalkot District)

Name of the River : Asangi-Krishna River
Polluted river stretch : Tamadaddi village to Chikkapdasalagi Village – 33 Kms stretch of Krishna River, Bagalkot District
Priority : V
Status as on : December-2022

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately:

a. Urban Population:

Sl. No.	Name	Population
1	CMC, Rabakavi-Banahatti, Jamakhandi-Tq, Bagalkot-Dist.	77,004
2	TMC, Terdal, Jamakhandi-Tq, Bagalkot-Dist.	26,088
Total		**1,03,092**

b. Rural Population:

Sl. No.	Name	Population
1	Gram Panchayat, Tamadaddi	3,101
2	Gram Panchayat, Halingali	7,363
3	Gram Panchayat, Madanamatti	1,207
4	Gram Panchayat, Asangi	5,787
Total		**17,458**

II. **Estimated Sewage Generation (MLD):** 9.95MLD

III. <u>Details of Sewage Treatment Plant:</u>

- **Existing no. of STPs and Treatment Capacity (in MLD):** 01 & 9.2MLD
- **Capacity Utilization of existing STPs:** 9.2MLD

- **MLD of sewage being treated through Alternate technology:** 0
- **Gap in Treatment Capacity in MLD:** 0.75MLD
- **No. of Operational STPs:** 1
- **No. of Complying STPs:** 1
- **No. of Non-complying STPs:** 0

Details of each existing STP in the State

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
01.	CMC, Rabakavi-Banahatti, Tq-Jamakhandi, Dist-Bagalkot	9.2MLD	9.2MLD	Operating	Operating

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
--	--	--	--	--	--

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
01.	TMC-Terdal, Jamakhandi-Tq, Bagalkot-Dist.	0.75MLD	DPR Stage	DPR Stage

IV. Details of Industrial Pollution:

- **No. of industries in the Polluted River stretch:** 07
- **No. of water polluting industries in the Polluted River stretch:** 07
- **Quantity of effluent generated from the industries in MLD:** 2.25
- **Quantity of Hazardous Sludge generated from the Industries in TPD:** 00

- **Number of industrial units having ETPs:** 05
- **Number of industrial units connected to CETP:** 00
- **Number and total capacity of ETPs (details of existing/ under construction / proposed):** 05ETPs of total capacity 2.75MLD
- **Compliance status of the ETPs:** Complying
- **Number and total capacity of CETPs (details of existing/ under construction / proposed):** 00
- **Status of compliance and operation of the CETPs:** Not applicable

Town/ village	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
Terdal	01	478KLD	500KLD (01 No)- Operating	NA
Hipparagi-Mygur	02	902KLD	1000KLD (01 No)- Operating	NA
Hirepadasalagi	02	630KLD	1000KLD (01 No)- Operating	NA
Asangi	01	242.28KLD	250KLD (01 No)- Operating	NA
Banahatti	01	2.5KLD	5.0KLD (01 No)- Operating	NA

V. **Solid Waste Management:**

- **Total number of Urban Local Bodies and their Population:**

Sl. No.	Name	Population
1	CMC, Rabakavi-Banahatti, Jamakhandi-Tq, Bagalkot-Dist.	77,004
2	TMC, Terdal, Jamakhandi-Tq, Bagalkot-Dist.	26,088
Total		**1,03,092**

- **Current Municipal Solid Waste Generation:**

  The details are enclosed as Annexure-1.

- **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), biomethanation, MRF etc**

  The details are enclosed as Annexure-1.

- **Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)**

  Nil

- **No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)**

  Nil

- **Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source**

  a. In CMC, Rabakavi-Banahatti total 31 wards are there and all the wards have door to door collection service.

  b. In TMC, Terdal total 23 wards are there and all the wards have door to door collection service.

- **Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)**

  The details are enclosed as Annexure-1.

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

  Nil

- **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**

  Nil

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
CMC, Rabakavi-Banahatti, Jamakhandi-Tq, Bagalkot-Dist	26	26	Vermi Composting	26TPD	---
TMC, Terdal, Jamakhandi-Tq, Bagalkot-Dist	13	0	No Vermi Composting has been practiced. Only landfill site is provided.	0	---

VI. Bio-medical Waste Management:

- **Total Bio-medical generation:** 0.610TPD
- **No. of Hospitals and Health Care Facilities:** 118
- **Status of Treatment Facility/ CBMWTF:** Complying

VII. Hazardous Waste Management:

- **Total Hazardous Waste generation:** 3.45TPD
- **No. of Industries generating Hazardous waste:** 05
- **Treatment Capacity of all TSDFs:** Nil
- **Avg. Quantity of Hazardous waste reaching the TSDFs and Treated:** Nil
- **Details of on-going or proposed TSDF:** Nil

VIII. Plastic Waste Management:

- **Total Plastic Waste generation:** 3.46TPD
- **Treatment/ Measures adopted for reduction or management of plastic waste:** Nil

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

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

Presently there is no any proposal for In-situ, Remediation from the concerned authority. They were informed to appoint an expert to suggest better technology and finalization of technology.

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: ----

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;

Krishna River

Name of the River: Krishna River

Name of the Station: Asangi Barrage

Station Code: 2763

Sl No.	Month/Parameters	Jan-22	Feb-22	Mar-22	Apr-22	May-22	June-22	July-22	Aug-22	Sep-22	Oct-22	Nov-22
1	Dissolved Oxygen	8.5	6.7	6	6.3	7.4	8.5	5.0	7.0	5.7	7.0	12.1
2	BOD	1.62	2.94	2.94	2.4	1.98	2.34	1.02	1.14	2.1	1.7	2.7
3	Total Coliforms	1600	>1600	>1600	1600	1600	1600	1600	1600	1600	1600	1600
4	Fecal Coliforms	920	920	920	920	920	920	430	920	920	920	920
5	Fecal Streptococci	540	540	540	540	540	540	350	540	350	350	540
6	Conductivity	700	752	640	698	762	758	330	390	461	510	750

XIV. Ground water regulation:

Letter addressed to the Senior Geologist, Ground Water Directorate, Bagalkot for compliance.

XV. Good irrigation practices being adopted by the State:

Letter addressed to the Joint Director, Agriculture Department, Bagalkot for compliance.

XVI. Rain Water Harvesting:

Letter addressed to the P.D, DUDC & PD, ZP, Bagalkot for compliance.

XVII. Demarcation of Flood plain and removal of illegal encroachments:

Letter addressed to the DCF, Bagalkot, Karnataka Forest Department for compliance.

XVIII. Maintaining minimum e-flow of river:

Letter addressed to the Executive Engineer, Krishna Bhagya Jala Nigam Ltd., Dam Zone, Almatti, Tq: Basavana Bagewadi, Dist: Vijayapura for compliance.

XIX. Plantation activities along the rivers:

Letter addressed to the DCF, Bagalkot, Karnataka Forest Department for compliance.

XX. Development of biodiversity park:

Letter addressed to the DCF, Bagalkot, Karnataka Forest Department for compliance.

XXI. Reuse of Treated Water: ----

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: ----

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: ----

XXIV. Regulation of Mining Activities in the State/UT: ----

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring: ----

XXVI. Overall progress of the month: ----

ENVIRONMENTAL OFFICER
RO, KSPCB, BAGALKOT

Annexure-I

Status of Solid Waste Management & Details of Processing Facilities:

Name of the Local Body	Types of Waste/ Characteristic of waste	Generated Quantity (MT/Day)	Collection/Storage facility with capacity (MT/Day)	Disposal/Treatment facility with capacity along with location (MT/Day)	Total Gap with generation & existing treatment facilities if Any (MT/Day)	Proposed action plan /facility to cover gap	Time limit	Remarks	Present Status
CMC, Rabakavi-Banahatti, Jamakhandi-Tq, Bagalkot-Dist	Domestic Waste (Mixed type)	26	26	26	00	—	31-12-2020	The authorities have vermin-composting pit and vermin-composting has been practiced.	Rabakavi-Banahatti generate 26TPD of solid waste and all 26 TPD of solid waste is composted & sold as manure
TMC, Terdal, Jamakhandi-Tq, Bagalkot-Dist	Domestic Waste (Mixed type)	13	13	0	13	—	31-12-2020	No Vermi Composting has been practiced	TMC, Terdal generate 13TPD of solid waste and no treatment & dumped in landfill site
Total		**39**	**39**	**26**	**13**				

ENVIRONMENTAL OFFICER,
RO, KSPCB, BAGALKOT

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : Bhadra River
Polluted river stretch : 10Km
Priority : IV
Status as on : 31.12.2022

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately:

CMC Bhadravathi Population is 151102. (As on 2011 census)

II. Estimated Sewage Generation (MLD): 20 MLD

III. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD):

Existing 3 no of STP's of 5.83 MLD, WSP Technology at Jatpat Nagar, Bhadravathi, 7.2 MLD, WSP Technology at Sy.no.77/P,75/P,75/1P,741/P,64/P,58/1,Seegebagi, CN Road, Bhadravathi, Shivamogga Dist & 1 MLD STP is 1 MLD STP located at Ward no 22, Ujjanipura, Bhadravathi are under operation.

Capacity Utilization of existing STPs: 0.05 MLD

- MLD of sewage being treated through Alternate technology: --
- Gap in Treatment Capacity in MLD:17.95
- No. of Operational STPs: 1
- No. of Complying STPs : 1
- No. of Non-complying STPs: 2

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	City Municipal Council, Bhadravathi Jatpat Nagara, Bhadravathi, Shivamogga Dist	5.83 MLD	0	Not Working	Not Complied
2	City Municipal Council, Bhadravathi Sy.no.77/P,75/P,75/1P,741/P,64/P,58/1, Seegebagi, CN Road,Bhadravathi, Shivamogga Dist	7.2MLD	0	Not Working	Not Complied
3	City Municipal Council, Bhadravathi,Sy.No.13, WardNo.22,Ujjipura, Bhadravathi,Shivamogga	1MLD	0.05 MLD	Working	Complied

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
	-	-	-	-	-

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
-	-	-	-	-

IV. Details of Industrial Pollution:

- No. of industries in the State:

There are 3 large industries are located in the bank of the Bhadra River.

1. MPM is not working since 6 years.
2. VISL is working intermittently. BF and SMS unit are not working since 5 years.
3. Bhadra Packaids is recycling waste water and comply.

- No. of water polluting industries in the State: 3
- Quantity of effluent generated from the industries in MLD: -

1. The Mysore Paper Mills Ltd, Bhadravathi, Shivamogga Dist. The effluent generation was 29 MLD. MPM is not working since 6 years.
2. Steel Authority Of India Ltd, Visveswarayya Iron and Steel Ltd., Bhadravathi, Shivamogga. The effluent generation was 1520 KLD. Blast Furnance and SMS units are not working. Rerolling Mill and Forging units operating intermittently.
3. Bhadra Packaids Pvt. Ltd, Bommenahalli, Barandur, Badravahti Tq, Shivamogga Dist. The effluent generation is 340 KLD. Recycled back into the process & in washing section after treating in ETP.

.

- Quantity of Hazardous Sludge generated from the Industries in TPD: -
- Number of industrial units having ETPs: 3
- Number of industrial units connected to CETP: Nil
- Number and total capacity of ETPs (details of existing/ under construction / proposed) : 87400 KLD
- Compliance status of the ETPs: Complied
- Number and total capacity of CETPs (details of existing/ under construction / proposed) : --

Not Applicable (Shivamogga Dist is not having any CETP.

Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
	Nil			

V. Solid Waste Management:

- Total number of Urban Local Bodies and their Population:

  1 - City Municipal Council, Bhadravathi. Population is 151102

  Current Municipal Solid Waste Generation is about 53.8 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), biomethanation, MRF etc :

  City Municipal Council, Bhadravathi is having MSW sit processing & disposal at Hiriyuru Village, Bhadravathi Tq, Shivamogga Dist.

- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%) : --
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction) : NIL
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source : The CMC Bhadravathi is Collecting Solid waste from door to door. The CMC has reported that they have carried out segregation in all 35 wards. The wet waste is composted in the existing solid waste disposal site, the dry recyclable waste are segregated and sent to recyclers.
- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)-**Nil**

- 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 : --
- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:---

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
1	53.8 TPD	45 TPD	Composting	45 TPD	Plant & Machineries installation work is under process . Work completed on July-2022

VI. Bio-medical Waste Management:

- Total Bio-medical generation : 290Kg/day
- No. of Hospitals and Health Care Facilities : There are 121 No of Health Care facilities in the Local body located on the Bhadra river stretch including 32 No bedded Health Care facility, 88 No Non bedded Health Care facilities and 01 Veterinary Hospital.
- Status of Treatment Facility/ CBMWTF: The Shivamogga Dist is having one CBMWTF at i.e.M/s.Shushrutha Biomedical Waste Management Society®, Plot.No.31/C Machenahalli,Bhadravathi Tq & Shivamogga Dist.
  The unit has obtained Consent and Authorization from the Board for the period up to 30.06.2025.

VII. **Hazardous Waste Management:**

- No. of Industries generating Hazardous waste : 6
- Treatment Capacity of all TSDFs:

Not Applicable (Shivamogga Dist is not having TSDF Site)

- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: Not Applicable
- Details of on-going or proposed TSDF: Not Applicable

VIII. <u>Plastic Waste Management:</u>

- Total Plastic Waste generation: 1095 TPA
- Treatment/ Measures adopted for reduction or management of plastic waste:

  The City Municipal Council, Bhadravathi has prepared By laws for Plastic Waste Management Rule. Plastic raids on Commercial activities are conducted from time to time from City Municipal Council, Bhadravathi and KSPCB.

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:--

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;

Earlier Samples were collected from the drains and Bore well and Results also Submitted along with Action Plan. This Office has collected drains and Bore well samples during July 2022. This Office is collecting the River Water Samples every month at 4 locations.

XIV. Ground water regulation:

District Ground Water Office has reported that Shivamogga Dist lies under safe zone (There is no over exploited Taluk)

XV. Good irrigation practices being adopted by the State:

Adaption of micro irrigation practices such as drip/sprinkler.

XVI. Rain Water Harvesting:

Shivamogga Urban Development Authority (SUDA) is insisting residential Buildings/Commercial Buildings to adopt Rain Water Harvesting in its approval.

XVII. Demarcation of Floodplain and removal of illegal encroachments:

Flood plain zone encroachment details are sought from the Revenue Department.

XVIII. Maintaining minimum e-flow of river:

Karnataka Water Resources Department is the concerned Department and it is maintaining the flow as per the Norms.

XIX. Plantation activities along the rivers:

The Deputy Commissioner has informed the Forest Department Officers to take suitable action for plantation in flood plain zone.

XX. Development of biodiversity park:

The Deputy Commissioner instructed the Irrigation Department Officials to verify the encroachment if any on the river banks and informed to take suitable action on this issue along with the concerned Department.

XXI. Reuse of Treated Water: --

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: --

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: **Not Applicable**

XXIV. Regulation of Mining Activities in the State/UT:

Mines & Geology Dept is monitoring Sand Mining activity

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring:--

XXVI. Overall progress of the month:--

Please provide overall progress achieved in terms of all the above points compared to previous month.

KARNATAKA STATE [illegible], CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.

NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS									
Sl No	Sample Nos		W-479	W-480	W-481	W-482	W-483	W-484	W-485
	Station code		2765	4105	1387	1169	1896	4106	1168
I	Date & Time of collection		12.12.2022 2.10PM	12.12.2022 1.40PM	12.12.2022 1.15PM	12.12.2022 12.30PM	12.12.2022 12.00PM	12.12.2022 11.00AM	12.12.2022 11.30AM
II	Weather		Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None
VI	Visible effluent discharge		None	None	None	None	None	None	None
VII	Human activities around the station		None	None	None	None	None	None	None
VIII	Station details		U/s of MPM, Bhadra River, Karnataka	D/s of MPM, Bhadra River, Karnataka	D/s of Bhadravathi, Bhadra River, Karnataka	Holehonnur Bridge, Bhadra River, Karnataka	Kudli Confluence point, TB River, Karnataka	U/s of Shivamogga, Tunga river, Karnataka	D/s of Shivamogga, Tunga river, Karnataka
CORE PARAMETERS									
Sl No	Parameter	Unit							
1	Temperature	°C	26	25	27	26	26	26	25
2	DO	mg/L	6.1	6.0	6.4	6.3	6.1	6.5	6.2
3	pH	pH unit	8.1	8.1	7.9	7.5	7.8	7.8	8.2
4	Conductivity	µS/cm	190	280	210	320	270	130	150
5	BOD	mg/L	1.8	2.2	2.8	3.0	1.6	1.7	2.0
6	Nitrate as N	mg/L	0.53	0.42	0.56	0.61	0.63	0.68	0.41
7	Total Coli form	MPN/100ml	280	920	2800	1700	280	280	1500
8	Faecal Coli form	MPN/100ml	34	94	310	240	33	27	170
GENERAL PARAMETERS									
SL.NO	PARAMETER	UNIT							
1	Turbidity	NTU	21	20	24	22	23	7	10
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	116	120	80	134	100	50	72
4	Chloride	mg/L	20	22	24	32	26	14	20
5	COD	mg/L	11	15	18	23	14	13	18
6	TKN	mg/L	1.40	1.70	1.65	1.20	1.40	1.50	1.20
7	Ammonia as N	mg/L	0.81	0.94	0.91	0.70	0.73	0.81	0.74
8	Hardness as $CaCO_3$	mg/L	48	74	44	86	60	28	32
9	Calcium as $CaCO_3$	mg/L	24	34	30	60	38	14	18
10	Calcium as Ca++	mg/L	9.60	13.60	12.00	24.00	15.20	5.60	7.20
11	Magnesium as $CaCO_3$	mg/L	24	40	14	26	22	14	14
12	Magnesium as Mg++	mg/l	5.83	9.72	3.40	6.32	5.35	3.40	3.40
13	Sulphate	mg/L	10.00	50.00	12.20	34.60	20.10	7.80	12.60
14	Sodium	mg/L	7	13	15	17	12	6	11
15	Total Dissolved Solids	mg/L	132	196	140	224	180	90	104
16	Total Fixed Solids	mg/L	128	184	132	214	174	86	100
17	Total Suspended Solids	mg/L	16	18	24	20	26	12	24
18	Phosphate as PO_4	mg/L	BDL	0.14	0.41	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	1	2	1	1	1
21	Fluoride	mg/L	0.27	0.41	0.15	0.21	0.35	0.11	0.14
Class/category			B	C	C	C	B	B	C
Water Quality Index			S	S	S	S	S	S	S

Analysed by

Scientific Assistant

Verified by

Deputy Scientific Officer

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter

OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : BHIMA RIVER
Polluted river stretch : Ghanagapur to Yadgir - 160km
Priority : V
Status as on : 05.01.2023
Overall status of the State:

I. Total Population: Urban Population & Rural Population separately : **25,686**

II. Estimated Sewage Generation (MLD): **2.77MLD**

III. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD): **Nil**
- Capacity Utilization of existing STPs: **Nil**
- MLD of sewage being treated through Alternate technology: **Nil**
- Gap in Treatment Capacity in MLD: **2.77MLD**
- No. of Operational STPs: **Nil**
- No. of Complying STPs: **Nil**
- No. of Non-complying STPs: **Nil**

<u>Details of each existing STP in the State</u>

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
-	-	-	-	-	-

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
-	-	-	-	-	-

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	Jewargi	3.25	-	-

IV. Details of Industrial Pollution:

- No. of industries in the State: **Nil (**There are no industry located in the river stretch)
- No. of water polluting industries in the State: **Nil**
- Quantity of effluent generated from the industries in MLD: **Nil**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **Nil**
- Number of industrial units having ETPs: **Nil**
- Number of industrial units connected to CETP: **Nil**
- Number and total capacity of ETPs (details of existing/ under construction / proposed): **Nil**
- Compliance status of the ETPs: **Nil**
- Number and total capacity of CETPs (details of existing/ under construction / proposed) : **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)
-	-	-	-	-

V. **Solid Waste Management:**

- Total number of Urban Local Bodies and their Population : **Town Municipal Council, Jewargi having population of 25,686**
- Current Municipal Solid Waste Generation: **10MT/day, Dry waste – 4MT/day and Wet waste – 6MT/day.**
- 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), biomethanation, MRF etc: **Dry waste from the TMC, Jewargi is sent to Cement industry for co-processing in cement kiln and Wet waste is converted into compost by local body in the designated/authorised solid waste processing site.**
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%): **NIL**
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction): **Proposed**
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source : **23**
- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology) : **Dry waste from the TMC, Jewargi is sent to Cement industry for co-processing in cement kiln.**
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills-**NIL**
- 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 : **Drains-5,** no. of drains having floating racks/screens - **Nil**

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
1	10MT/day	10MT/day	1	10MT/day	-

VI. Bio-medical Waste Management:

- Total Bio-medical generation: **32.5 Kg/day**
- No. of Hospitals and Health Care Facilities: **32 Bedded HCFs and 72 Non Bedded HCFs**
- Status of Treatment Facility/ CBMWTF: **The CBWTFs has provided online continuous monitoring system to incinerator for monitoring of emission. CBWTF has already upgraded their incinerator to meet revised emissions standards as per MOEF Notification 2016.**

VII. Hazardous Waste Management:

- Total Hazardous Waste generation: **Nil**
- No. of Industries generating Hazardous waste: **Nil**
- Treatment Capacity of all TSDFs: **Nil**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: **Nil**
- Details of on-going or proposed TSDF: **Nil**

VIII. Plastic Waste Management:

- Total Plastic Waste generation: **1.1TPD**

Treatment/ Measures adopted for reduction or management of plastic waste: **Segregated Plastic waste from the TMC Jewargi is sent to Cement industry for co-processing in cement kiln. Draft Policy and Plan for plastic waste management has been prepared by the ULBD and accordingly plastic waste shall be collected from un-organized sectors and from house hold/commercial sectors. Plastic raids (Sales & Shops) were conducted from time to time by Local Body.**

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

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

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: ---

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.

XIV. Ground water regulation: ---

XV. Good irrigation practices being adopted by the State: ---

XVI. Rain Water Harvesting: ----

XVII. Demarcation of Floodplain and removal of illegal encroachments: ----

XVIII. Maintaining minimum e-flow of river: ----

XIX. Plantation activities along the rivers: ---

XX. Development of biodiversity park: ---

XXI. Reuse of Treated Water: ---

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: ---

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: **NA**

XXIV. Regulation of Mining Activities in the State/UT: ---

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring: **Nil**

XXVI. Overall progress of the month: ---

Please provide overall progress achieved in terms of all the above points compared to previous month.

KARNATAKA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE, KALABURAGI.
MINARS PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.	
	Station Code	1183
I.	Date & Time of collection	13.12.2022
		12.30 PM
II	Weather	Clear
III	Approximate depth	50cm
IV	Colour & Intensity	Colourless
V	Odour	Odourless
VI	Visible effluent discharge	None
VII	Human activities around the station.	Cloth washing & Bathing
VIII	Station details.	Bhima River at D/s of Bridge Ganagapur Kalaburagi

CORE PARAMETERS:

Sl.No.			
1	Temperature	°C	25
2	pH	pH unit	8.55
3	Conductivity	µS/cm	1135
4	DO	mg/L	7.96
5	BOD	mg/L	3
6	Nitrate as N	mg/L	1.71
7	Ammonia as N	mg/L	0.02
8	Total Coli form	MPN/100ml	160000
9	Faecal Coli form	MPN/100ml	4600

GENERAL PARAMETERS:

SL. NO			
1	COD	mg/L	87.76
2	Turbidity	NTU	6
3	Hardness as $CaCO_3$	mg/L	399.44
4	Calcium as $CaCO_3$	mg/L	130
5	Magnesium as $CaCO_3$	mg/L	269.44
6	Chloride	mg/L	160
7	Sodium	mg/L	110
8	Potassium	mg/L	5.8
9	Sulphate	mg/L	74
10	P-Alkalinity as $CaCO_3$	mg/L	50
11	Total Alkalinity as $CaCO_3$	mg/L	200
12	TKN	mg/L	-
13	Total Dissolved Solids	mg/L	760.45
14	Total Fixed Solids	mg/L	-
15	Total Suspended Solids	mg/L	20
16	Phosphate as PO_4	mg/L	BDL
17	Fluoride	mg/L	0.45
18	Bicarbonate(HCO3)	mg/L	200
19	Boron	mg/L	-
Classification			Class "D"as per primary water quality criteria CPCB
Water Quality Index			US
Note-Water quality Index US :Unsatisfactory , S:Satisfactory			

Assistant Scientific Officer
Karnataka State Pollution Control Board
KALABURAGI.

KARNATAKA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE, KALABURAGI.
MINARS PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.	
	Station Code	**1184**
I.	Date & Time of collection	13.12.2022 01.45PM
II	Weather	Clear
III	Approximate depth	50cm
IV	Colour & Intensity	Colourless
V	Odour	Odourless
VI	Visible effluent discharge	None
VII	Human activities around the station.	Cloth Washing
VIII	Station details.	Bhima River at D/s of Ferozabad Kalaburagi

CORE PARAMETERS:

Sl.No.			
1	**Temperature**	° C	26
2	**pH**	pH unit	8.77
3	**Conductivity**	µS/cm	1126
4	**DO**	mg/L	8.09
5	**BOD**	mg/L	3
6	**Nitrate as N**	mg/L	3.41
7	**Ammonia as N**	mg/L	0.01
8	**Total Coli form**	MPN/100ml	160000
9	**Faecal Coli form**	MPN/100ml	3100

GENERAL PARAMETERS:

SL. NO			
1	**COD**	mg/L	65.2
2	**Turbidity**	NTU	3.1
3	**Hardness as $CaCO_3$**	mg/L	318
4	**Calcium as $CaCO_3$**	mg/L	167.2
5	**Magnesium as $CaCO_3$**	mg/L	150.8
6	**Chloride**	mg/L	150
7	**Sodium**	mg/L	114
8	**Potassium**	mg/L	8.9
9	**Sulphate**	mg/L	91
10	**P-Alkalinity as $CaCO_3$**	mg/L	40
11	**Total Alkalinity as $CaCO_3$**	mg/L	196
12	**TKN**	mg/L	-
13	**Total Dissolved Solids**	mg/L	754.42
14	**Total Fixed Solids**	mg/L	-
15	**Total Suspended Solids**	mg/L	18
16	**Phosphate as PO_4**	mg/L	BDL
17	**Fluoride**	mg/L	0.54
18	**Bicarbonate(HCO3)**	mg/L	196
19	**Boron**	mg/L	-
Classification			Class "D"as per primary water quality criteria CPCB
Water Quality Index			**US**

Note-Water quality Index US :Unsatisfactory , S:Satisfactory

Assistant Scientific Officer
Karnataka State Pollution Control Board
KALABURAGI.

KARNATAKA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE, KALABURAGI.
MINARS PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.	
	Station Code	1888
I.	Date & Time of collection	13.12.2022
		02.10 PM
II	Weather	Clear
III	Approximate depth	50 cm
IV	Colour & Intensity	Colorless
V	Odour	Odorless
VI	Visible effluent discharge	None
VII	Human activities around the station.	None
VIII	Station details.	Bhima at confluence of Jewargi town sewage Disposal point Kalaburagi

CORE PARAMETERS:

Sl.No.			
1	Temperature	° C	27
2	pH	pH unit	8.94
3	Conductivity	µS/cm	1081
4	DO	mg/L	8.81
5	BOD	mg/L	3.2
6	Nitrate as N	mg/L	2.55
7	Ammonia as N	mg/L	0.01
8	Total Coli form	MPN/100ml	54000
9	Faecal Coli form	MPN/100ml	3300

GENERAL PARAMETERS:

SL. NO			
1	COD	mg/L	69.04
2	Turbidity	NTU	2.3
3	Hardness as $CaCO_3$	mg/L	314.56
4	Calcium as $CaCO_3$	mg/L	140.24
5	Magnesium as $CaCO_3$	mg/L	174.32
6	Chloride	mg/L	148
7	Sodium	mg/L	116
8	Potassium	mg/L	5.7
9	Sulphate	mg/L	56
10	P-Alkalinity as $CaCO_3$	mg/L	45
11	Total Alkalinity as $CaCO_3$	mg/L	200
12	TKN	mg/L	-
13	Total Dissolved Solids	mg/L	724.27
14	Total Fixed Solids	mg/L	-
15	Total Suspended Solids	mg/L	10
16	Phosphate as PO_4	mg/L	BDL
17	Fluoride	mg/L	0.53
18	Bicarbonate(HCO3)	mg/L	200
19	Boron	mg/L	-
Classification			Class "D"as per primary water quality criteria CPCB
Water Quality Index			US

Note-Water quality Index US :Unsatisfactory , S:Satisfactory

Assistant Scientific Officer
Karnataka State Pollution Control Board
KALABURAGI.

National Mission for Clean Cauvery

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020) For the State of Karnataka

Name of the River	**Cauvery**
Polluted river stretch	**Ranganathittu to Sattegala Bridge**
Priority	**IV**
Status as on	**Dec-22**

Overall status of the State:

Particulars		**TMC Srirangapatna**	**TMC Bannur**	**TMC Narasipura**	**GP Mullur**	**GP Harale (Dasanapura & Harle Village)**	**CMC Kollegala**	**GP Satthegala (Yedkuri Village)**	**Total**
I.	Total Population: Urban Population & Rural Population separately	25069	24430	31498	5671	3264	57149	428	147509
II.	Estimated Sewage Generation (MLD):	2.7	2.63	3.40	0.24	0.14	6.19	0.018	15.318

III. Details of Sewage Treatment Plant:

Particulars	**TMC Srirangapatna**	**TMC Bannur**	**TMC Narasipura**	**GP Mullur**	**GP Harale (Dasanapura & Harle Village)**	**CMC Kollegala**	**GP Satthegala (Yedkuri Village)**	**Total capacity in MLD**
Existing no. of STPs and Treatment Capacity (in MLD):	3.6	3.31	5.5	Nil	Nil	9	Nil	**21.41**
Capacity Utilization of existing STPs:	2.7	2.63	3.40	Nil	Nil	4.5	Nil	**13.23**
MLD of sewage being treated through Alternate technology:	Nil	Nil	Nil	Nil	Nil	Nil	Nil	**Nil**
Gap in Treatment Capacity in MLD:	Nil	Nil	Nil	Nil	Nil	Nil	Nil	**Nil**
No. of Operational STPs:	1	1	1	Nil	Nil	1	Nil	**4**
No. of Complying STPs:	1	1	1	Nil	Nil	1	Nil	**4**
No. of Non-complying STPs:	Nil	Nil	Nil	Nil	Nil	Nil	Nil	**Nil**

- **Note:** GP Mullur, GP Harale (Dasanapura & Harle Village) & GP Satthegala (Yedkuri Village) does not have STP and the Sewage effluent from the individual houses are being disposed off in to Septic tank and soak pits.

Details of each existing STP in the State

Name of the Local Body	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
TMC Srirangapatna	Ganjam, Srirangapatna	3.6 MLD	2.7 MLD	Operational	Complied
TMC, T Narasipura	Sy. No. 65/1, Byrapura & Algudu Village, T.N.Pura Taluk, Mysuru	5.5 MLD	3.8 MLD	Operational	STP is under stabilization & not receiving full quantum of sewage
TMC, Bannur	Sy. No. 174/1, 174/2, Yedahalli Village, Bannur Hobli, Bannur, Mysuru	3.31 MLD	2.36 MLD	Operational	STP consisting of WSP not maintained & operated in scientific manner
CMC, Kollegala	Sy No.930, 934, 946 & 935, Mullur Road, Kollegal Taluk	9.0 MLD	4.5 MLD	4.5 MLD	As per the MRP submitted by CMC Kollegal for the month of December-2021: STP is under Operation the missing UGD links in the networks have been identified and are being laid by the water board. The entire UGD network and other sources of sewage generator have been connected to the STP

Details of under construction STPs in the State

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
TMC Srirangapatna	Ganjam, Srirangapatna.	Up gradation of existing 3.6 MLD STP to 5 MLD with SBR Technology	Revised DPR is prepared by KUWS&DB, Mandya Division for Rs. 16.30 Crores to divert the sewage discharged in to river through storm water drain. Connecting household to UGD by 3000 houses. Up gradation of existing 3.6 MLD STP to 5.0 MLD. The DPR is approved and tender is under process.	Proposals submitted to Government for taking up I&D works to reconnect the sewage in to nearby wet wells and household UGD connections for 3000 houses.	31-03-2021

TMC, T Narasipura	Sy. No. 65/1, Byrapura & Algudu Village, T.N.Pura Taluk, Mysuru	Nil	Nil	4 drains carrying sullage effluent is to be connected to wet well before Micro STP. **No Work is in Progress.**	31-03-2021
TMC, Bannur	Sy. No. 174/1, 174/2, Yedahalli Village, Bannur Hobli, Bannur, Mysuru	0.49 MLD	DPR prepared by KUWS&DB, Mysuru for Rs. 58 Crores for laying UGD network for new extension and to upgrade the existing STP to 3.8 MLD with SBT Technology.	50% of the town limit is connected to UGD & the remaining houses are yet to be connected. The sewage effluent from Makanahalli Extension is disposed off in to Septic tank and the same is transported to STP for further treatment & disposal.	31-03-2021
GP, Mulluru	-	-	-	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. **No Work is in Progress.**	31-03-2021
GP Harale (Dasanapura & Harle Village)	-	-	-	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. **No Work is in Progress.**	31-03-2021
CMC, Kollegala	Sy No.930, 934, 946 & 935, Mullur Road, Kollegal Taluk	9 MLD	80% is completed. since Out of the planned 7 wet wells serving each of the 7 collection networks zones, the construction of 03 wet wells one each for Uppara mole, shankanapura and Hosanagalli is yet to be taken up by the implementing agency i.e., KUWS&DB. The construction of Shankanpura collection zones wet well is delayed has the land issue of the wet well site as enter into illegal litigation in the Karnataka High Court. As per the MPR for the March 2021 received from CMC, Kollegal: The missing Links in the sewer network are being attended to and the proposed wet wells in separate areas away from the city like Hosaanagalli, Shankanapura ,budithittu and Bendarahalli have been dropped and	Laying UGD network is in progress & after completion of the same sewage discharge in to storm water drain is avoided. **Work is in progress.** Presently, 9 MLD STP is under operation & not receiving full quantum of sewage because of the missing links. UGD works is completed but the house to sewer network connection is partially completed. As per the MPR submitted by the CMC Kollegala the connection of entire sewer network and other sources of generation of sewage have been connected to the STP barring the isolated areas of Hosa Anagalli, Shankanapura, Upparamole and Bendarahalli and Boodititu. The earlier proposed wet wells have been dropped at Hosa Anagalli, Shankanapura, Upparamole and Bendarahalli and Boodititu and new technology based decentralized local	31-03-2021

			new technology based decentralized local treatment units have been proposed for the said areas which will take some time for implementation and commissioning. Stipulating the time limit as August- 2021. **No Work is in Progress.**	treatment units in the form of mini STP have been proposed for the said area. Hence CMC kollegala has soughted time till Aug 2021 for the establishment and commissioning of the proposed mini STP's. **No Work is in Progress.**	
Yedkuri Village (GP Satthegala)	-	-	-	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. **No Work is in Progress.**	31-03-2021

Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
TMC Srirangapatna	Chandagalu Road, Ganjam, Srirangapatna.	Up gradation of existing 3.6 MLD STP to 5.0 MLD.	Revised DPR is prepared by KUWS&DB, Mandya Division for Rs. 16.30 Crores to divert the sewage discharged in to river through storm water drain. Connecting household to UGD by 3000 houses. Up gradation of existing 3.6 MLD STP to 5.0 MLD. The DPR is approved and tender is under process.	March - 2021
TMC, T Narasipura	Sy. No. 65/1, Byrapura & Algudu Village, T.N.Pura Taluk, Mysuru	Nil	Nil	Nil
TMC, Bannur	Sy. No. 174/1, 174/2, Yedahalli Village, Bannur Hobli, Bannur, Mysuru	Upgradation the existing STP to 3.8 MLD with SBT Technology.	DPR prepared by KUWS&DB, Mysuru for Rs. 58 Crores for laying UGD network for new extension and to upgrade the existing STP to 3.8 MLD with SBT Technology.	March - 2021
GP, Mulluru	GP, Mulluru	2 drains is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 3.0 Lakhs for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress in Field is made upto Jan 2022.**	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. The Executive Officer, Taluk Panchayath, Kollegala has submitted a letter stating that under Swatch Bharath mission budget is sanctioned for providing septic tank and	March - 2021

			soak pit and phyto remediation technique for treatment of sullage for the villages located along the banks of Cauvery river. No Work is in Progress. As per the letter submitted by Executive Officer, Taluk Panchayath, Kollegal on 03/01/2021, stating that the Construction of the septic tank and soak pit as per IS 2470 by the end of March 2022 is being prepared and submitted action plan to the Zilla Panchayat Office for approval.	
GP Harale (Dasanapura & Harle Village)	GP Harale (Dasanapura & Harle Village)	5 drains is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 3.0 Lakhs for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress in Field is made upto Jan- 2021.**	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. The Executive Officer, Taluk Panchayath, Kollegala has submitted a letter stating that under Swatch Bharath mission budget is sanctioned for providing septic tank and soak pit and phyto remediation technique for treatment of sullage for the villages located along the banks of Cauvery river. **No Work is in Progress.**	March - 2021
Yedkuri Village (GP Satthegala)	Yedkuri Village (GP Satthegala)	Nil	Nil	March - 2021
CMC, Kollegala	CMC, Kollegala	1 drains is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 3.0 Lakhs for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress in Field is made upto Jan 2021.**	Proposed to provide Common Septic tank and soak pit by diverting the sullage joining to river. The Executive Officer, Taluk Panchayath, Kollegala has submitted a letter stating that under Swatch Bharath mission budget is sanctioned for providing septic tank and soak pit and phyto remediation technique for treatment of sullage for the villages located along the banks of Cauvery river. **No Work is in Progress.**	-

IV. <u>Details of Industrial Pollution:</u>

Particulars	TMC Srirangapatna	TMC Bannur	TMC Narasipura	GP Mullur	GP Harale (Dasanapura & Harle Village)	CMC Kollegala	GP Satthegala (Yedkuri Village)
No. of industries in the State:	6	4	34	Nil	Nil	14	Nil
No. of water polluting industries in the State:	1	3	22	Nil	Nil	2	Nil
Quantity of effluent generated from the industries in MLD:	0.0196	0.027	0.027	Nil	Nil	0.0178	Nil
Quantity of Hazardous Sludge generated from the Industries in TPD:	Nil	**Nil**	**Nil**	Nil	Nil	0	Nil
Number of industrial units having ETPs:	1	**3**	**22**	Nil	Nil	2 (1 no. Sri Sai Automobiles, Kollegal, 1 No. Partally provided grit Chamber as a part of ETP KSRTC Kollegal)	Nil
Number of industrial units connected to CETP:	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Number and total capacity of ETPs (details of existing/ under construction / proposed)	No. of ETP–1, Capacity-0.022 Under construction–0, Capacity-0 Proposed–0. Capacity-0	No. of ETP–3, Capacity-0.027 Under construction–0, Capacity-0 Proposed–0. Capacity-0	No. of ETP–22, Capacity-0.027 Under construction–0, Capacity-0 Proposed–0. Capacity-0	Nil	Nil	No. of ETP–2, Capacity-0.0178 Under construction–0, Capacity-0 Proposed–1. Capacity-0.018	Nil
Compliance status of the ETPs:	Complied	Nil	Nil	Nil	Nil	Complied	Nil
Number and total capacity of CETPs (details of existing/ under construction / proposed)	Nil	Nil	Nil	Nil	Nil	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)
TMC Srirangapatna	Nil	Nil	Nil	Nil
TMC, T Narasipura	Nil	Nil	Nil	Nil
TMC, Bannur	Nil	Nil	Nil	Nil
GP, Mulluru	Nil	Nil	Nil	Nil
GP Harale (Dasanapura & Harle Village)	Nil	Nil	Nil	Nil

CMC, Kollegala	Nil	Nil	Nil	Nil
Yedkuri Village (GP Satthegala)	Nil	Nil	Nil	Nil

V. **Solid Waste Management:**

Particulars	TMC Srirangapatna	TMC Bannur	TMC Narasipura	GP Mullur	GP Harale (Dasanapura & Harle Village)	CMC Kollegala	GP Satthegala (Yedkuri Village)
Total number of Urban Local Bodies and their Population	25069	24430	31498	5671	3264	57149	428
Current Municipal Solid Waste Generation	11.17 TPD	8.9	10	1.2	0.6	21.0	0.1
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), biomethanation, MRF etc	• Composting Existing – 1.5 Gap – 3.0 TPD • Sanitary landfill Existing–Nil Gap – 2.34 TPD	• Composting Existing – 1.5 Gap – 0.64 TPD • Sanitary landfill Existing–Nil Gap – 2.13 TPD	• Composting Existing – Nil Gap – 4.1 TPD • Sanitary landfill Existing–Nil Gap – 2.4 TPD	**Nil**	**Nil**	• Composting Existing – 2.0 Gap – 6.61TPD • Sanitary landfill Existing–Nil Gap – 5.0 TPD	**Nil**
Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	DPR for Rs. 4.43 Crores is approved to provide compost plant & sanitary land fill site & the same is to be undertaken. At present the solid waste is dumped in the site without any treatment. The work is assigned to contractor and out of 22 works,12 works are completed and remaining 10 works are under progress.	DPR for Rs. 1.06 Crores is approved to provide compost plant & sanitary land fill site. The work is under progress. At present the solid waste is dumped in the site without any treatment.	DPR for Rs. 4.13 Crores is approved to provide compost plant & sanitary land fill site & the same is to be undertaken. One zero waste management site has been established. At present the solid waste is dumped in the site without any treatment.	Nil	Nil	DPR is approved for Rs. 2.5 Crores for procurement of machinery & other accessory to initiate composting & sanitary land fill site maintenance.	Nil
No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at	• Door to door collection 23/23 Wards.	• Door to door collection 23/23 Wards.	• Door to door collection 23/23 Wards.	Nil	Nil	• Door to door collection 31/31 Wards.	Nil

source	• Segregation practice-19 Wards	• Segregation practice-13 Wards	• Segregation practice-6 wards			• Segregation practice-28	
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	Nil	Nil	Nil	Nil	Nil	Nil	Nil
No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers	Nil	Nil	Nil	Nil	Nil	Nil	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	Nos. of drains 3 Nos. of drains having floating racks / screen – Nil	Nos. of drains 2 Nos. of drains having floating racks / screen – Nil	Nos. of drains 4 Nos. of drains having floating racks / screen – Nil	Nos. of drains 2 Nos. of drains having floating racks / screen – Nil	Nos. of drains 5 Nos. of drains having floating racks / screen – Nil	Nos. of drains1 Nos. of drains having floating racks / screen – Nil	Nos. of drains 1 Nos. of drains having floating racks / screen – Nil

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
TMC Srirangapatna	11.17	1.5	Pit Composting	1.5	DPR for Rs. 4.40 Crores is approved for processing of entire MSW. Currently, the work is assigned to contractor and out of 22 works,12 works are completed and remaining 10 works are under progress.
TMC, T Narasipura	10	0	Pit Composting	0	SWM DPR prepared under swaccha Bharath Mission is approved and action is being taken up as per DPR . One zero waste management site has been established. Timeline -30-03-2021
TMC, Bannur	8.9	1.5	Pit Composting,	1.5	DPR has been prepared under SBM and it is in the implementation stage. The work is under progress. Timeline -30-03-2021
GP, Mulluru	1.2	0	Nil	0	No action plan
GP Harale (Dasanapura & Harle Village)	0.6	0	Nil	0	No action plan
CMC, Kollegala	21.0	2.0	Composting is carried	2.0	As per the MPR March 2021 submitted by the CMC

			out		Kollegala, Construction of compound wall, processing Shed, windrow platform, internal roads, Sanitary Land Fill(SLF), drain, watch man shed is completed. Electrification, drilling of Borewell, installation of machineries, are under tender process and sought Completion Timeline on April 2021. Presently segregated is being dump separately at land fill site. Wet waste is processed for compost. Bio-medical waste is being handled by private CBMWTF. Land has been indentify for set up of decentralized waste management
Yedkuri Village (GP Satthegala)	0.1	0	Nil	0	No action plan
Total	**52.97**	**5.0**		**5.0**	

VI. Bio-medical Waste Management:

Particulars	**TMC Srirangapatna**	**TMC Bannur**	**TMC Narasipura**	**GP Mullur**	**GP Harale (Dasanapura & Harle Village)**	**CMC Kollegala**	**GP Satthegala (Yedkuri Village)**
Total Bio-medical generation in Kgs/day	54.45 Kg/day	16 Kg/day	119.5 Kgs/day	Nil	Nil	103.44 kg/day	Nil
No. of Hospitals and Health Care Facilities:	Bedded: 3 Non Bedded: 19	Bedded: 1 Non Bedded: 4	Bedded: 15 Non Bedded:18	Nil	Nil	Bedded: 09 Non Bedded:31	Nil
Status of Treatment Facility/ CBMWTF:	CBMWTF	CBMWTF	CBMWTF	Nil	Nil	CBMWTF	Nil

VII. Hazardous Waste Management:

Particulars	**TMC Srirangapatna**	**TMC Bannur**	**TMC Narasipura**	**GP Mullur**	**GP Harale (Dasanapura & Harle Village)**	**CMC Kollegala**	**GP Satthegala (Yedkuri Village)**
Total Hazardous Waste generation:	Nil	Nil	Nil	Nil	Nil	0.805 TPA	Nil
No. of Industries generating Hazardous waste	Nil	Nil	Nil	Nil	Nil	01	Nil
Treatment Capacity of all TSDFs	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Details of on-going or proposed TSDF	Nil	Nil	Nil	Nil	Nil	Nil	Nil

VIII. Plastic Waste Management:

Particulars	TMC Srirangapatna	TMC Bannur	TMC Narasipura	GP Mullur	GP Harale (Dasanapura & Harle Village)	CMC Kollegala	GP Satthegala (Yedkuri Village)
Total Plastic Waste generation:	0.69	0.2	0.36	Nil	Nil	0.5 TPD	Nil
Treatment/ Measures adopted for reduction or management of plastic waste:	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Particulars	TMC Srirangapatna	TMC Bannur	TMC Narasipura	GP Mullur	GP Harale (Dasanapura & Harle Village)	CMC Kollegala	GP Satthegala (Yedkuri Village) Total
IX. Details of Alternate Treatment Technology being adopted by the State/UT	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**
X. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment:	3 drain is identified & monitored & the drain is connected to nearby wet well to pump the same to STP.	2 Drains identified and monitored periodically	4 Drains identified and monitored periodically	2 drains is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 3.0 Lakhs for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress**	5 drains is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 1,15,000/- for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress**	1 drain is identified & monitored. CMC Kollegala is providing UGD network for the entire town & after completion of the same the sewage & sullage entering the said drains is diverted to STP for further treatment & disposal. The work is under	1 drain is identified & monitored. ZP Chamarajanagar has earmarked an amount of Rs. 2.0 Lakhs for providing Common Sewage collection tank & Common septic tank and soak pit. **No physical progress**

						progress.	
XI.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	-					
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;	**Status of water quality of polluted rivers in Annexure-1.**					
XIV.	Ground water regulation:	CMC Kollegala : As per the details submitted by Sr. Geologist, District Ground Water Authority, Chamarajanagar for the month of March 2021, as per the circular KGA/NOC/2019-20 dated 29-05-2019 with reference to Karnataka Act 2011 U/s 17 (K), so as to fulfill the objectives of the Act, in notified taluks and non notified taluks for NOC for the purpose of industrial, commercial, entertainment, infrastructure, mining and others is made compulsory. This subject was discussed in District Ground Water Authority meeting. In this regard, as per the directions, notices has been issued to obtain NOC for extracting groundwater from Karnataka Ground Water Authority / District Ground Water Authority.. **Status of Ground Water Resource Assessment in Annexure-2**					
XV.	Good irrigation practices being adopted by the State:	The Dept. of Agriculture has submitted action plan for implementation of following measures: I. General Government Practice of Irrigation is maintained. II. Farmers are made aware to use water optimally. As per the details submitted by KaveriNeeravariNigama for the month of August 2020, Canal System are partially lined, so as to minimize seepage losses. In view of this a DPR proposed from the irrigation department of Kollegala taluk for the work related to Distributaries (D-56 to D-62) under Kabini Right Bank Canal (KRBC). Total cost of Rs.20 crores for modernization of					
XVI.	Rain Water Harvesting:	As per the details submitted by Sr. Geologist, District Ground Water Authority, Chamarajanagar for the month of October 2020, to improve the ground water situation rain water harvesting structure and some of the other artificial recharge structures are recommended to be constructed in their premises while giving the permission to extract ground water from the authority.					
XVII.	Demarcation of Floodplain and removal of illegal encroachments:	--					
XVIII.	Maintaining minimum e-flow of river:	The Cauvery Neeravari Nigam Ltd., is requested to submit the action plan as per MoEF & CC norms during monsoon seasons and same is not submitted					
XIX.	Plantation activities along the rivers:	Social Forestry Department, Chamarajanagar district in its letter reads that the proposed plan for plantation of saplings on the bank of Cauvery river for about 14.5 Kms in the ensuing monsoon season. The project is yet to be approved and sanctioned. Hence no progress made.					

XX.	Development of biodiversity park:	-
XXI.	Reuse of Treated Water:	-
XXII.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	-
XXIII.	Status of Preparation of Action Plan by the 13 Coastal States:	-
XXIV.	Regulation of Mining Activities in the State/UT:	-
XXV.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	-
XXVI.	Overall progress of the month: Please provide overall progress achieved in terms of all the above points compared to previous month.	a) TMC Srirangatapna - DPR is prepared by KUWS&DB, Mandya Division for Rs. 16.30 Crores to divert the sewage discharged in to river through storm water drain. Connecting household to UGD by 3000 houses. Up gradation of existing 3.6 MLD STP to 5.0 MLD. The DPR is approved and tender is under process. b) CMC Kollegala – Presently, 9 MLD STP is under operation & not receiving full quantum of sewage because of the missing links. UGD works is completed but the house to sewer network connection is partially completed. As per the MPR submitted by the CMC Kollegala the connection of entire sewer network and other sources of generation of sewage have been connected to the STP barring the isolated areas of Hosa Anagalli, Shankanapura, Upparamole and Bendarahalli and Boodititu. The earlier proposed wet wells have been dropped at Hosa Anagalli, Shankanapura, Upparamole and Bendarahalli and Boodititu and new technology based decentralized local treatment units in the form of mini STP have been proposed for the said area. Hence CMC kollegala has soughted time till October 2021 for the establishment and commissioning of the proposed mini STP's. c) As per the MPR submitted by the CMC Kollegala, Construction of compound wall, processing Shed, windrow platform, internal roads, Sanitary Land Fill(SLF), drain, watch man shed is completed. Electrification, drilling of Borewell, installation of machineries, are under tender process and sought Completion Timeline on April 2021.**No Work is in Progress.** d) As per the letter from Executive Officer, Taluk Panchayath, Kollegala dated 3-1-2022, stated within March 2022 the Septic & Soak pit as per IS 2470 will be constructed. e) With respect to treatment & disposal of sewage effluent the LB's have taken steps to operate the existing STPs & action plan for up gradation of the existing STPs is being prepared by KUWS&DB & the same is yet to be approved by the Government. f) With respect to Solid Waste Management by Municipalities, steps have been taken process the Solid Waste with the existing compost facilities and works followed by tendering Zor expanding the same along with sanitary land fill sites construction are under progress.

	g) District level meeting on Polluted river stretches was held on 3-3-2021 under the Chairmanship of Minister C.P Yogeshwar. As per the directions of Minister Local Bodies were directed to use the available funds of the CMC to divert the Missing links of sewage to STP **h) Short term tender notification has been called by the KUWS&DB through E-procurement portal tender no: KUWSDB/2021-22/WS/WORK_INDENT2943 on 06-04-2021 with respect to rejuvenation of UGD systems, construction/ upgradation of STPs, providing sewer networks and outfall sewer lines, construction of wetwells, providing rising mains and other related works along with operation and maintenance of STPs as per NGT directions** i) Work Order issued by Executive Engineer, KUWS &DB, Mysuru to the M/s. CVK Construction Pvt Ltd., Vide letter dated 08.11.2021 to proceed with the contract for providing/ rejuvenation of UGD scheme to Bannur Town as per NGT standards including O&M for 5 years at a tender price of Rs. 43,10,72,922 as approved by Chief Engineer, KUWS& DB, Mysuru . **j)** Flow data given by Chief Engineer CNNL Irrigation South Mysore, Cauvery Neeravari Nigama Limited wrt daily Gauge report of Cauvery . As per the report the inflow of the Cauvery river is 7260 cusecs as on 04.12.2021 **k) Upgradation of existing Bannur STP to 3.8 MLD with SBT Technology work has been taken up.** **l) The DPR has been prepared and yet to be approved for connecting the missing links across the T Narasipura town to wet well**

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Details of Water Quality Monitoring locations as per NWMP	Month	DO(mg/l)	BOD(mg/l)	Fecal Coliform (MPN/100 ml)	Totalcoliform (MPN/100 ml)
1	D/S of river Cauvery in Ranganathittu Bird sanctuary, SR Patna Taluk, Mandya District	Dec-22	6.7	2	210	1300
2	D/s of left bank of river Cauvery in Mandya Water Supply Intake Point near SR Patna Taluk, Mandya District	Dec-22	6.7	2.0	140	1200
3	D/s of right bank of river Cauvery in Srirangapatna Water Supply Intake Point near Wellesly Bridge TMC SR Patna, Mandya District	Dec-22	6.5	2.5	120	1100
4	D/S of river Cauvery in Mysore-Bangalore Road Bridge of TMC Srirangapatna, Mandya District	Dec-22	6.6	2.5	170	1300
5	D/S of river Cauvery Bannur TMC Water supply intake point near Mysore- Bannur Road bridge, T.Narasipura Taluk, Mysore District	Dec-22	6.4	2.0	140	1100
6	D/S of river Cauvery near Mullur Village, Kollegala Taluk, Chamarajanagar District	Dec-22	6.5	3.0	140	1300
7	D/S of Cauvery river near Dasanapura Village, Kollegala Taluk, Chamarajanagar District	Dec-22	6.7	2.0	150	1100
8	D/S of Cauvery river near Sathegala Bridge,Kollegala Taluk, Chamarajanagar District	Dec-22	6.6	2.0	140	1300

ANNEXURE-2

XIV Status of Ground Water Resource Assessment in Annexure-2

District	Taluka	NetAnnual Ground Water Availability (HAM)	Total Ground Water Draft (HAM)	Gap between availability andDraft (HAM)	Stageof Ground Water Development (%)*	Category
Mandya	Srirangpatna	6769.77	2960.12	3809.65	44%	***Safe (≤ 70)**
Mysuru	T.Narasipura	10244	4978	5266	49	***Safe (≤70)**
Ch-nagar	Kollegala	142.23 (MCM)	100.42 (MCM)	41.18 (MCM)	71	***Semi Critical**
Note:-ThegroundwaterresourcesassessmentiscarriedoutonTalukawise (Administrative Units) The State Govt. hastakenup various Recharge/WaterConservationSchemes like foraugmentationofgroundwaterresources.						

National Mission for Clean Cauvery

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)For the State of Karnataka

Name of the River	**Kabini**
Polluted river stretch	**Nanjangud to Hejjige**
Priority	**IV**
Status as on	**December 2022**

Overall status of the State:

Particulars		CMC Nanjangud
I.	Total Population: Urban Population & Rural Population separately	**50137**
II.	Estimated Sewage Generation (MLD):	**5.41**

III. <u>Details of Sewage Treatment Plant:</u>

Particulars	CMC Nanjangud
Existing no. of STPs and Treatment Capacity (in MLD):	**7**
Capacity Utilization of existing STPs:	**2**
MLD of sewage being treated through Alternate technology:	**Nil**
Gap in Treatment Capacity in MLD:	**3.41**
No. of Operational STPs:	**1**
No. of Complying STPs:	**1**
No. of Non-complying STPs:	**Nil**

<u>Details of each existing STP in the State</u>

Name of the Local Body	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
CMC Nanjangud	Sy. No. 24/1, Golur Village, Nanjangud Taluk	7 MLD	2 MLD	Operational	Complied

Details of under construction STPs in the State

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
CMC Nanjangud	Sy. No. 24/1, Golur Village, Nanjangud Taluk	Nil	Nil	60% house hold connections is completed & remaining works is under progress. DPR for Rs. 36.86 Crores is approved for laying UGD network for new extensions & to upgrade the existing STP to SBT Technology. **Work is under progress.**	31-03-2021

Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
CMC Nanjangud	Sy. No. 24/1, Golur Village, Nanjangud Taluk	Nil	DPR is approved for Rs.36.86 crores for up gradation of SBT Technology. **Work is under progress.**	31.03.2021

IV. Details of Industrial Pollution:

Particulars	
No. of industries in the State:	38
No. of water polluting industries in the State:	38
Quantity of effluent generated from the industries in MLD:	9.03
Quantity of Hazardous Sludge generated from the Industries in TPD:	Nil
Number of industrial units having ETPs:	38
Number of industrial units connected to CETP:	Nil
Number and total capacity of ETPs (details of existing/ under construction / proposed)	No. of ETP–38, Capacity-9.43 Under construction–0, Capacity-0 Proposed–0. Capacity-0
Compliance status of the ETPs:	Complied
Number and total capacity of CETPs (details of existing/ under construction / proposed)	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)
CMC Nanjangud	NIL	NIL	NIL	NIL

V. **Solid Waste Management:**

Particulars	CMC Nanjangud
Total number of Urban Local Bodies and their Population	**50137**
Current Municipal Solid Waste Generation	**26 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), biomethanation, MRF etc	Compost Plant around 6 TPD.
Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	Composting gap Existing-6 TPD, Gap-4.66 TPD Sanitary landfill site Existing- Nil, Gap-6.24 TPD
No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	Nil
Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	31 wards, all are with door to door collection and source segregation is practiced in 24 wards.
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	DPR for Rs. 5.16 Crores is approved to provide sanitary land fill site to dispose 6.24 TPD of rejects and around 9.1 TPD of Dry Waste is segregated and sold in the Market. Proposals for providing 10 TPD compost plant is to be prepared & got it approved. The work of construction of sanitary landfill site is in progress.
No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	NIL
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	5 nos. of drains out of which 2 drains are connected to nearby wet well and 3 drains works are yet to be undertaken.

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
CMC Nanjangud	**26**	**6**	**1**	**6**	**31.03.2021.**

Bio-medical Waste Management:

Particulars	CMC Nanjangud
Total Bio-medical generation:	0.217 Kg/day
No. of Hospitals and Health Care Facilities:	Bedded: 35 Non Bedded: 50
Status of Treatment Facility/ CBMWTF:	CBMWTF

VI. Hazardous Waste Management:

Particulars	CMC Nanjangud
Total Hazardous Waste generation:	**22117 TPA**
No. of Industries generating Hazardous waste	**10**
Treatment Capacity of all TSDFs	**Nil**
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	**4888 TPA**
Details of on-going or proposed TSDF	**Nil**

VII. Plastic Waste Management:

Particulars	CMC Nanjangud
Total Plastic Waste generation:	**4 TPD**
Treatment/ Measures adopted for reduction or management of plastic waste:	Nil

Particulars	CMC Nanjangud
VIII. Details of Alternate Treatment Technology being adopted by the State/UT	-
IX. Identification of polluting sources including drains contributing to river pollution and action	**06 drains identified and monitored periodically**

	as per NGT order on insitu treatment:	
X.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	-
I.	Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:	-
II.	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;	**Status of water quality of polluted rivers in Annexure-1.**
III.	Ground water regulation:	As per the District Ground water Authority data submitted for the year 2020 in their Hand Book CMC Nanjangud comes under safer zone as per ground water resources assessment and there is no over exploitation of ground water in the region**.**
IV.	Good irrigation practices being adopted by the State:	The Dept. of Agriculture has submitted action plan for implementation of following measures: I. General Government Practice of Irrigation is maintained. II. Farmers are made aware to use water optimally.
V.	Rain Water Harvesting:	**Rain water harvesting is made mandatory for new constructions, CMC has taken up awareness programmes to educate the people about river flooding during Monsoon**
VI.	Demarcation of Floodplain and removal of illegal encroachments:	Nil
VII.	Maintaining minimum e-flow of river:	Flow data given by Chief Engineer CNNL Irrigation South Mysore, Cauvery Neeravari Nigama Limited wrt daily Gauge report of Kabini. As per the report the inflow of the Kabini river is 1707 cusecs as on 04.12.2021
VIII.	Plantation activities along the rivers:	As of now there are no plantations on the banks of river Kabini in the polluted stretch since the area is confined to CMC limit
IX.	Development of biodiversity park:	As of now, there are no Bio diversity parks in this stretch
X.	Reuse of Treated Water:	--
XI.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	--
XII.	Status of Preparation of Action Plan by the 13 Coastal States:	NA
XIII.	Regulation of Mining Activities in the State/UT:	Nil
XIV.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	Nil

XV. Overall progress of the month: Please provide overall progress achieved in terms of all the above points compared to previous month.	a) With respect to treatment & disposal of sewage effluent the LB has taken steps to operate the existing STPs & action plan for up gradation of the existing STPs is being prepared by KUWS&DB & the same is yet to be approved by the Government. b) With respect to Solid Waste Management by Municipalities, steps have been taken process the Solid Waste with the existing compost facilities and works followed by tendering for expanding the same along with sanitary land fill sites construction are under progress. c) District level meeting on Polluted river stretches was held on 3-3-2021 under the Chairmanship of Minister C.P Yogeshwar. As per the directions of Minister Local Bodies were directed to use the available funds of the CMC to divert the Missing links of sewage to STP d) Short term tender notification has been called by the KUWS&DB through E-procurement portal tender no: KUWSDB/2021-22/WS/WORK_INDENT2943 on 06-04-2021 with respect to rejuvenation of UGD systems, construction/ upgradation of STPs, providing sewer networks and outfall sewer lines, construction of wetwells, providing rising mains and other related works along with operation and maintenance of STPs as per NGT directions e) As per the proceedings of the meeting conducted on 24.09.2021 under the chairmanship of Hon`ble Subhash Adi Former Judge, High Court of Karnataka and Upa Lokayuktha, Government of Karnataka and Chairperson National Green Tribunal State Level Committee Karnataka Constituted by Hon`ble NGT in OA No 606/2018 , "Missing links sewage effluent discharged into storm water drain shall be diverted to nearby STPs /Wet wells by providing interception and diversion system by adopting low cost treatment facilities", the same is communicated to ULB`s for further action. f) Flow data given by Chief Engineer CNNL Irrigation South Mysore, Cauvery Neeravari Nigama Limited wrt daily Gauge report of Kabini. As per the report the inflow of the Kabini river is 1707 cusecs as on 04.12.2021 g) DPR approved by the Government for laying UGD network for new extensions & to upgrade the existing STP for Rs. 36.86 Crores. h) The tender of Rs. 2731,13,999.00/- has been accepted from M/s Akhil Infra Projects Pvt Ltd, Ballari on 31-12-2021 for the work of " Providing/Rejuvenation of UGD scheme to Nanjangud city as per NGT standards including O&M for 5 years i) STP Up gradation to SBT Technology **Work is under progress.**

Environmental Officer
RO-2, Mysuru(Rural)

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Particulars of sampling locations as per NWMP	Year	DO(mg/l)	BOD(mg/l)	Fecal Coliform (MPN/100 ml)	Total coliform (MPN/100 ml)
1	D/s of Kabini at Nanjangud Water Supply Intake Point near Debur	Dec-22	6.8	1.5	150	1300
2	D/S of Kabini from KIADB W/s Intake Point Kallahalli	Dec-22	6.7	2.0	170	1200
3	D/s of Kabini near Bathing Ghat, Nanjangud	Dec-22	6.5	2.0	170	1500

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter

OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : KAGINA RIVER
Polluted river stretch : Shahabad to Hongunta -10KM
Priority : IV
Status as on : 05.01.2023
Overall status of the State:

I. Total Population: Urban Population & Rural Population separately : **47,582**

II. Estimated Sewage Generation (MLD): **7.06MLD**

III. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD): **Nil**
- Capacity Utilization of existing STPs: **Nil**
- MLD of sewage being treated through Alternate technology: **Nil**
- Gap in Treatment Capacity in MLD: **7.06MLD**
- No. of Operational STPs: **Nil**
- No. of Complying STPs: **Nil**
- No. of Non-complying STPs: **Nil**

<u>Details of each existing STP in the State</u>

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
-	-	-	-	-	-

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
-	-	-	-	-	-

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	Shahabad	13.5	-	-

IV. Details of Industrial Pollution:

- No. of industries in the State: **Nil (**There are no industry located in the river stretch)
- No. of water polluting industries in the State: **Nil**
- Quantity of effluent generated from the industries in MLD: **Nil**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **Nil**
- Number of industrial units having ETPs: **Nil**
- Number of industrial units connected to CETP: **Nil**
- Number and total capacity of ETPs (details of existing/ under construction / proposed): **Nil**
- Compliance status of the ETPs: **Nil**
- Number and total capacity of CETPs (details of existing/ under construction / proposed) : **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)
-	-	-	-	-

V. **Solid Waste Management:**

- Total number of Urban Local Bodies and their Population : **City Municipal Council Shahabad having population of 47,582**
- Current Municipal Solid Waste Generation: **17.44MT/day, Dry waste – 11MT/day and Wet waste – 5.44MT/day.**
- 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), biomethanation, MRF etc: **Dry waste from the CMC Shahabad is sent to Cement industry for co-processing in cement kiln and Wet waste is converted into composted by local body in the designated/authorised solid waste processing site.**
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%): **Nil**
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction): **Proposed**
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source : **27**
- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology) : **Dry waste from the CMC Shahabad is sent to Cement industry for co-processing in cement kiln.**
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills.: **Nil**
- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers : **Nil**
- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers : **1**

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
1	**17.44MT/day**	**17.44MT/day**	1	**17.44MT/day**	-

VI. Bio-medical Waste Management:

- Total Bio-medical generation: **12 Kg/day**
- No. of Hospitals and Health Care Facilities: **4 Bedded HCFs and 20 Non Bedded HCFs**
- Status of Treatment Facility/ CBMWTF: **The CBWTFs has provided online continuous monitoring system to incinerator for monitoring of emission. CBWTF has already upgraded their incinerator to meet revised emissions standards as per MOEF Notification 2016.**

VII. Hazardous Waste Management:

- Total Hazardous Waste generation: **Nil**
- No. of Industries generating Hazardous waste: **Nil**
- Treatment Capacity of all TSDFs: **Nil**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: **Nil**
- Details of on-going or proposed TSDF: **Nil**

VIII. Plastic Waste Management:

- Total Plastic Waste generation: **2TPD**

Treatment/ Measures adopted for reduction or management of plastic waste: **Segregated Plastic waste from the CMC Shahabad is sent to Cement industry for**

co-processing in cement kiln. Draft Policy and Plan for plastic waste management has been prepared by the ULBD and accordingly plastic waste shall be collected from un-organized sectors and from house hold/commercial sectors. Plastic raids (Sales & Shops) were conducted from time to time by Local Body.

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

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

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: ---

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.

XIV. Ground water regulation: ---

XV. Good irrigation practices being adopted by the State: ---

XVI. Rain Water Harvesting: ----

XVII. Demarcation of Floodplain and removal of illegal encroachments: ----

XVIII. Maintaining minimum e-flow of river: ----

XIX. Plantation activities along the rivers: ---

XX. Development of biodiversity park: ---

XXI. Reuse of Treated Water: ---

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: ---

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: **NA**

XXIV. Regulation of Mining Activities in the State/UT: ---

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring: **Nil**

XXVI. Overall progress of the month: ---

Please provide overall progress achieved in terms of all the above points compared to previous month.

KARNATAKA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE, KALABURAGI.
MINARS PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.	
	Station Code	1895
I.	Date & Time of collection	13.12.2022
		02.40 PM
II	Weather	Clear
III	Approximate depth	50cm
IV	Colour & Intensity	Clear
V	Odour	Odourless
VI	Visible effluent discharge	None
VII	Human activities around the station.	Bathing
VIII	Station details.	Kagina at D/s of shahabad town sewage confluence Point Kalaburagi

CORE PARAMETERS:

Sl.No.			
1	Temperature	° C	27
2	pH	pH unit	8.78
3	Conductivity	µS/cm	727
4	DO	mg/L	7.75
5	BOD	mg/L	1.4
6	Nitrate as N	mg/L	3.00
7	Ammonia as N	mg/L	0.01
8	Total Coli form	MPN/100ml	92000
9	Faecal Coli form	MPN/100ml	8400

GENERAL PARAMETERS:

SL. NO			
1	COD	mg/L	30.16
2	Turbidity	NTU	7.2
3	Hardness as $CaCO_3$	mg/L	202.88
4	Calcium as $CaCO_3$	mg/L	76
5	Magnesium as $CaCO_3$	mg/L	126.88
6	Chloride	mg/L	58
7	Sodium	mg/L	84.78
8	Potassium	mg/L	6.1
9	Sulphate	mg/L	42
10	P-Alkalinity as $CaCO_3$	mg/L	50
11	Total Alkalinity as $CaCO_3$	mg/L	168
12	TKN	mg/L	-
13	Total Dissolved Solids	mg/L	442.2
14	Total Fixed Solids	mg/L	-
15	Total Suspended Solids	mg/L	2
16	Phosphate as PO_4	mg/L	BDL
17	Fluoride	mg/L	1
18	Boron	mg/L	-
19	Bicarbonate (HCO3)	mg/L	168
Classification			Class "D"as per primary water quality criteria CPCB
Water Quality Index			US

Note-Water quality Index US :Unsatisfactory , S:Satisfactory

Assistant Scientific Officer
Karnataka State Pollution Control Board
KALABURAGI.

KARNATAKA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE, KALABURAGI.
MINARS PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.	
	Station Code	2777
I.	Date & Time of collection	13.12.2022
		03.05 PM
II	Weather	Clear
III	Approximate depth	50 cm
IV	Colour & Intensity	Colourless
V	Odour	Odourless
VI	Visible effluent discharge	None
VII	Human activities around the station.	None
VIII	Station details.	Kagina River at D/s of Shahabad Bridge Kalaburagi

CORE PARAMETERS:

Sl.No.			
1	**Temperature**	°C	27
2	**pH**	pH unit	8.66
3	**Conductivity**	µS/cm	660
4	**DO**	mg/L	7.88
5	**BOD**	mg/L	2
6	**Nitrate as N**	mg/L	2.81
7	**Ammonia as N**	mg/L	0.01
8	**Total Coli form**	MPN/100ml	160000
9	**Faecal Coli form**	MPN/100ml	4800

GENERAL PARAMETERS:

SL. NO			
1	**COD**	mg/L	22.88
2	**Turbidity**	NTU	3.8
3	**Hardness as $CaCO_3$**	mg/L	343.2
4	**Calcium as $CaCO_3$**	mg/L	61.92
5	**Magnesium as $CaCO_3$**	mg/L	281.28
6	**Chloride**	mg/L	48
7	**Sodium**	mg/L	71.89
8	**Potassium**	mg/L	5.6
9	**Sulphate**	mg/L	38
10	**P-Alkalinity as $CaCO_3$**	mg/L	20
11	**Total Alkalinity as $CaCO_3$**	mg/L	156
12	**TKN**	mg/L	-
13	**Total Dissolved Solids**	mg/L	442
14	**Total Fixed Solids**	mg/L	-
15	**Total Suspended Solids**	mg/L	12
16	**Phosphate as PO_4**	mg/L	BDL
17	**Fluoride**	mg/L	0.87
18	**Boron**	mg/L	-
19	**Bicarbonate (HCO3)**	mg/L	156
Classification			**Class "D"as per primary water quality criteria CPCB**
Water Quality Index			**US**

Note-Water quality Index US :Unsatisfactory , S:Satisfactory

Assistant Scientific Officer
Karnataka State Pollution Control Board
KALABURAGI.

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka (River Kali)

Overall status of the State:

Name of the River **:** Kali River
Polluted river stretch **:** Hasan Maad to Bommanahalli (10 km)
Priority **:** IV
Status as on **:** Dec - 2022.

I. Total Population: Urban Population & Rural Population separately:

Urban Population-52069 (2011 census) and Rural population is about 1000.

II. Estimated Sewage Generation (MLD): 8.5MLD

III. Details of Sewage Treatment Plant:

- Existing no. of STPs and Treatment Capacity (in MLD):
  Existing STP-NIL.
  In Dandeli CMC limit maximum no. of individual houses are having ST & SP for toilet blocks. Now, authority has proposed 100% UGD with STP. UGD laying and STP work is under progress, the CMC-Dandeli has committed to complete the work by February 2023. Plant and machineries were procured at site and installation under progress and civil work almost completed.
- Capacity Utilization of existing STPs: NA
- MLD of sewage being treated through Alternate technology:
  In Dandeli CMC limit maximum no. of individual houses are having ST & SP for toilet blocks.
- Gap in Treatment Capacity in MLD: 8.5 MLD (Remarks- Individual houses are having ST and SP for toilets. However, washings and other waste water (sullage) of about 2-3 MLD are being discharging to drains and ultimately joins the Kali River.
- No. of Operational STPs: NIL
- No. of Complying STPs: NA
- No. of Non-complying STPs: NA

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	NA	NA	NA	NA	NA

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	CMC-Dandeli (Halamaddi)	8.5	UGD-90% And STP-95% (installation of machineries under progress)	Under progress	February-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	NIL	NA	NA	NA

IV. Details of Industrial Pollution:

- No. of industries in the State: 1
- No. of water polluting industries in the State: 1
- Quantity of effluent generated from the industries in MLD:
  Present maximum quantity of effluent generation is about 55MLD (consented 85.885MLD).
- Quantity of Hazardous Sludge generated from the Industries in TPD:
  15.0 KL/Annuam
- Number of industrial units having ETPs: 1
- Number of industrial units connected to CETP: NIL
- Number and total capacity of ETPs (details of existing/ under construction / proposed): 01, 85.885 MLD capapcity and is under operation.
- Compliance status of the ETPs: Complied.
- Number and total capacity of CETPs (details of existing/ under construction / proposed): Not Applicable.
- Status of compliance and operation of the CETPs: Not Applicable

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
NIL				

V. Solid Waste Management:

VI. Total number of Urban Local Bodies and their Population: ULB- 01 (CMC-Dandeli), Population: 52069 (2011 census).

- Current Municipal Solid Waste Generation: 18 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), biomethanation, MRF etc:
  CMC is practicing the system of door to door collection of segregated municipal solid waste. The wet waste is composted (vermin compost) in the identified the solid waste disposal site, the dry recyclable waste such as Plastic waste and E-waste are segregated and sent to recyclers. However, they are yet to provide sanitary landfill facility for the disposal of inerts. Construction of sanitary landfill site is under progress. The CMC is yet to identify a dedicated site for processing and disposal of Construction and demolition waste generated in the town.
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%): Adequate
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction): NIL- The CMC is yet to identify a dedicated site for processing and disposal of Construction and demolition waste generated in the town. At present C & D wastes were being collected and stored in SWM site premises.
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source:

Total 31 wards practicing door to door collection service, and practicing segregation at source.

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology): NIL
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills. NIL
- 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:
  5Nos and all are provided with screens.

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
CMC-Dandeli	18	17	Vermi -Composting, Wind Row flat form, Dry Waste segregation and collection shed.	17TPD	Landfill construction completed.

VII. Bio-medical Waste Management:

- Total Bio-medical generation: 5MTA
- No. of Hospitals and Health Care Facilities: 36
- Status of Treatment Facility/ CBMWTF: There is a Common Biomedical waste treatment Facility in the district by name M/s. Kenara IMA common bio-medical Waste Treatment Facility which is collecting the biomedical waste from this town also. Health care establishments have made MoU with the Common facility and they in turn pick up the waste and disposing in their facility.

VIII. Hazardous Waste Management:

- Total Hazardous Waste generation: 15KL/Annum
- No. of Industries generating Hazardous waste: 01
- Treatment Capacity of all TSDFs: Not Applicable
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: Not Applicable
- Details of on-going or proposed TSDF: Not Applicable

IX. Plastic Waste Management:

- Total Plastic Waste generation: 36.5 TPA
- Treatment/ Measures adopted for reduction or management of plastic waste:
  Banned plastic sale and usage was banned in the city and other plastic wastes with calorific value are being collected and sent to Cement industry for further treatment (CO-incineration at Kiln).

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

XI. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment: In Dandeli CMC limit maximum no. of individual houses are having ST & SP for toilet blocks. Now, authority has proposed 100% UGD with STP. UGD laying and STP work is under progress, the CMC-Dandeli has committed to

complete the work by July 2022. Polluting sources including drains contributing to river pollution are being connected to STP.

XII. Details of Nodal Officer appointed by Chief Secretary in the State/UT:-

XIII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT: Till date 9 number of District Level Special Environment Surveillance Task Force Meetings were conducted under the Chairmanship of Deputy Commissioner.

XIV. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river; **Attached as Annexure-1**

XV. Ground water regulation:

The authority of District Ground Water Department informed that there are no critical blocks in the district.

XVI. Good irrigation practices being adopted by the State:
Yes- Farmers are practicing micro irrigation technologies as a part of good irrigation practices. Adoption of Micro irrigation practices for all the crops and making Micro irrigation technology easily accessible at the rural level. Usage of ground water should be minimized and after installation and operation of STP by CMC-Dandeli, the treated sewage shall be utilized for irrigation activity in the surrounding area. Farmers being insisted to adopt mirco-irrigation practice to reduce the water requirements.

XVII. Rain Water Harvesting: Directions given to agricultural/irrigation department to organize awareness programmes in farmers to conserve water and good irrigation practices to be adopted and is under progress.

XVIII. Demarcation of Floodplain and removal of illegal encroachments: Area comes under reserved forest and action will be taken Concern Department (forest department). Department of forest has submitted DPR for protection and management of flood plain zone and accordingly work is under progress.

XIX. Maintaining minimum e-flow of river: Directions given to M/s. KPC Ltd., for maintaining minimum environmental flow of river. Monthly Average Data for the year 2020 is attached as **Annexure-2**

XX. Plantation activities along the rivers: Department of Forest has submitted DPR for protection and management of flood plain zone.

XXI. Development of Biodiversity Park: Area comes under reserved forest and work is under progress.

XXII. Reuse of Treated Water: Treated sewage will be reused once STP put into operation.

XXIII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: Directions being followed.

XXIV. Status of Preparation of Action Plan by the 13 Coastal States:
Information furnished in the format in OA No. 829/2019 through email on 29/9/2020 and Action plan forwarded to Board Office on 10/12/2020. District Level Special Environment Surveillance Meeting held on 08/12/2022 and in this meeting along with polluted river stretch, discussion held on Coastal pollution with concern departments.

XXV. Regulation of Mining Activities in the State/UT:
Being monitored and regulated by Department of Mines and Geology.

XXVI. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring: NIL

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Environmental Officer (I/c)
KSPCB, RO, Karwar

Annexure-1												
River Kali-Analysis report of water sample collected from Kali River under MINARS programme(Jan-2022 to Dec-2022)												
Month	Upstream of m/s west coast paper mills, Dandeli						Downstream of m/s west coast paper mills, Dandeli					
	pH	DO(mg/l)	BOD (mg/l)	F.Coli(MPN /100ml)	T.Coli(MPN /100ml)	Fecal Stretococci (MPN/100ml)	pH	DO(mg/l)	BOD (mg/l)	F.Coli(MPN /100ml)	T.Coli(MPN/100ml)	Fecal Stretococci(MPN/100ml)
Jan'22	7.1	7.8	2.2	22	70	15	7.2	7.7	2.4	39	120	17
Feb'22	6.9	7.8	2.3	24	63	12	7.1	7.5	2.6	*27*	*74*	14
March'22	7.2	7.3	2.2	21	78	10	7.3	7.7	2.5	34	109	18
April'22	7.3	7.7	2.3	22	54	9	7.4	7.5	2.5	25	69	14
Mayl'22	7.4	7.8	2.3	26	63	11	7.5	7.6	2.6	33	76	16
June'22	7.1	7.6	2.4	29	74	14	7.2	7.5	2.7	37	89	18
July'22	6.9	7.8	2.6	33	110	17	7.1	7.6	2.8	40	139	26
Aug'22	6.8	7.8	2.4	70	154	25	6.9	7.7	2.7	90	177	41
Sept'22	7.1	7.6	2.3	84	141	27	6.8	7.4	2.6	96	175	39
Oct'22	6.9	7.7	2.4	80	170	32	6.7	7.5	2.7	94	182	48
Nov'22	6.8	7.8	2.3	94	180	38	7.1	7.6	2.6	110	195	52
Dec'22	7.1	7.7	2.2	92	168	46	7.2	7.5	2.5	109	210	76

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Annexure-1

Drains leading to River Kali: Analysis report of Sullage/sewage water samples collected from many points before joining to River Kali

SL. No	Locations	Date Of sampling	pH	BOD(mg/l)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	Halmadi Nalla, Dandeli 15.245756 N, 74.635991 E	19-01-2022'	6.8	24	177	348
		03-02-2022'	6.7	26	240	426
		04-03-2022'	6.8	28	148	278
		07-04-2022'	6.9	36	212	345
		05-05-2022'	6.7	23	177	348
		08-06-2022'	6.7	28	170	430
		06-07-2022'	6.9	19	220	500
		03-08-2022'	6.8	25	130	350
		06-09-2022'	6.9	21	33	70
		07-10-2022'	6.8	24	170	280
		03-11-2022'	6.9	29	210	350
		03-12-2022'	**6.9**	**18**	**220**	**540**
	Bailpar Bridge Cross, Old Dandeli 15.235565 N, 74.617418 E	19-01-2022'	6.7	17	175	426
		03-02-2022'	6.8	22	148	426
		04-03-2022'	6.7	19	172	345
		07-04-2022'	6.8	22	141	366
		05-05-2022'	6.9	27	148	426
		08-06-2022'	6.8	17	170	430
		06-07-2022'	6.8	23	350	900
		03-08-2022'	6.9	19	430	920
		06-09-2022'	6.8	16	21	48
		07-10-2022'	6.7	19	350	900
		03-11-2022'	6.9	16	430	920
		03-12-2022'	**6.8**	**15**	**540**	**1600**
	Opp Gate-3 of West Coast Paper Mills Ltd, Dandeli 15.246695 N, 74.630080 E	19-01-2022'	6.7	15	221	420
		03-02-2022'	6.8	18	177	345
		04-03-2022'	6.7	24	212	426
		07-04-2022'	6.9	20	175	278
		05-05-2022'	6.7	18	148	253
		08-06-2022'	6.8	23	150	280
		06-07-2022'	7.1	16	170	350
		03-08-2022'	6.7	13	220	426
		06-09-2022'	6.8	17	25	58
		07-10-2022'	6.7	15	280	500
		03-11-2022'	6.9	17	350	540
		03-12-2022'	**6.9**	**14**	**280**	**540**
	Mirachigalli Bridge, Old Dandeli 15.243819 N, 74.622409 E	19-01-2022'	6.9	13	221	480
		03-02-2022'	6.8	15	212	486
		04-03-2022'	6.9	22	253	542
		07-04-2022'	6.8	19	221	426
		05-05-2022'	6.8	22	175	503
		08-06-2022'	6.7	16	220	540
		06-07-2022'	7.2	26	280	900
		03-08-2022'	6.8	17	350	900
		06-09-2022'	7.1	15	24	50
		07-10-2022'	6.8	20	300	900
		03-11-2022'	6.8	23	350	920
		03-12-2022'	**6.7**	**16**	**540**	**920**
	Behind DSFA, Patel Nagar bridge, Dandeli 15.248093 N, 74.605713 E	19-01-2022'	6.8	15	253	503
		03-02-2022'	6.6	17	253	151
		04-03-2022'	6.7	25.8	221	542
		07-04-2022'	6.7	31	172	348
		05-05-2022'	6.7	24	148	345
		08-06-2022'	6.7	21	120	350
		06-07-2022'	6.9	17	175	420
		03-08-2022'	6.7	15	212	426
		06-09-2022'	6.7	22	22	49
		07-10-2022'	6.9	22	220	345
		03-11-2022'	7.1	25	240	350
		03-12-2022'	**6.8**	**17**	**240**	**540**

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Environmental Officer (I/c)

KSPCB, RO, Karwar

Annexure-1

Stream joining to River Kali-Analysis report of water sample collected from streams

Sl. No	Stream Name	Month	Stream joining to River Kali								
			pH	BOD (mg/l)	Conductivity (µc/cm)	Boron (mg/l)	Fe (mg/l)	Floride (mg/l)	Phosphate (mg/l)	Sulphate(mg/l)	Nitrite (mg/l)
1	Karkal Hana	19-01-2022'	7.1	2.2	56	BDL	BDL	0.2	0.006	1.9	BDL
		03-02-2022'	6.9	2.1	67	BDL	BDL	0.2	0.007	2.3	BDL
		04-03-2022'	7.1	2.3	63	BDL	BDL	0.2	0.006	2.2	BDL
		07-04-2022'	7.1	2.1	58	BDL	BDL	0.2	0.005	2.4	BDL
		05-05-2022'	7.1	2.3	139	BDL	BDL	0.2	0.007	3.3	BDL
		08-06-2022'	7.5	2.4	103	BDL	BDL	0.2	0.006	2.8	BDL
		06-07-2022'	6.9	2.7	279	BDL	BDL	0.2	0.01	6.3	BDL
		03-08-2022'	7.4	2.5	223	BDL	BDL	0.3	0.012	6.3	BDL
		06-09-2022'	7.2	2.2	136	BDL	BDL	0.2	0.008	3.2	BDL
		07-10-2022'	7.1	2.4	296	BDL	BDL	0.3	0.011	10.8	BDL
		03-11-2022'	6.8	2.3	262	BDL	BDL	0.3	0.02	12.2	BDL
		03-12-2022'	**7.3**	**2.2**	**241**	**BDL**	**BDL**	**0.2**	**0.009**	**8.5**	**BDL**
2	Upstream of Halmadi Nalla (before sewage entry)	19-01-2022'	7.1	2.3	59	BDL	BDL	0.2	0.006	2.2	BDL
		03-02-2022'	6.9	2.5	70	BDL	BDL	0.2	0.008	2.5	BDL
		04-03-2022'	7.3	2.3	64	BDL	BDL	0.2	0.009	2.4	BDL
		07-04-2022'	7.2	2.5	69	BDL	BDL	0.2	0.01	2.6	BDL
		05-05-2022'	7.3	2.6	129	BDL	BDL	0.2	0.009	3.1	BDL
		08-06-2022'	7.2	2.5	84	BDL	BDL	0.2	0.01	2.9	BDL
		06-07-2022'	7.5	2.5	133	BDL	BDL	0.2	0.012	3.8	BDL
		03-08-2022'	7.3	2.7	218	BDL	BDL	0.3	0.015	5.5	BDL
		06-09-2022'	7.1	2.5	293	BDL	BDL	0.3	0.013	7.5	BDL
		07-10-2022'	7.2	2.7	388	BDL	BDL	0.3	0.012	12.3	BDL
		03-11-2022'	7.1	2.6	361	BDL	BDL	0.2	0.016	14.3	BDL
		03-12-2022'	**7.4**	**2.4**	**244**	**BDL**	**BDL**	**0.2**	**0.013**	**9.1**	**BDL**
3	Upstream of Barchi Nalla	19-01-2022'	7.1	2.1	68	BDL	BDL	0.2	0.007	2.8	BDL
		03-02-2022'	7.2	2.2	66	BDL	BDL	0.2	0.006	2.2	BDL
		04-03-2022'	7.2	2.1	60	BDL	BDL	0.2	0.005	2.1	BDL
		07-04-2022'	7.1	2.2	56	BDL	BDL	0.2	0.006	1.9	BDL
		05-05-2022'	7.2	2.4	133	BDL	BDL	0.2	0.008	3.2	BDL
		08-06-2022'	6.9	2.2	69	BDL	BDL	0.2	0.006	2.2	BDL
		06-07-2022'	7.4	2.6	191	BDL	BDL	0.3	0.01	5.4	BDL
		03-08-2022'	7.2	2.4	278	BDL	BDL	0.3	0.013	7.5	BDL
		06-09-2022'	7.1	2.7	386	BDL	BDL	0.2	0.011	10.2	BDL
		07-10-2022'	7.2	2.5	281	BDL	BDL	0.2	0.009	9.5	BDL
		03-11-2022'	6.8	2.3	251	BDL	BDL	0.2	0.007	11	BDL
		03-12-2022'	**7.4**	**2.3**	**327**	**BDL**	**BDL**	**0.2**	**0.011**	**13.1**	**BDL**
4	Downstream of Barchi Nalla at Maulangi	19-01-2022'	6.9	2.3	61	BDL	BDL	0.2	0.007	2.5	BDL
		03-02-2022'	7.1	2.4	70	BDL	BDL	0.2	0.009	2.7	BDL
		04-03-2022'	7.2	2.5	75	BDL	BDL	0.2	0.008	3.1	BDL
		07-04-2022'	7.1	2.4	64	BDL	BDL	0.2	0.007	2.3	BDL
		05-05-2022'	7.3	2.5	154	BDL	BDL	0.2	0.009	3.8	BDL
		08-06-2022'	7.1	2.8	260	BDL	BDL	0.2	0.01	5.3	BDL
		06-07-2022'	7.5	2.8	336	BDL	BDL	0.2	0.012	7.5	BDL
		03-08-2022'	7.3	2.6	216	BDL	BDL	0.3	0.011	5.1	BDL
		06-09-2022'	7.2	2.5	280	BDL	BDL	0.2	0.013	7.3	BDL
		07-10-2022'	6.9	2.8	440	BDL	BDL	0.3	0.015	14.6	BDL
		03-11-2022'	6.9	2.5	364	BDL	BDL	0.3	0.012	15.6	BDL
		03-12-2022'	**7.2**	**2.6**	**418**	**BDL**	**BDL**	**0.3**	**0.012**	**15.6**	**BDL**

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KSPCB, RO, Karwar

Annexure-2

Status of E-Flow of River - Kali (daily average in Cusecs for the month of December- 2022)

Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	**Dec-22**
4255.22	5948.81	7261.74	7209.99	5097.76	2400.22	1201.34	939.887	1375.541	1862.75	2338.91	**2556.87**

Sd/-
Environmnetal Officer (I/c)
RO, KSPCB, Karwar

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA

No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : Krishna
Polluted river stretch : Yadurwadi to Tintini bridge (200 km)
Priority : IV
Status as on : Dec -2022

Overall status of the State:

Total Population: Urban Population & Rural Population separately: **394643** (Details Enclosed as Anexure-1)

1. TMC- Devadurga – 28929
2. TMC Lingasugur - 15224
3. Hutti TP - 16525
4. Hutti Notified Area – 13535
5. TMC Chikkodi **&** TMC Sadalaga -Urban Population- 1,62,136 & Rural Population-1,58,294

Estimated Sewage Generation (MLD): **37.6 MLD (**Details Enclosed as Anexure-1)

1. TMC- Devadurga – 2.25 MLD
2. TMC Lingasugur – 1.6 MLD
3. Hutti TP -1.6 MLD
4. Hutti Notified Area –1.4 MLD
5. TMC Chikkodi **&** TMC Sadalaga - Urban-15.56 & Rural-15.19 MLD

I. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD):

1. **Hatti Gold Mines - 2 Nos of 1.25 MLD each**
2. **TMC Chikkodi - 5.80 MLD**
3. **TMC Sadalaga – 3.72 MLD**

Total -12.02 MLD

- Capacity Utilization of existing STPs:

    1. **Hatti Gold Mines - 1.4 MLD**
    2. **TMC Chikkodi – 4.592 MLD**
    3. **TMC Sadalaga – 00 MLD (Since, now it is under repair)**

    Total - 5.992 MLD

- MLD of sewage being treated through Alternate technology:
-
- Gap in Treatment Capacity in MLD: **31.608 MLD**
- No. of Operational STPs: 3
- No. of Complying STPs: 3
- No. of Non-complying STPs: **1**

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	Hutti Notified Area, Lingasugur	2x1.25 MLD	1.4 MLD	2 nos, Operational	Partially Complied
2	Chikodi	5.80	4.592	Operational	complied
3	Sadalaga	3.72	00	Construction of STP work is completed and now it is under repair	Now it is under repair
4	**Total**	**12.02**	**5.992**	-	-

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	Nil	Nil	Nil	Nil	Nil

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	Town Municipal Council, Lingsugur-Tq, Raichur-Dist.	6.82	Submitted to Govt. by MD, KUWS&DB, Bangalore for administrative approval vide letter no 897/2019-20, dated 04/10/2019, Awaiting approval from Govt.	-
2	Town Municipal Council, Deodurga, RaichurDist	5	Submitted to Govt. by MD, KUWS&DB, Bangalore for administrative approval vide letter no 49/2020-21, dated 08/04/2020, Awaiting approval from Govt.	-
3	Town Muncipal Council, Kudachi, RaibagTaluk, Belagavi District	4.30	DPR Prepared by KUWSSB and submitted to DMA	31-07-2021
4	Town Panchayat, ChinchaliRaibagTaluk Belagavi District.	3.88	DPR Prepared by KUWSSB and submitted to DMA	31-07-2021
5	Town PanchayatAinapur, Athani-Taluk, Belagavi District	4.37	DPR Prepared by KUWSSB and submitted to DMA	31-07-2021
6	Town Panchayat Examba ChikkodiTalukBelagavi District.	2.61	DPR Prepared by KUWSSB and submitted to DMA	31-07-2021
7	Town Muncipal Council Ugarkurd, AthaniTaluk, Belagavi District	3.2	DPR Prepared by KUWSSB and submitted to DMA	31-07-2021

II. Details of Industrial Pollution:

- No. of industries in the Stretch: **5**
- No. of water polluting industries in the State: **5**

- Quantity of effluent generated from the industries in MLD: **6.0085 MLD**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **Nil**
- Number of industrial units having ETPs: **5**
- Number of industrial units connected to CETP: **There are no CETP's**
- Number and total capacity of ETPs (details of existing/ under construction / proposed) **Existing : 5 no's and 10.93 MLD.**
- Compliance status of the ETPs: **Operational and Complied**
- Number and total capacity of CETPs (details of existing/ under construction / proposed) : **Nil**
- Status of compliance and operation of the CETPs : **Nil**

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
Lingasugur	M/s Hutti Gold Mines Co., Ltd, Hutti Village, Lingasugur-Tq, Dist-Raichur.	0.46 MLD	2x1.25 MLD capacity Common Treatment Plant (Effluent/Sewage)	Existing
M/s. Shivashakti Sugar ltd, Soudatti Village, Raibag, Taluk, Belagavi District.	04	4.793	Operational	NA
M/s. Krishna SSK Ni, Sankonatti Village, Athani Taluk, Belagavi District.				

M/s. Ugar Sugar works ltd, Ugarkhurd Village, Athani Taluk, Belagavi District.				
M/s. Hermers Distillery Private limited, Yadravi Vilage, Raibag Taluk, Belagavi District.				

III. <u>Solid Waste Management:</u>

- Total number of Urban Local Bodies and their Population : **255811** (details Enclosed as Annexure- II)
- Current Municipal Solid Waste Generation: **82.68 TPD** (details Enclosed as Annexure- II)
- 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), biomethanation, MRF etc: **Enclosed as Annexure- II**
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%): **41.88TPD. - Action plan is yet to be submitted.**
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction): **Nil.**

- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source : **153 Wards** (details Enclosed as Annexure- II)
- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology) : **Nil**
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills and no. and area (in acres) of legacy waste within 1km buffer of both side of the rivers:

Sl. No	**Local Bodies (7 No's)**	**Area of** uncontrolled garbage dumpsites (**Acres)**
1	Town Panchayat Examba Chikkodi Taluk, Belagavi District.	--
2	Town Muncipal Council Ugarkurd, AthaniTaluk, Belagavi District.	--
3	Town Muncipal Council, Kudachi, RaibagTaluk, Belagavi District	1.0
4	Town Panchayat Chinchali, Raibag TalukBelagavi District	--
5	Town Panchayat Ainapur, Athani-Taluk, Belagavi District.	--
6	Town Muncipal Council Sadalaga, Chikkodi Taluk, Belagavi District.	0.5
7	Town Muncipal Council Chikkodi, Chikkodi Taluk, Belagavi District.	1.5

- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers: **Nil**

Status of ULB wise Management of Solid Waste

ULB	**Total MSW generation in TPD**	**Total MSW being processed in TPD**	**Existing MSW facilities**	**Utilization Capacity of the existing MSW facilities**	**Proposed MSW Facilities & Completion Timeline**
TMC- Deodurga, DeodurgaTq, Raichur Dist.	6 T	0	MSW Site Existing	---	Directions were given to all the concerned Local Bodies to take immediate action to
TMC Lingasugur, LingasugurTq, Raichur Dist.	14.4 T	0	MSW Site Existing	---	
Hutti TP, LingasugurTq,	6 T	0	MSW Site Existing	---	

Raichur Dist.					comply with SWM Rules, 2016 from time to time. Target date to comply is 31.12.2020.
Hutti Notified Area, LingasugurTq, Raichur Dist.	8 T	0	MSW site existing. Further, in Hutti Gold Mines, the wet waste is being digested and bio gas is being produced and utilized for canteen.	---	
Town Panchayat Examba ChikkodiTaluk, Belagavi District.	4.5	0	There is no any solid waste management & processing facilities provided by the newly formed ULB's (during 2015)	Not provided	Directions were given to the concerned newly formed (during 2015) Local Bodies to take immediate action to comply with SWM Rules within 30-06-2021
Town Muncipal Council Ugarkurd, Athani Taluk, Belagavi District.	08	0		Not provided	
Town Panchayat Ainapur, Athani-Taluk, Belagavi District.	05	0		Not provided	
Town Panchayat, Chinchali,Raibag Taluk Belagavi District	4.78	0		Not provided	
Town Muncipal Council Sadalaga, Chikkodi Taluk, Belagavi District.	05	02	Soild waste management & processing facilities provided by existing	1. Recyclable waste-0.05MT 2. RDF Material-1.0 MT 3. Low lying area-1.0 MT	31-12-2020

			ULB's	4. Inert-0.45	
Town Muncipal Council Chikkodi, Chikkodi Taluk, Belagavi District.	14.5	2.5		**a)**Engineering pits composting---3.5 MT **Dry Waste** 1 Recyclable waste-0.15 MT 2 RDF Material-3.81 MT 3 Low lying area-4.40 MT 4 Inert-0.14	
Town Muncipal Council, Kudachi, Raibag Taluk, Belagavi District	6.5	1.9		**a)**Engineering pits composting---1.0 MT **Dry Waste** 1. Recyclable waste-0.1MT 2. RDF Material-2.0 MT 3. Low lying area-1.0 MT 4. Inert-0.5	
Total	48.28	6.4	-	19.6	-

IV. Bio-medical Waste Management:

- Total Bio-medical generation: **360 Kg/day**

- No. of Hospitals and Health Care Facilities: **371 nos**
- Status of Treatment Facility/ CBMWTF:
    1. **In Raichur zone BMW waste is treated in RIMACT facility.**
    2. **In Chikkodi zone it is handed over to CBMWTF.**

V. Hazardous Waste Management:

- Total Hazardous Waste generation:

A. In Raichur zone :

1. **Cyanide Tailing- 6,38,540 Tons & stowing sand of 79,152 Tons, (Total 5,59,388 Tons of Cyanide treated ore waste impound in tailing dump).**

2. **Used Oil- 74 liters.**
3. **Discarded Containers-7112 nos. (As per Annual Report From-IV submitted for the year 2019-20).**

B. In Chikkodi zone quantity of 0.041872 TPD is generated.

- No. of Industries generating Hazardous waste: **5**
- Treatment Capacity of all TSDFs : **Nil**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated : **Nil**
- Details of on-going or proposed TSDF: **Nil**

VI. <u>Plastic Waste Management:</u>

- Total Plastic Waste generation: **0.613 TPD**
- Treatment/ Measures adopted for reduction or management of plastic waste: - **Local bodies have started to hand over plastic waste/ RDF materials to Dalmia Cement (Bharat) Ltd, Yadwad, Cement plant for co-processing in cement kiln. There are no Unregistered Manufacturing or recycling of plastic units.**

VIII. Details of Alternate Treatment Technology being adopted by the State/UT : **Local bodies have started to hand over plastic waste/ RDF materials to Dalmia Cement (Bharat) Ltd, Yadwad, Cement plant for co-processing in cement kiln.**

VII. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in situ treatment: **Enclosed as Annexure-III**

VIII. Details of Nodal Officer appointed by Chief Secretary in the State/UT: ----

IX. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT: ----

X. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river: **Enclosed as Annexure-IV**

<u>Good irrigation practices being adopted by the State:</u>

1. Crop diversification: Replacement of high water demanding commercial crops with low water requiring crops like Pulses and Oilseeds particularly in Command areas by mandating at Government level.

2. Micro Irrigation: Adoption of Micro irrigation practices for all the crops and making Micro irrigation technology easily accessible at the rural level.

3. Making Ground Water extraction beyond a specific limit punishable under the Act (Not allowing Borewell digging activities in vulnerable or exploited areas).

4. Crop Intensification: Providing incentives to the farmer for taking up Crop intensification in the command areas.

5. Modification in Surface Irrigation Methods: Surface water can be utilised in a minimised way by adopting alternate row irrigation system.

6. Mulching Practices: Any organic or inorganic materials can be used for mulching to reduce evapotranspiration, thereby reducing irrigation intervals and water amount.

IX. **Rain Water Harvesting:**Letter addressed to the Project Director, DUDC &Project Director, ZP, Belagavi for compliance.

X. **Demarcation of Floodplain and removal of illegal encroachments:**The 16 villages situated in the bank of Krishna river will be warned by Revenue department as per the flood memorandum through early warning arrangement.

XI. **Maintaining minimum e-flow of river:** Letter addressed to the Executive Engineer, Major Irrigation Department, Chikkodi for compliance**.**

XII. **Plantation activities along the rivers**: Letter addressed to the DCF, Gokak, Karnataka Forest Department for compliance.

XIII. **Development of biodiversity park**: Letter addressed to the DCF, Gokak, Karnataka Forest Department for compliance.

XIV. **Reuse of Treated Water**:--The industrial effluent after treatment is used on land for irrigation and partially recycled back into process. All the industries i.e. 03 No's of sugar industries and 02 N Distillery units have installed OCEMS.

Details of treated trade effluent used for irrigation in the agriculture land

Sl.No	Name of the industry	Total agriculture land (Acres)
1	M/s. Shivashakti Sugar ltd, Soudatti Village, RaibagTaluk, Belaga District.	220
2	M/s. Krishna SSK Ni, Sankonatti Village, Athani Taluk, Belagavi District.	156
3	M/s. Ugar Sugar works Ltd, Ugarkhurd Village, AthaniTaluk,Belagavi District.	800

XV. **Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:--**Nil

XVI. **Status of Preparation of Action Plan by the 13 Coastal States:---**NA

XVII. **Regulation of Mining Activities in the State/UT**: There is no mining active located in the Krishna river basin.

XVIII. **Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring-**Meeting held on 19-11-2020 at Deputy Commissioner Office Belagavi along with Commissioners/Chief Officers of the Local Bodies and direction given to comply with the provisions of the Water Act 1974, Solid waste management Rules, 2016, Plastic waste management Rules, 2016, Bio-medical waste management Rules, 2016 and Construction and Demolition waste (Management) Rules, 2016.

Meeting held on 09-02-2021 under the Chairmanship of Deputy Commissioner at Deputy Commissioner Office Belagavi along with Commissioners/Chief Officers of the Local Bodies and direction given to comply with the provisions of the Water Act 1974, Solid waste management Rules, 2016, Plastic waste management Rules, 2016, Bio-medical waste management Rules, 2016 Construction and Demolition waste (Management) Rules, 2016 and E-waste (Management) Rules, 2016. The other concerned Departments were informed to take action and to furnish details within 5th of every month.

XIX. **Overall progress of the month:**
Please provide overall progress achieved in terms of all the above points compared to previous month---Nil

Annexure-1

Sl.No	**Local Body**	**Population-2011**	**Quantity of sewage geration in MLD**	**STP provided not provided**
1	TMC-Devadurga	28929	2.25	Not provided
2	TMC Lingasugur	15224	1.6	Not provided
3	Hutti TP	16525	1.6	Not provided
4	Hutti Notified Area	13535	1.4	Being treated in 2x1.25 MLD STP provided at Hatti Gold Mines
5	TMC Chikkodi	Urban Population - 1,62,136 & Rural Population -1,58,294	Urban-15.56 & Rural-15.19	Provided of capacity 5.80 MLD
6	TMC Sadalaga			Provided of capacity 3.72MLD
7	**Total**	**382,461**	**37.6**	**12.02**

Annexure-II

Sl. No	Name of Local Body	Population (census2011)	Total Solid Waste Generation (TPD)	Proposed Achievable target	Present Status
1	TMC- Deodurga, DeodurgaTq, Raichur Dist.	28929	6	Directions were given to all the concerned Local Bodies to take immediate action to comply with SWM Rules, 2016 from time to time. Target date to comply is 31.12.2020.	MSW Site Existing
2	TMC Lingasugur, LingasugurTq, Raichur Dist.	34932	14.4		MSW Site Existing
3	Hutti TP, LingasugurTq, Raichur Dist.	16278	6		MSW Site Existing
4	Hutti Notified Area, LingasugurTq, Raichur Dist.	13536	8		MSW siteexisting. Further, in Hutti Gold Mines, the wet waste is being digested and bio gas is being produced and utilized for canteen.
5	Town Panchayat Examba Chikkodi Taluk, Belagavi District.	15224	4.5	-	0
6	Town Muncipal Council Ugarkurd, Athani Taluk, Belagavi District.	23762	08	-	0

7	Town Muncipal Council, Kudachi, Raibag Taluk, Belagavi District	23154	6.5	-	1.9 T, Vermi composting and Engineering pit composting
8	Town Panchayat, Chinchali, Raibag Taluk Belagavi District	18986	4.78	-	00
9	Town Panchayat Ainapur, Athani-Taluk, Belagavi District.	18913	05	-	00
10	Town Muncipal Council Sadalaga, Chikkodi Taluk, Belagavi District.	23790	05	-	02 T, Vermi composting
11	Town Muncipal Council Chikkodi, Chikkodi Taluk, Belagavi District.	38307	14.5	-	2.5 T, Vermi composting and Engineering pit composting
12	Total	255811	82.68		

Details of no of Ward, Door to Door collection and Segregation

Name of the Local Bodies	Total No wards	No of wards Door to Door collection	No of wards practicing segregation
Town Panchayat Examba Chikkodi Taluk, Belagavi District.	**17**	**16**	**12**
Town Muncipal Council Ugarkurd, AthaniTaluk, Belagavi District.	**23**	**23**	**18**
Town Muncipal Council, Kudachi, RaibagTaluk,	**23**	**23**	**19**

Belagavi District			
Town Panchayat, Chinchali,RaibagTalukBelagavi District	**19**	**19**	**16**
Town PanchayatAinapur, Athani-Taluk, Belagavi District.	**19**	**19**	**12**
Town Muncipal Council Sadalaga, ChikkodiTaluk, Belagavi District.	**23**	**23**	**19**
Town Muncipal Council Chikkodi, ChikkodiTaluk, Belagavi District.	**23**	**23**	**10**
Total	**147**	**146**	**106**

Annexure-III
Sources including Nala/Drains joining to River – Krishna and its Water Quality

Sl No	Location	pH	BOD	COD	TSS
1	Sunakal Nala	7.7	2.2	26	20
2	Halabhavi Nala	8.00	2.2	22	8
3	Jaladurga Nala	8.25	2	25	8
4	Gonavatla Nala	8.20	3	24	21
5	Guntagola Nala	8.05	3	28	20
6	Ramroti Nala	8.00	3	25	16
7	Raidurga Nala	8.35	3	33	18

Status of Water Quality of River – Krishna @ Tintani Bridge

Year	DO (mg/L)		BOD(mg/L)		Faecal Coliform (MPN/100ml)		Total Coliform (MPN/100ml)		Class
	Min	Max	Min	Max	Min	Max	Min	Max	
2017-18	6.6	7.6	2	2.5	110	350	920	1600	C
2018-19	7	7.6	2	3	110	1000	500	3200	C
2019-20	6.6	7.6	2	2.5	110	350	920	1600	C
2020-21	7	7.8	2	2.5	94	450	540	2200	C
2021-22	7	7.6	2	3	140	490	920	2800	C

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

Sl. No	Name of the point were collected the sample	Latitude Longitude	Population	Flow in KL
1	Yadurwadi	16.60568, 74.68154	8613	344.2
2	Kalloli	16.57535, 74.64262	5171	206.84
3	Yadur	16.57114, 74.66414	4261	170.44
4	Ankali	16.547345 , 74.682533	11261	450.44
5	BavanSaudatti	16.558274, 74.702167	6232	249.28
6	Diggewadi	16.567793, 74.746118	4617	184.68
7	Chinchalli	16.343296, 74.474674	4483	179.32
8	Malawad	16.344413, 74.473057	3446	137.84
9	Krishna Kittur	16.381595, 74.544653	5217	208.68
10	Shirgur	16.365143, 74.55916	2385	95.4
11	Kudachi	16.63838, 74.84928	23154	926.16
12	Sapatsagar	16.633246, 74.948080	4352	174.08
13	Agarani	16.394606, 74.575065	1018	40.72
14	Hulagabali	16.659864, 74.992670	8359	334.36
15	NadiIngalgaon	16.646961, 74.997551	5070	202.8
16	Darur	16.637928, 75.021071	5681	227.24
17	Halyal	16.641507, 75.022056	5169	206.76
18	Avarkhod	16.630357, 75.030256	3437	137.48
19	Khavatakoppa	16.596084, 75.038497	3484	139.36
20	Shegunshi	16.572303, 75.053860	5793	231.72
21	Satti	16.568606, 75.077527	9984	399.36
22	Nadeshwar	16.545675, 75.092835	5784	231.36
23	Janawad	16.552266, 75.161556	3558	142.32
24	Savadi	16.589390, 75.157020	7977	319.08
25	Shirhatti	16.365374, 75123295	5726	229.04
26	Zunjarwadi	16.37865,75132367	4062	162.48

Note: Insitu treatment proposal is under planning stage.

Status of Water Quality of River – Krishna in year 2020-21

Sl. No	Year	Locations	pH	BOD	Dissolved Solids	Conductivity	COD	Oil and Grease
1	**2020-21**	Halyal	8.08	2.94	760	1198	36	BDL
2		Avarkhod	8.34	2.71	400	645	32	BDL
3		Darur	8.14	3.08	400	647	40	BDL
4		Sapatsagar	8.26	2.46	360	595	28	BDL
5		NadiIngalgaon	8.36	2.83	400	648	40	BDL
6		Khavatakoppa	8.31	2.46	360	580	32	BDL
7		Shegunshi	8.42	2.34	480	760	28	BDL

Sl.No	Year	Locations	pH	BOD	Dissolved Oxygen	Dissolved Solids	Conductivity	COD	Oil and Grease	Total Coliforms	Fecal Colifarms
1	2020-21	Satti	8.47	1.26	7.8	520	818	16	BDL	920	540
2		Nandeshwar	8.31	0.54	8.3	600	940	12	BDL	920	540
3		Janawad	8.23	4.38	7.4	640	991	52	BDL	1600	920
4		Savadi	8.41	3.42	7.6	680	1068	40	BDL	1600	920
5		Shirahatti	8.31	0.78	8.3	640	998	28	BDL	920	540
6		Zunjarwad	8.25	0.9	7.2	640	1000	28	BDL	920	540

Sl. No	Year	Locations	pH	BOD	DO	DS	Conductivity	COD	O & G	TC	FC
1	2020-21	Avarkhod	8.31	1.8	6.7	640	1010	24	BDL	920	540
2		Agrani	8.24	2.1	5.7	480	768	28	BDL	920	540
3		Kavatakoppa	8.2	20.7	4.8	480	760	36	BDL	1600	920
4		NadiIngalgaon	8.11	2.17	4.3	560	880	36	BDL	1600	920
5		Hulagaballi	8.35	1.5	5.5	480	764	32	BDL	920	540
6		Halyal	7.97	6.15	1.8	680	1068	72	BDL	3200	1840
7		Shegunshi	8.26	1.5	5.8	480	758	24	BDL	1600	920
8		Darur	8.13	1.86	5.7	480	762	28	BDL	1600	920
9		Saptsagar	8.56	1.74	5.9	520	838	12	BDL	1600	920

Sl.No	Year	Locations	pH	BOD	DO	DS	Conductivity	COD	O & G	TC	FC
1	2022-23	Halyal	7.88	3.9	3.1	480	768	36	BDL	1600	920
2		NadiIngalgaon	7.84	2.7	1.9	560	877	28	BDL	1600	920
3		Satti Nala	7.75	7.5	1	560	876	72	BDL	1600	920
4		Kavatakoppa	7.83	5.7	2.1	440	702	64	BDL	1600	920
5		Shegunshi	7.67	6.9	1.2	560	878	100	BDL	1600	920
6		Nandeshwar	7.87	2.7	3.9	280	458	68	BDL	1600	920
7		Janawad	7.7	11.4	2.6	360	590	116	BDL	3200	1840
8		Savadi Nala	7.72	15	1.5	400	638	140	BDL	3200	1840

Sl.No	Year	Locations	pH	BOD	DO	DS	Conductivity	COD	O & G	TC	FC
1	2022-23	Confluence point Zunjurwad Nala & Krishna River	7.79	8.32	3.6	560	894	80	BDL	1600	920
2		Confluence point Sapthasagar & Krishna River	7.8	5.47	4	520	835	60	BDL	1600	920
3		Confluence point Shirahatti Nala & Krishna River	7.84	7.57	4.8	480	764	68	BDL	1600	540

Annexure-IV

Status of Ground Water Quality in the villages located on the polluted stretch of River – Krishna

Sl. No.	Grama panchayath	Village/ habitation	Type of source (bw/ surface well/ filter)	Ph value(013)	Turbidity(001)	Total dissolved solids (TDS) (015)	Total Alkalinity	Nitrate(006)	Fluoride(003)	Chloride(005)	Total alkalinity(018)	Total hardness(016)	Sulphate(007)	Calcium	Magnesium
								As no3	As(f)	(as cl)	Ascaco3	As caco3	(as so4)	As Ca	As Mg
					(NTU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
				6.5-8.5	(1-5)	500-2000	200-600	45-n.r.	1.0-1.5	250-1000	200-600	200-600	200 - 400	75-200	30-100
1	Hutti Notified Area	Hutti	bw	8.10	8	610	224	0.96	1.28	114	224	216	160	53	20

Sl.no.	Gramapanchayath	Village/ habitation	Type of source (bw/ surface well/ filter)	Ph value(013)	Turbidity(001)	Total dissolved solids(tds)(015)	Electrical conductivity (e.c.)	Nitrete(006)	Flouride(003)	Chloride(005)	Total alkalinity(018)	Total hardness(016)	Free residual chlorine(017)	Sulphate(007)	Total iron(004)
								As no3	As(f)	(as cl)	Ascaco3	As caco3		(as so4)	(as fe)
					(ntu)	(mg/l)		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
				6.5-8.5	(1-5)	500-2000		45-n.r.	1.0-1.5	250-1000	200-600	200-600	0.2-1.0	200-400	1.0-n.r.
1	Kallol	Kallol	Bw	7.32	0.05	490	820	11	0.15	130	212	276	0.00	30	0.16
2	Yadur	Yadur	Bw	7.35	0.05	600	980	14	0.58	130	236	336	0.00	48	0.1
3	Ankali	Ankali	Bw	7.67	0.05	400	670	10	0.23	46	284	296	0.00	40	0.05
4	Bavansavad	Savadatt	Bw	7.89	0.10	510	920	20	0.15	178	132	206	0.00	64	0.10

	atti	i													
5	Diggewadi	Diggewadi	Serface	7.85	0.05	420	840	23	0.06	166	188	238	0.04	112	0.07
6	Chinchali	Chinchali	Bw	7.86	0.05	560	930	28	0.23	202	368	232	0.00	54	0.01
7	Kusnal	Malawad	Bw	720	0.05	2130	4060	6	0.62	700	680	880	0.00	410	0.11
8	Krishna kittur	K kittur	Bw	7.16	0.05	1385	2560	15	0.78	448	360	560	0.00	250	0.12
9	Shirgur	Shirgur	Bw	7.42	0.05	1070	1980	42	0.14	338	222	448	0.00	152	0.10
10	Saptasagar	Ssaptasagar	Bw	8.44	0.1	1540	2750	12	0.21	532	400	560	0.00	310	0.14
11	Parthanalli	Agrani	Bw	6.79	1.0	840	1680	19	0.55	320	380	240	0.00	192	0.09
12	Hulagbali	Hulagbali	Bw	8.12	0.05	1240	2210	18	0.45	336	400	520	0.00	266	0.21
13	Nadiingalgoan	Nadiingalgoan	Bw	8.35	0.1	1680	2900	12	0.44	560	520	640	0.00	320	0.21
14	Darur	Darur	Bw	8.16	0.1	900	1420	11	0.21	224	320	480	0.00	120	0.28
15	Halyal	Halyal	Bw	7.93	0.05	1290	2270	19	0.57	420	280	480	0.00	283	0.08
16	Naganurp.k	Awarkhod	Bw	8.08	0.1	1150	2320	17	0.45	448	520	480	0.00	108	0.16
17	Shankarahatti	Kavatkoppa	River	9.11	1	970	1785	15	0.22	336	440	480	0.00	84	0.2
18	Shegunashi	Shegunashi	Bw	7.8	0.05	1950	3590	24	0.26	616	640	760	0.00	378	0.21
19	Satti	Satti	Bw	7.59	0.10	2370	4500	8	0.37	900	500	1020	0.00	230	0.29

20	Nandeshwar	Nandeshwar	Bw	7.6	0.1	1100	1835	5	0.34	252	240	520	0.00	224	0.21
21	Mahishwadgi	Janawad	Bw	8.29	0.1	1284	2260	14	0.25	474	640	520	0.00	170	0.16
22	Savadi	Savadi	Bw	7.57	0.1	2990	5020	21	0.53	1036	560	1280	0.00	392	0.1
23	Shirahatti	Shirahatti	Bw	7.26	0.10	2100	3980	22	0.37	672	500	840	0.00	400	0.07
24	Jhunjurwad	Jhunjurwad	Bw	7.61	0.10	1465	2750	18	0.61	532	374	640	0.00	194	0.07

National Mission for Clean Cauvery

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)For the State of Karnataka

Name of the River	**River Lakshmantheertha**
Polluted river stretch	**Hunsur to Kattemalavadi**
Priority	**III**
Status as on	**December 2022**

Overall status of the State:

Particulars		CMC Hunsur
I.	Total Population: Urban Population & Rural Population separately	**50850**
II.	Estimated Sewage Generation (MLD):	**5.5 MLD**

III. Details of Sewage Treatment Plant:

Particulars	CMC Hunsur
Existing no. of STPs and Treatment Capacity (in MLD):	**3.91 MLD**
Capacity Utilization of existing STPs:	**3.91 MLD**
MLD of sewage being treated through Alternate technology:	**0**
Gap in Treatment Capacity in MLD:	**1.59 MLD**
No. of Operational STPs:	**1**
No. of Complying STPs:	**0**
No. of Non-complying STPs:	**1**

Details of each existing STP in the State

Name of the Local Body	Location	Existing STP Capacity	Capacity Being Utilized	Operational Statusof STP	Compliance Status of STP
CMC Hunsur	Kalukunike Village,Hunsur Taluk	3.91 MLD	3.91 MLD	Operational	Not Complied

Details of under construction STPs in the State

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
CMC Hunsur	Kalukunike Village, Hunsur Taluk	Nil	Nil	50% house hold connections is completed & remaining works is under progress DPR for Rs. 80.0 Crores is prepared for laying UGD network for new extensions & to upgrade the existing STP to SBR Technology.	31-03-2021

Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
CMC Hunsur	Kalukunike Village, Hunsur Taluk	Up gradation of existing 3.91 MLD STP to 4.09 MLD.	Revised DPR is prepared by KUWS&DB, Mysuru Division for Rs. 26.80 Crores to divert the sewage discharged in to river through storm water drain by providing additional 2 Nos. of wetwell for 2 drains. Upgrdation of existing UGD networks. Upgradation of existing STP 3.91 MLD to 8.0 MLD with SBR Technology. **DPR is approved and upgradation work is under progress.**	March - 2021

IV. Details of Industrial Pollution:

Particulars	CMC Hunsur
No. of industries in the State:	**7 Nos.**
No. of water polluting industries in the State:	4
Quantity of effluent generated from the industries in MLD:	**0.019 MLD**
Quantity of Hazardous Sludge generated from the Industries in TPD:	**0.007572 TPD**
Number of industrial units having ETPs:	**4Nos**
Number of industrial units connected to CETP:	**0**
Number and total capacity of ETPs (details of existing/ under construction / proposed)	No. of ETP–4, Capacity-0.019 Under construction–0, Capacity-0 Proposed–0. Capacity-0
Compliance status of the ETPs:	Complied
Number and total capacity of CETPs (details of existing/ under construction / proposed)	0

Status of compliance and operation of the CETPs

Town	No. of industries	Industrial Discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
CMC Hunsur	**Not Applicable**			

V. **Solid Waste Management:**

Particulars	CMC Hunsur
Total number of Urban Local Bodies and their Population	**50850**
Current Municipal Solid Waste Generation	**23 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), biomethanation, MRF etc	• Composting Existing – 9.43 Gap – Nil • Sanitary landfill Existing–Nil Gap – 5.52
Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	DPR for Rs. 1.76 Crores is approved to provide compost plant & sanitary land fill site & the same is to be undertaken. At present the solid waste is dumped in the site without any treatment.
No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	0
Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	• Door to door collection 31/31 Wards. Segregationpractice-20 Wards
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	Nil
No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	NIL
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	Nos. of drains 2 Nos. of drains having floating racks / screen – Nil

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
CMC Hunsur	23	10	1	10	DPR for Rs. 1.76 Crores is approved for processing of entire MSW & currently work is assigned to contractor is going on.

VI. Bio-medical Waste Management:

Particulars	CMC Hunsur
Total Bio-medical generation:	0.1597 Kg/day
No. of Hospitals and Health Care Facilities:	Bedded: 18 Non Bedded: 50
Status of Treatment Facility/ CBMWTF:	CBMWTF

VII. Hazardous Waste Management:

Particulars	CMC Hunsur
Total Hazardous Waste generation:	**0.007575 TPA**
No. of Industries generating Hazardous waste	**3Nos**
Treatment Capacity of all TSDFs	**NA**
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	**NA**
Details of on-going or proposed TSDF	**NA**

VIII. Plastic Waste Management:

Particulars	CMC Hunsur
Total Plastic Waste generation:	**0.45 TPD**
Treatment/ Measures adopted for reduction or management of plastic waste:	**Nil**

Particulars		CMC Hunsur
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:	2 drain is identified & monitored & the drain is yet to be connected.
XI.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	--
I.	Details of meetings carried under the Chairmanship Chief of Secretary in the	--

	State/UT:	
II.	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;	**Status of water quality of polluted rivers in Annexure-1.**
III.	Ground water regulation:	As per the District Ground water Authority data submitted for the year 2020 in their Hand Book CMC Hunsur comes under safer zone as per ground water resources assessment and there is no over exploitation of ground water in the region**.**
IV.	Good irrigation practices being adopted by the State:	---
V.	Rain Water Harvesting:	**Rain water harvesting is made mandatory for new constructions, CMC has taken up awareness programmes to educate the people about river flooding during Monsoon**
VI.	Demarcation of Floodplain and removal of illegal encroachments:	During the month of September Paper advertisements were issued to the residents located on the banks on the river Lakshmanatheetha about flooding by CMC and early warning arrangement in consultation with revenue department from Cauvery Neeravari Nigam Ltd is carried out
VII.	Maintaining minimum e-flow of river:	Flow data of Hydrological observation Sites is available in Central water commission Website and further implementation from irrigation department will be initiated
VIII.	Plantation activities along the rivers:	As of now there are no plantations on the banks of river Lakshmantheertha in the polluted stretch since the area is confined to CMC limit
IX.	Development of biodiversity park:	As of now, there are no Bio diversity parks in this stretch
X.	Reuse of Treated Water:	--
XI.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	--
XII.	Status of Preparation of Action Plan by the 13 Coastal States:	NA
XIII.	Regulation of Mining Activities in the State/UT:	Nil
XIV.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	Nil
XV.	Overall progress of the month: Please provide overall progress achieved in terms of all the above points compared to previous month.	a) With respect to treatment & disposal of sewage effluent the LB's have taken steps to operate the existing STPs & action plan for up gradation of the existing STPs is being prepared by KUWS&DB & the same is approved by the Government. b) With respect to Solid Waste Management by Municipalities, steps have been taken process the Solid Waste with the existing compost facilities and works followed by tendering for

	expanding the same along with sanitary land fill sites construction are under progress. c) District level meeting on Polluted river stretches was held on 3-3-2021 under the Chairmanship of Minister C.P Yogeshwar. As per the directions of Minister Local Bodies were directed to use the available funds of the CMC to divert the Missing links of sewage to STP d) As per the proceedings of the meeting conducted on 24.09.2021 under the chairmanship of Hon`ble Subhash Adi Former Judge, High Court of Karnataka and Upa Lokayuktha, Government of Karnataka and Chairperson National Green Tribunal State Level Committee Karnataka Constituted by Hon`ble NGT in OA No 606/2018 , "the missing links sewage effluent discharged into storm water drain shall be diverted to nearby STPs /Wet wells by providing interception and diversion system by adopting low cost treatment facilities" the same is communicated to ULB`s for further action. e) DPR approved by the Government to divert the sewage discharge into river through storm water drain by providing additional 2 Nos. of wetwell for 2 drains, Upgradation of existing STP 3.91 MLD to 8 MLD with SBR technology and UGD networks for Rs. 26.8 Crores. f) Short term tender notification has been called by the KUWS&DB through E-procurement portal tender no: KUWSDB/2021-22/WS/WORK_INDENT2943 on 06-04-2021 with respect to rejuvenation of UGD systems, construction/ upgradation of STPs, providing sewer networks and outfall sewer lines, construction of wetwells, providing rising mains and other related works along with operation and maintenance of STPs as per NGT directions. Qualified tender agencies proposal has to be placed for technical evaluation committee for approval. g) The tender of Rs. 20,12,49,000/- has been assigned to M/s Akhil Infra Projects Pvt Ltd, Ballari on 31-12-2021 for the work of " Providing/Rejuvenation of UGD scheme to Hunsur city as per NGT standards including O&M for 5 years. h) Upgradation of existing STP 3.91 MLD to 8 MLD with SBR technology and UGD networks **work is under progress.**

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Location	Year	DO(mg/l)	BOD(mg/l)	Fecal Coliform (MPN/100 ml)	Totalcoliform (MPN/100 ml)
1	D/S of Lakshmantheertha in New road bridge of Bengaluru-Bhantwala Road at Hunsur town	Dec-22	6.0	3.0	210	2400
2	D/S of Lakshmantheertha at water barrage near Kattemalalavadi Village	Dec-22	6.0	3.0	210	2400

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : Malaprabha River
Polluted river stretch : Khanapur to Ramdurg
Priority : III
Status as on : As on 31.12.2022.

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately: **Urban----1,81,045, Rural---- 80,795**

II. Estimated Sewage Generation (MLD): **34.48.**

III. Details of Sewage Treatment Plant:

- Existing no. of STPs and Treatment Capacity (in MLD): **One STP with Capacity 8.28 MLD (Bailhongal)**
- Capacity Utilization of existing STPs: : **4.5MLD**
- MLD of sewage being treated through Alternate technology: **NA**
- Gap in Treatment Capacity in MLD:**---**
- No. of Operational STPs: **One**
- No. of Complying STPs: **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	Bailhongal	8.28 MLD	4.5MLD	Operating	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	Ramdurg	3.30 & 1.00	75 %	House sewer yet to be connected	April-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	Khanapur	1.00	The TP, Khanapur has proposed 1 MLD (MBBR) STP. The estimates are prepared and approved by KUWS & DB. Work yet to be started.	Tender awarded to M/s.Dev Constructions.
2	Munavalli	1.25	The TMC, Munavalli has proposed 1.25 MLD (MBBR) STP. The estimates are prepared and approved by KUWS & DB. The appointing of contractors is under progress. Work yet to be started.	Tender awarded to M/s. Dev Constructions.
3	M.K. Hubli	0.75	The TP, M.K. Hubli has proposed 0.75 MLD (MBBR) STP. The estimates are prepared and approved by KUWS & DB. Work under progress.	Tender awarded to M/s. Dev Constuctions
4	Savadatti	3.50	The TMC, Soundatti has proposed 3.50 MLD (SBR) STP. The estimates are prepared and approved by KUWS & DB. STP site selection is completed. Work under progress.	Tender awarded to M/s. M N Ramesh, Tumkur.

IV. Details of Industrial Pollution:

- No. of industries in the State: :**04**

- No. of water polluting industries in the State: :**NIL**
- Quantity of effluent generated from the industries in MLD: :**2684.6 (KLD)**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **0.00335 (KLPD)**
- Number of industrial units having ETPs: : **04**
- Number of industrial units connected to CETP: : **No CETP.**
- Number and total capacity of ETPs (details of existing/ under construction / proposed): **Existing.**

Sl. No.	Name of the industry	Sugar/ Distillery	ETP capacity in KLD
1	Laila sugars Ltd. Khanapur Tq. Belagavi Dist. Karnataka	Sugar	1000 KLD
2	Malaprabha SSK Niyamit, M.K. Hubli Bailhongal Tq. Belagavi Dist. Karnataka	Sugar & Distillery	400 KLD
3	Renuka Sugars Ltd., Munavalli, Soundatti Tq. Belagavi Dist. Karnataka	Sugar & Distillery	800 KLD
4	EID parry Sugars Ltd., Khanpet, Ramdurg Tq. Belagavi Dist. Karnataka	Sugar & Co-gen	550 KLD

- Compliance status of the ETPs: **Complied**
- Number and total capacity of CETPs (details of existing/ under construction /proposed) :**NA**
- Status of compliance and operation of the CETPs: **NA**

V. Solid Waste Management:

- Total number of Urban Local Bodies and their Population: **06 & Population- 1,92,404.**
- Current Municipal Solid Waste Generation: **68 (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), biomethanation, MRF etc: 06 , Number, installed capacity & utilization of existing MSW processing facilities are **submitted in table-1**.

- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)

- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction): **Nil**

- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source:**Total no. of wards—138, 137 (D-D collection),92 no. of wards practicing segregation at source.**

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology):**Proposed at M K Hubli.**

- No. and area (in acres) of uncontrolled garbage dump sites and Sanitary Landfills: Already submitted
- No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers: Already submitted

- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:

Table-1
Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
Bailhongal	18	05	Compound wall, borewell, connecting road, windrow platform, sanitary land fill, weigh bridge,dry waste collection centre, Mansoon	17.25 TPD	----

			shed, Tree plantation, Plastic bailing m/c, segregation & shredding M/cs,		
Savadatti	14	04	Windrow platform, Vermi composting	04	6 Months
Ramdurg	16	04	22 TPD	16 TPD	----
Munavalli	10	2.5	Composting	----	3 Months
Khanapur	06	2.4	Aerobic Composting	Fertilizer & it has been using in ULB gardens.	6 Months
M K Hubli	04	00	There is no any solid waste management & processing facilities provided by the newly formed ULB	0	6 Months

VI. <u>Bio-Medical Waste Management:</u>

- Total Bio-medical waste generation: **0.301 Tons/day.**
- No. of Hospitals and Health Care Facilities: **167 Nos (Hopsitals & HCEs).**
- Status of Treatment Facility/ CBMWTF: **Handed over to CBMWTFs.**

M/s.Belgaum Green Environment Management Ltd, Haroogoppa-Murgod Cross, Savadatti-Tq, Belagavi-Dist and, 2. M/s.Rio Green, Hubballi. The existing M/s. Association of Medical Establishments, Khasbag, Belagavi-Tq & Dist, closed due to non-compliances.

VII. Hazardous Waste Management:

- **Total Hazardous Waste generation:** 0.0038 KLPD.
- **No. of Industries generating Hazardous waste:** 04.
- **Treatment Capacity of all TSDFs:** NA.
- **Avg. Quantity of Hazardous waste reaching the TSDFs and Treated:** NA.
- **Details of on-going or proposed TSDF:** NA.

VIII. Plastic Waste Management:

- **Total Plastic Waste generation:** 0.98 Tons/Day (Local Bodies).

.Treatment/ Measures adopted for reduction or management of plastic waste: Local bodies have started to hand over plastic waste/ RDF materials to Dalmia Cement (Bharat) Ltd, Yadwad, Cement plant for co-processing in cement kiln. There are no Unregistered Manufacturing or recycling of plastic units.

IX. Details of Alternate Treatment Technology being adopted by the State/UT Local bodies have started to hand over plastic waste/ RDF materials to Dalmia Cement (Bharat) Ltd, Yadwad, Cement plant for co-processing in cement kiln.

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

Malaprabha River Right Bank Tributaries Nala/Halla.

Sl No.	Name of the Stations	Latitude	Longitude
1	Water sample collected from Karambala nala sewage confluence point	15.622106	74.527977
2	B/w water sample collected at Karambal Water supply	15.622096	74.528001
3	Water sample collected at Karlaga Road Bridge	15.609526	74.550976
4	Hand pump water sample collected near Ramling Temple Karlaga Village	15.616205	74.555852
5	Bore well water sample collected at Kodachwad village water supply	15.656697	74.611666
6	Bore well Water sample collected at Hiremunoli near Govt. Hig School	15.668768	74.630596

7	Water sample collected from Nala near Chikkmunoli bridge	15.661303	74.645149
8	Bore well Water sample collected at Sri. Gopal B. Belawani agri field Chikkamunoli	15.661496	74.645254
9	Bore well Water sample collected at Kerkoppa village water supply	15.680876	74.694936
10	Water sample collected from Tattihala between Itagi and Itagi cross	15.675344	74.704193
11	Malaprabha River sample collected at Holemmadevi temple Hunasikatti (Malaprabha SSK D/s)	15.7055728	74.750451
12	Water sample collected at Holinagalapur Nala Bridge,	15.713633	74.805175
13	Bore well water sample collected from water supply, Gudadur	15.718601	74.819806
14	Malaprabha River back water sample collected at Nayanagar Bridge	15.451554	74.523209
15	Renuka Sugars Ltd., Peizometer -01	15.856996	75.101904
16	Renuka Sugars Ltd., Peizometer -02	15.853639	75.10552
17	Renuka Sugars Ltd., Peizometer -03	15.8584	75.101677
18	Renuka Sugars Ltd., Peizometer -04	15.85626	75.101753
19	Renuka Sugars Ltd., Peizometer -05	15.854665	75.102575
20	Renuka Sugars Ltd., Peizometer -06	15.853959	75.106311
21	Renuka Sugars Ltd., Peizometer -07	15.85858	75.106054
22	Renuka Sugars Ltd., B/w at Dyamanagoudar Agri Field	15.87125	75.099078
23	Renuka Sugars Ltd., B/w at Talawar Agri Field	15.861527	75.107304
24	Renuka Sugars Ltd., B/w at Kalamma Devi Temple	15.856994	75.116936
25	Renuka Sugars Ltd., B/w at Nadaf Agri Field	15.857368	75.110891

Malaprabha River Left Bank Tributaries Nala/Halla

Sl No.	Name of the Stations	Lattitude	Longitude
1	Water sample collected from Shapurwala nala Khanapur sewage confluence point	15.646964	74.516524

2	Laila Sugars Ltd., Khanapur	15.642913	74.547894
3	Water sample collected from Nalla between Doddahosur and Yadoga Road	15.66228	74.551258
4	Water sample collected from Devalatti Halla	15.67304	74.581541
5	Water sample collected from Hoovinahalla near MK Hubli	15.717014	74.681496
6	Town Panchayat, MK Hubli	15.717421	74.693716
7	Water sample collected from Malaprabha River water sample collected at Gangambika Temple KH4.	15.422131	74.422012
8	Malaprabha SSK Ni., MK Hubli	15.694774	74.715207
9	Water sample collected from Malaprabha River water sample collected at Holemmadevi temple Hunasikatti (Malaprabha SSK D/s)	15.705684	74.750506
10	Water sample collected at Neginaal Doddahalla	15.75386	74.786672
11	TMC Saundatti, Belagavi	15.463891	75.6974
12	Renuka Sugars Munolli, Saundatti	15.856853	75.100613
13	Water sample collected from Nalla near Renuks Sugars Ltd., Munoli	15.847772	75.107105
14	Town Panchayat, Munolli Saundatti	15.51661	75.71874
15	Water sample collected from Doddahalla at Munoli to Shindogi Road	15.847858	75.129464
16	Water sample collected from Tegyal Halla from Munoli to Katkol Road	15.865747	75.128968
17	EID (I) Ltd., Khanpeth, Ramdurg	15.939426	75.217133
18	Water sample collected from Halolli Halla between halolli to Sunnal Road	15.580448	75.151755
19	TMC Ramdurg	15.562887	75.174290
20	Bore well at MSW Site TMC Ramdurg	15.57336	75.17187

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: NIL

XII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT: Conducted under the Chairmanship of Deputy Commissioner, Belagavi on 09.02.2021.

XIII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river; Already submitted

Ground water regulation: Already submitted.

Period: 2020-21

NAME OF THE STATION	: Tributaries (Nalla) of Malaprabha River Polluted Stretch.
SAMPLE COLLECTED BY	: EO, Belagavi.
DATE OF COLLECTION	: 12-07-2021.
RECEIVED DATE	: 13-07-2021.
PARTICULARS OF SAMPLE	: 360-Hand pump water sample collected near Ramling Temple, Karalaga village, Khanapur.

Sl No.	PARAMETERS	UNITS	Std Limit IS 10500 2012 *DL	**PL	**360**
1	pH	_	6.5-8.5	NR	7.59
2	BOD	mg/l	_	_	
3	Dissolved Solids	mg/l	500	2000	240
4	Conductivity	uMhos/cm	_	_	
5	Chlorid as Cl	mg/l	250	1000	80
6	Sulphate as SO_4	mg/l	200	400	18
7	Hardness	mg/l	200	600	140
8	Calcium as Ca	mg/l	75	200	30.4
9	Magnesium as Mg	mg/l	30	100	16
10	Nitrate as NO_3	mg/l	45	NR	4.5
11	Iron as Fe	mg/l	0.3	NR	0.012
12	Fluoride as F	mg/l	1	1.5	0.172
13	Total Chromium Cr	mg/l	0.05	NR	BDL
14	Alkalinity	mg/l	200	600	112
15	Turbidity	ntu	1	5	0.6

NAME OF THE STATION	: Tributaries (Nalla) of Malaprabha River Polluted Stretch.
SAMPLE COLLECTED BY	: EO, Belagavi.
DATE OF COLLECTION	: 07-10-2021.

RECEIVED DATE : 08-10-2021.

PARTICULARS OF SAMPLE : 918-B/w sample collected at Kodachawad village Water supply, Khanapur.
919-B/w sample collected at Hiremunoli near Govt High School. 922-B/w sample collected at
Kerakoppa water supply Bailhongal.

Sl No.	PARAMETERS	UNITS	Std Limit IS 10500 2012 *DL	**PL	**918**	**919**	**922**
1	pH	_	6.5-8.5	NR	6.15	7.21	7.05
2	BOD	mg/l	_	_	0.54	0.6	1.06
3	Dissolved Solids	mg/l	500	2000	760	680	360
4	Conductivity	uMhos/cm	_	_	1198	1068	580
5	Chlorid as Cl	mg/l	250	1000	204	184	92
6	Sulphate as SO_4	mg/l	200	400	152	46	16
7	Hardness	mg/l	200	600	400	480	260
8	Calcium as Ca	mg/l	75	200	83	90	61
9	Magnesium as Mg	mg/l	30	100	47	62	26
10	Nitrate as NO_3	mg/l	45	NR	2.39	2.79	5.59
11	Iron as Fe	mg/l	0.3	NR	0.012	0.015	0.011
12	Fluoride as F	mg/l	1	1.5	0.321	0.416	0.513
13	Total Chromium Cr	mg/l	0.05	NR	BDL	BDL	BDL
14	Alkalinity	mg/l	200	600	332	348	272
15	Turbidity	ntu	1	5	0.4	0.2	0.4

XIV. Good irrigation practices being adopted by the State:

1. Directions issued by the DC, Belagavi to Dept of Agriculture, during the meeting held on 09.02.2021.
2. **Crop diversification**: Replacement of high water demanding commercial crops with low water requiring crops like Pulses and Oilseeds particularly in Command areas by mandating at Government level.

3. **Micro Irrigation:** Adoption of Micro irrigation practices for all the crops and making Micro irrigation technology easily accessible at the rural level.

4. Making Ground Water extraction beyond a specific limit punishable under the Act (Not allowing Bore well digging activities in vulnerable or exploited areas).

5. **Crop Intensification:** Providing incentives to the farmer for taking up Crop intensification in the command areas.

6. **Modification in Surface Irrigation Methods**: Surface water can be utilised in a minimised way by adopting alternate row irrigation system.

7. **Mulching Practices**: Any organic or inorganic materials can be used for mulching to reduce evapotranspiration, thereby reducing irrigation intervals and water amount.

XV. **Rain Water Harvesting:** Letter addressed to the Project Director, DUDC &Project Director, ZP, Belagavi for compliance. But all the four industries have implemented rain water harvesting system. Directions issued.

XVI. **Demarcation of Floodplain and removal of illegal encroachments:**Warned by Revenue department as per the flood memorandum through early warning arrangement. Directions issued by the DC, Belagavi to Revenue Dept.

XVII. **Maintaining minimum e-flow of river:**Letter addressed to the Executive Engineer, Major Irrigation Department, Belagavi for compliance**.**

XVIII. **Plantation activities along the rivers:** Letter addressed to the DCF, Belagavi, Karnataka Forest Department for compliance. Directions issued by the DC, Belagavi to Forest Dept.

XIX. **Development of biodiversity park**: Letter addressed to the DCF, Belagavi,Karnataka Forest Department for compliance. Directions issued by the DC, Belagavi to Forest Dept.

XX. **Reuse of Treated Water:**The industrial effluent after treatment is used on land for irrigation and partially recycled back into process. All the industries i.e. 04 No's of sugar industries have installed OCEMS. The treated sewage of TMC, Bailhongal is used for irrigation purposes.

XXI. **Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: NIL**

XXII. **Status of Preparation of Action Plan by the 13 Coastal States**: NA

XXIII: **Regulation of Mining Activities in the State/UT**: There is no mining activity located in the Malaprabha river basin.

XXIV. **Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring:** Meeting held on 11-09-2021 at Deputy

Commissioner Office Belagavi along with Commissioners/Chief Officers of the Local Bodies and direction given to comply with the provisions of the Water Act 1974, Solid waste management Rules, 2016, Plastic waste management Rules, 2016, Bio-medical waste management Rules, 2016 and Construction and Demolition waste management Rules, 2016.

XXV. Overall progress of the month:

Please provide overall progress achieved in terms of all the above points compared to previous month:

STP's Status :

1. **TP-Khanapur, TP-Munavalli, M K Hubli & TMC-Soundatti**: Tender awarded.
2. **TMC-Ramdurg**: Yet to commission STP's of capacities 3.30 & 1.0 KLD each.

The samples collected from Malaprabha River at downstream of Khanapur town, Hubli-Dharwad water abstraction point at Soundatti & Markandeya River Rakaskoppa Reservoir. The analysis report for the month of Dec-2022 is enclosed.

Regional Office : Belagavi-1
Karnataka State Pollution Control Board
#1, Main Road, Auto Nagar,
Kamberga Industrial Area, Belagavi-590 015
Telefax : 0831-2459121

ಪ್ರಾದೇಶಿಕ ಕಛೇರಿ : ಬೆಳಗಾವಿ-೧
೧ ನೇ ಮುಖ್ಯ ರಸ್ತೆ, ಆಟೋ ನಗರ,
ಕಾರ್ಮಿಕ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶ,
ಬೆಳಗಾವಿ-೫೯೦೦೧೫
ದೂರವಾಣಿ:೦೮೩೧ - ೨೪೫೯೧೨೧

ಕರ್ನಾಟಕ ರಾಜ್ಯ
ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ

Towards a cleaner Karnataka

ANALYSIS REPORT : RIVER
Regional Laboratory, Belagavi

NO: PCB/BGV-1/LAB/AR/NWMP/2022-23/ 895 Date: 11/1/23

NAME OF THE STATION : River water

SAMPLE COLLECTED BY : E. O. Belgaum.

DATE OF RECEIPT : 06-12-2022 (1366). 09-12-2022 (1388). 14-12-2022 (1394).

PARTICULARS OF SAMPLE : 1366-Markandeya River Rakksakoppa Reservior.

1388-Malaprabha River water sample collected at D/s of Khanapur Town.1394- Malaprabha River sample collected at Hubli-Dharwad Water abstraction point at Saundatti.

Sl No.	Sample No.s / Parameters		1366	1388	1394
GENERAL OBSERVATIONS					
I	Station Code		4098	1187	1164
II	Date of Collection		05/12/2022	09/12/2022	14/12/2022
III	Time of Collection		03.40 pm	12.10 pm	12.50 pm
IV	Weather		Clear	Clear	Clear
V	Deapth of the Stream		> 100 cm	> 100 cm	> 100 cm
VI	Colour		Clear	Clear	Clear
VII	Intensity		Light	Light	Light
VIII	Odour		None	None	None
IX	Viss. Eff. Discharge in Proximity		None	None	None
X	Human activities		WSP	-	WSP
XI	Location Details		-		
LAB ANALYSIS		Units			
1	Temperature	°C	22	26	26
2	Dissolved oxygen	mg/l	6.6	7.7	7.4
3	pH	-	8.58	7.4	7.62
4	Conductivity	uMhos/cm	284	272	394
5	BOD	mg/l	1.2	1.02	1.08
6	Nitrate as NO_3	mg/l	17	22	17
7	Ammonia As N	mg/l	BDL	BDL	BDL
8	Total Coli	mpn/100ml	920	1600	1600
9	Faecal Coli	mpn/100ml	540	920	920
10	Faecal Streptococci	mpn/100ml	350	350	280
11	Turbidity	ntu	5.4	5.6	3.7
12	Total Alkalinity	mg/l	160	60	116
13	Pheno Alkalinity	mg/l	12	12	20

PTO...

Contd..

14	Hardness as $CaCO_3$	mg/l	48	68	88
15	Calcium as CaCO3	mg/l	24	28	48
16	Magnesium as MgCO3	mg/l	24	40	40
17	Calcium as Ca	mg/l	10	11	19
18	Magnesium as Mg	mg/l	6	10	10
19	Chlorid as Cl	mg/l	32	24	44
20	Sulphate as SO_4	mg/l	4	6	9
21	Sodium as Na	mg/l	5	7	12
22	Pottesium as K	mg/l	1.24	2	1.75
23	Total Dissolved Solids	mg/l	160	160	240
24	Fixed Diasolved Solids	mg/l	80	40	80
25	Total Suspended Solids	mg/l	5	15	5
26	Total Phosphate as P	mg/l	0.481	0.167	0.239
27	Phosphate as P	mg/l	0.033	0.056	0.054
28	Fluoride as F	mg/l	0.018	0.003	0.036
29	COD	mg/l	36	60	48
30	TKN as N	mg/l	BDL	BDL	BDL
31	Boron as B	mg/l	BDL	BDL	BDL
32	Nitirite as N	mg/l	0.215	0.27	0.162
33	Percent Sodium	-	18	18	22
34	Sodium Absorption Ratio	-	0.824	0.368	0.555
35	Class		C	C	C
36	Water Quality Index (WQI)		S	S	S

This report refers only to the particular sample/job submitted for testing.
It should not be reproduced except in full.
WSP= Water Supply Point

Analysed by

Laboratory Head
Authorised Signatory

Scientific Officer
Regional Laboratory
Karnataka State Pollution Control Board
Belgaum.

End of Report

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka (Netravathi & Kumaradhara)

Overall status of the State: KARNATAKA (Dakshina Kannada)		
Name of The River		**Netravathi & Kumaradhara**
Polluted River Stretch		**Netravathi & Kumaradhara**
Priority		**Priority - V**
Status as on		**December -2022**
Overall status of the State:		
I	Total Population : Urban Population & Rural Population Separately	47,327 (As per 2011 census) (***The Population is consider within the polluted river stretch of length 55KM)***
	Urban Population	40,155
	Rural Population	7,172
II	Estimated Sewage Generation (MLD):	5.1 MLD
III Details of Sewage Treatment Plant		
• Existing no. of STPs and Treatment Capacity (in MLD)		No Existing STPs in Bantwala and Belthangady TMC Bantwala is taken up UGD construction work and is under progress
• Capacity Utilization of existing STPs		NA
• MLD of sewage being treated through Alternate technology		NA
• Gap in Treatment Capacity in MLD: • No. of Operational STPs:		5.1MLD
• No. of Complying STPs:		NA
• No. of Non-complying STPs:		NA

Details of each existing STP in the State

No.	Location	ExistingSTP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP

Not Applicable

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
NIL					

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
NIL				

IV Details of Industrial Pollution	
• No. of industries in the State (D.K District)	**0**
• No. of water polluting industries in the State	**0**
• Quantity of effluent generated from the industries in MLD	**NA**
• Quantity of Hazardous Sludge generated from the Industries in TPD	**NA**
• Number of industrial units having ETPs	**NA**
• Number of industrial units connected to CETP	**NA**
• Number and total capacity of ETPs (details of existing/ under construction / proposed)	**NA**
• Compliance status of the ETPs	**NA**
• Number and total capacity of CETPs (details of existing/ under construction / proposed)	**NIL**
• Status of compliance and operation of the CETPs	**NA**

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing,under construction & proposed)

Not applicable

V Solid Waste Management

- Total number of Urban Local Bodies and their Population List is attached as

Sl. No	Local Bodies	Population
1	Town Municipal council, Bantwala, Dakshina Kannada District.	40155
2	Uppinangady Grama Panchyath, Puttur Taluk, Dakshina Kannada District	7172
3	Subrahmanya Grama Panchyath, Puttur Taluk, Dakshina Kannada District	4443
4	Town Panchyath, Belthangadi Taluk, Dakshina Kannada District	7746

• Current Municipal Solid Waste Generation	16.49 MT/day
• 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), biomethanation, MRF etc	Composting-6.56 TPD by TMC Bantwala and Belthangadi. • The local bodies are practicing the system of door to door collection of segregated municipal solid waste. • Wet waste handed over to MCC for further disposal by TMC Bantwala. • TP Belthangadi wet waste is composted (vermin compost) in the identified the solid waste disposal site. • The dry recyclable waste such as are segregated and sent to recyclers. • Subrahmanya Grama Panchayath has installed incinerators for disposal of dry waste.
• Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	All local bodies have submitted action plan with time line to bridge gap between Installed Capacity and Current Utilization of processing facilities through District environmental plan as

	per the NGT Order wrt O.A.360 of 2018.
• No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction	There is no C&D waste processing plants.
• Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	Total No. of wards-38 Door to Door Collection-35 Segregation at Source-23 (As submitted by ULBs in DEP)
• Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	**NIL**
• No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	**Nil**
• 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	8

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
Bantwala TMC	14	12.2	• Windrows System for wet waste • MRF for dry waste	100%	Proposed incinerator for waste disposal by 31.03.2022
Belthangadi	2.49	1.94	• Windrows System	100%	NIL

TP			• MRF		

VI Bio-medical Waste Management	
• Total Bio-medical generation:	180 Kg/day
• No. of Hospitals and Health Care Facilities	132
• Status of Treatment Facility/ CBMWTF	The hospitals and HCEs hand over their biomedical waste for further treatment and disposal to CBMWTF- M/s. Ramky Enviro Tech Pvt. Ltd., Mulki, D.K. and M/s. Ayush Enviro tech Pvt. Ltd., Padubidre Udupi.

VII Hazardous Waste Management	
• **Total Hazardous Waste Generation**	NIL
• **No of Industries Generating Hazardous Waste**	NIL
• **Treatment Capacity of all TSDFS**	NIL. No TSDF proposed in the jurisdiction of RO-Mangalore. Hazardous waste generated in the District is sent to TSDF, Bangalore for landfilling, various incinerators, Co-processors & Recyclers across the state for treatment & disposal
• **Avg Quantity of Hazardous Waste reaching the TSDFs and treated**	
• **Details of on-going or proposed TSDF**	

VIII Plastic Waste Management		
	• Total Plastic Waste generation	392 MT/A
	• Treatment/ Measures adopted for reduction or management of plastic waste	• Single use plastic is totally banned in Karnataka as per GoK Notification No: No. FEE/17EPC2012, Bangalore, dated: 1-03-2016. • There are two waste plastic reprocessing industries in the jurisdiction of RO-Mangalore.

IX	Details of Alternate Treatment Technology being adopted by the State/UT	NA
X	Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment	• In ULB limit maximum no. of individual houses are having ST & SP for toilet blocks. • Revised river rejuvenation action plan submitted on 08.05.2020 with directions to stakeholder for • Proposal for Underground drainage system proposed in all areas for 100% waste water treatment. • Untreated sewage entering in to the rivers should be reduced by laying the drainage network & connecting it to sewage treatment plant. • To install STP's for treatment of domestic wastes and scientific disposal facilities for solid waste generated from the villages & town located on the bank of Netravathi River and Kumaradhara River.
XI	Details of Nodal Officer appointed by Chief Secretary in the State/UT	NA
XIII	Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:	NA
XIII	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;	Attached as Annexure
XIV	Ground water regulation	The industry authorities are directed to

		obtain NOC from State/ District Ground water Authority.
XV	Good irrigation practices being adopted by the State	NA
XVI	Rain Water Harvesting	Directions will be given to agricultural/irrigation department to organize awareness programmes in farmers to conserve water and good irrigation practices to be adopted.
XVII	Demarcation of Floodplain and removal of illegal encroachments	Directions have been given to Forest Department to submit details about flood plain zone and to carry out massive plantation and also notify the FPZ.Gazing station at Bantwala. through DEP
XVIII	Maintaining minimum e-flow of river	Directions given to agricultural/irrigation department to organize awareness programmes in farmers to conserve water and good irrigation practices to be adopted
XIX	Plantation activities along the rivers	NA
XX	Development of biodiversity park	NA
XXI	Reuse of Treated Water	Treated sewage will be reused once STP put into operation.
XXII	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards	Directions being followed.
XXIII	Status of Preparation of Action Plan by the 13 Coastal States	Submitted. Copy of Coastal plan enclosed. Information furnished in the prescribed format for OA No. 829/2019 vide letter dated: 03.01.2020.
XXIV	Regulation of Mining Activities in the State/UT	Being monitored and regulated by Department of Mines and Geology.

XXV	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	NIL
XXVI	**Please provide overall progress achieved in terms of all the above points compared to previous month** ➢ Effective implementation of Door to Door collection of solid waste is being done by the ULBs. ➢ The household plastic waste is collected and handed over to Authorized plastic waste recyclers. ➢ TMC Bantwala has started processing their wet waste through windrows composting. Previously the wet waste was being handed over to MCC for further process. ➢ This office has issued notices to urban local bodies to identify and obtain the Authorization under C&D Waste management Rules, 2016. ➢ Awareness regarding segregation of COVID-19 and non-COVID-19 WASTE and biomedical waste generated from houses is being given to public by local bodies as per the directions of KSPCB. ➢ Meeting of District Level Special Task Force (STF) was held on 29.12.2021 under the Chairmanship of Deputy Commissioner, D.K (Meeting conducted by Sri Channabasappa, ADC,D.K District) to review the progress with respect to implementation Solid Waste Management Rules 2016.	

REGIONAL OFFICER
KSPCB, MANGALURU

KARNATAKA STATE POLLUTION CONTROL BOARD

No 10 B,Industrial Area Baikampady Mangaluru 575011 Ph No: 0824-2408420

PCB/RO(MNG)/MINARS-1079-1084/2022-23/R No : 585

DATE: 5/01/2023

ANALYSIS REPORT OF WATER QUALITY

NAME OF THE INDUSTRY/LOCATION :	River water samples (MINARS)
SAMPLE COLLECTED BY :	DEO, Mangaluru
DATE OF COLLECTION :	07.12.2022
DATE OF RECEIPT :	07.12.2022
SAMPLE NO & PARTICULARS OF SAMPLE COLLECTED:	1. River Nethravathi U/s of Darmasthala water supply intake point (1079). 2. River Kumaradhara U/s of Uppinangady town before confluence with Nethravathi river (1080). 3. River Nethravathi D/s of Bantwal town Mangalore water Supply Point (Minars)Thumbay (1081). 4. River Nethravathi U/s of Uppinangady town before confluence with Kumaradhara river (1082). 5. Borewell water collected at Mangala nagar vamanjoor (MINARS) (1083). 6. Pond water collected at Pilikula Tank (1084).

S.NO	PARAMETERS	UNITS	Result					
			Sample No.1079	Sample No.1080	Sample No.1081	Sample No.1082	Sample No.1083	Sample No.1084
Station Code			1892	1894	3562	3563	3564	3565
Catagory			C	C	C	C	C	B
1	pH	pH unit	7.4	7.6	7.7	7.7	7.5	7.8
2	Colour	Colurless	Colurless	Colurless	Colurless	Colurless	Colurless	Colurless
3	Odour	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless
4	Temprature	°c	29	28	29	28	28	29
5	Turbidity	NTU	0.5	4.1	5.1	4.5	15.3	5.1
6	Dissolved Oxygen	mg/l	7.8	7.5	7.4	7.4	4.3	7.6
7	Total Alkalinity	mg/l	60	64	52	72	124	64
8	P.Alkalinity	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
9	Counductivity	µohms/cm	138	142	130	128	242	134
10	TDS	mg/l	110	114	112	108	168	106
11	Total Fixed Solids	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
12	Total Suspended Solids	mg/l	8	12	10	12	16	14
13	Hardness	mg/l	34	40	32	36	90	32
14	Calcium	mg/l	22	24	20	22	68	20
15	Magnesium	mg/l	12	16	12	14	22	12
16	Chloride	mg/l	24	26	24	30	28	30
17	Sulphate	mg/l	4	3	9	5	22	11
18	Fluoride	mg/l	0.045	0.063	0.066	0.064	0.098	0.052
19	Nitrate	mg/l	1.2	0.62	1.1	0.74	0.96	0.68
20	Phosphate	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
21	Sodium	mg/l	2	2	2	2	3	4
22	Potassium	mg/l	3	1	1	1	2	2
23	Boron	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
24	COD	mg/l	18	23	20	26	29	26
25	BOD	mg/l	2	2	2	3	3	3
26	Ammonical Nitrogen	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
27	TKN	mg/l	BDL	BDL	BDL	BDL	BDL	BDL
28	Coliform Total	MPN/100ml	540	540	790	700	BDL	460
29	Coliform Fecal	MPN/100ml	70	79	93	93	BDL	68
30	Fecal Streptococci	MPN/100ml	.....	.....	.....	.....	.....	.....

Note:1.The above results pertains only to the sample tested.2. The method of analysis is as per the Standard Method for the examination of Water and Waste Water, APHA, AWWA, WPCF, USA and Indian Standard Publication. 3 ND—Not Detected, BDL— Below detection limit 4. DL*: Desirable Limits PL **: Permissible Limits (in the absence of alternate Source)

Scientific Assistant
ANALYSED BY

Scientific Assistant
VERIFIED BY

Scientific Officer
LAB HEAD

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020) For the State of Karnataka

Name of the River	**SHIMSHA**
Polluted river stretch	**Yediyur to Halagur bridge**
Priority	**IV**
Status as on	**December- 2022**

Overall status of the State:

	Particulars	TMC Maddur
I.	Total Population: Urban Population & Rural Population separately	**28,902**
II.	Estimated Sewage Generation (MLD):	**3.5**

III. <u>Details of Sewage Treatment Plant:</u>

Particulars	TMC Maddur
Existing no. of STPs and Treatment Capacity (in MLD):	3.5 MLD
Capacity Utilization of existing STPs:	3.5 MLD
MLD of sewage being treated through Alternate technology:	-
Gap in Treatment Capacity in MLD:	Nil
No. of Operational STPs:	01
No. of Complying STPs:	01
No. of Non-complying STPs:	-

<u>Details of each existing STP in the State</u>

Name of the Local Body	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
TMC Maddur	Hole Anjanaiah swamy Temple Road, Maddur	3.5 MLD	3.5 MLD	Yes	Complied

Details of under construction STPs in the State:

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I & D or House sewer connections	Completion Timeline
TMC Maddur	Hole Anjanaiah swamy Temple Road, Maddur	Up gradation of existing 3.5 MLD STP to 6.0 MLD with Aeration Technology	Revised DPR is prepared by KUWS&DB, Mandya Division for Rs. 50.15 Crores to divert the sewage discharged into river through storm water drain. Connecting household to UGD by 4000 houses & construction of 2 nos. of wet wells. Upgradation of existing 3.5 MLD STP to 6.0 MLD. The DPR is approved & work has been assigned to KUWS&DB by the Government.	KUWS&DB has issued work order vide dtd on 15-04-2020 to contractor and 950 nos. of manholes and wet well & pump house roof slab concrete completed.	14-04-2022

Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
TMC Maddur	Hole Anjanaiah swamy Temple Road, Maddur	Up gradation of existing 3.5 MLD STP to 6.0 MLD.	Revised DPR is prepared by KUWS&DB, Mandya Division for Rs. 50.15 Crores to divert the sewage discharged into river through storm water drain. Connecting household to UGD for 4000 houses & construction of 2 nos. of wet wells and Upgradation of existing 3.5 MLD STP to 6.0 MLD. About 60 % of the work has been completed.	14-04-2022

IV. Details of Industrial Pollution:

Particulars	TMC Maddur
No. of industries in the State:	1
No. of water polluting industries in the State:	1
Quantity of effluent generated from the industries in MLD:	2.9
Quantity of Hazardous Sludge generated from the Industries in TPD:	Nil
Number of industrial units having ETPs:	01
Number of industrial units connected to CETP:	-
Number and total capacity of ETPs (details of existing/ under construction / proposed)	2.9
Compliance status of the ETPs:	Complied
Number and total capacity of CETPs (details of existing/ under construction / proposed)	-

Status of compliance and operation of the CETPs:

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
TMC Maddur	-	-	-	-

V. **Solid Waste Management:**

Particulars	TMC Maddur
Total number of Urban Local Bodies and their Population	28,902
Current Municipal Solid Waste Generation	10 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), bio-methanation, MRF etc	• Composting Existing – 0.0 Gap – 4.1 TPD • Sanitary landfill Existing–Nil Gap – 2.4 TPD
Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	DPR for Rs. 5.25 Crores is approved to provide compost plant & sanitary land fill site & the same is under progress. At present the solid waste is dumped in the site

	without any treatment.
No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	Nil
Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	• Door to door collection 23/23 Wards. • Segregation practice-18 Wards
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	-
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	-
No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers	Nos. of drains - 1 Nos. of drains having floating racks / screen – Nil

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
TMC Maddur	10	3.0	De centralized pit composting	3.0	DPR for Rs. 5.25 Crores (Civil work- 4 crore & vehicles 1.25 crores) with 12 % GST & work order for processing of entire MSW waste is issued on 23-03-2020 and currently the civil work is assigned to the contractor and about 50% of the work is completed.

VI. Bio-medical Waste Management:

Particulars	TMC Maddur
Total Bio-medical generation:	81.7 Kg/day
No. of Hospitals and Health Care Facilities:	Bedded: 03 Non Bedded: 26

Status of Treatment Facility/ CBMWTF:	Disposed to CBMWTF

VII. Hazardous Waste Management:

Particulars	TMC Maddur
Total Hazardous Waste generation.	-
No. of Industries generating Hazardous waste	-
Treatment Capacity of all TSDFs	-
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	-
Details of on-going or proposed TSDF	-

VIII. Plastic Waste Management:

Particulars	TMC Maddur
Total Plastic Waste generation:	**3.6 MTPD**
Treatment/ Measures adopted for reduction or management of plastic waste:	Awareness programme was carried out to minimize the usage of plastic & regular ride will be carried out.

Particulars		TMC Maddur
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:	One drain is identified & monitored. The sullage effluent is having BOD & TC in excess of standards & said drain is to be connected to nearby wet well to pump the same to STP.
XI.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	-
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;	**Status of water quality of polluted rivers in Annexure-1.**
XIV.	Ground water regulation:	The ground water resources assessment is carried out on Taluka wise (Administrative Units) The State Govt. has taken up various Recharge/Water Conservation Schemes like for augmentation of ground water resources. In

		respect of semi critical area action plan will be executed with the District Administration to restore the Ground Water Table. **<u>Status of Ground Water Resource Assessment in Annexure-2</u>**
XV.	Good irrigation practices being adopted by the State:	The Dept. of Agriculture has submitted action plan for implementation of following measures. • General Government Practice of Irrigation is maintained in the Maddur Taluk. • Farmers are made aware to use water optimally.
XVI.	Rain Water Harvesting:	The Department of Revenue and Irrigation have prepared District Disaster Management Plan for the Flood Plains of river Shimsha which is also covered under polluted river stretch. In order to overcome Flood Plains people of nearby villages are warned through early warning arrangement in consultation with revenue department. Further measures required for Flood Plain Management in the polluted river stretch will be implemented.
XVII.	Demarcation of Flood plain and removal of illegal encroachments:	
XVIII.	Maintaining minimum e-flow of river:	The Cauvery Neeravari Nigam Ltd., is requested to submit the action plan as per MoEF & CC norms during monsoon seasons and same is not yet submitted
XIX.	Plantation activities along the rivers:	The Forest Department is requested submit the action for plantation of saplings on the banks of polluted river stretch of Shimsha and the same is not yet submitted
XX.	Development of biodiversity park:	As of now, there is one Bird Sanctuary in Kokkare bellur in Shimsha river stretch of Maddur Taluk. The Forest Department is requested to submit action plan for the proposed bio diversity parks and the same is not yet submitted. The status of the existing and proposed bio diversity parks and its implementations will be executed in coordination with the Forest Department.
XXI.	Reuse of Treated Water:	Treated water is used on land for irrigation.
XXII.	Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	-
XXIII.	Status of Preparation of Action Plan by the 13 Coastal States:	-
XXIV.	Regulation of Mining Activities in the State/UT:	-
XXV.	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	-
XXVI.	Overall progress of the month:	a) With respect to treatment & disposal of sewage effluent the LB's have taken

Please provide overall progress achieved in terms of all the above points compared to previous month.	steps to operate the existing STPs & action plan for up gradation of the existing STPs is being prepared by KUWS&DB. KUWS&DB has issued work order vide dtd on 15-04-2020 to contractor and 950 nos. of manholes and wet well & pump house roof slab concrete completed. About 60% of the work has been completed. **No progress.** b) With respect to Solid Waste Management by Municipalities, steps have been taken to process the Solid Waste with the existing compost facilities and works followed by tendering for expanding the same along with sanitary land fill sites construction are under progress. About 50% of the work is completed. **No progress.**

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Details of Water Quality Monitoring locations as per NWMP	Year	DO (mg/l)	BOD (mg/l)	Fecal Coliform (MPN/100 ml)	Total coliform (MPN/100 ml)
1	D/S of river Shimsha near Bangalore-Mysore Road Bridge Maddur, Maddur Tq, Mandya District	Dec-22	6.6	2	320	2400
2	D/s of river shimsha near Halgur Road Bridge, Malavalli Tq, Mandya District	Dec-22	6.8	2.3	390	2100

ANNEXURE-2

XIV. Status of Ground Water Resource Assessment in Annexure-2

District	Taluka	Net Annual Ground Water Availability (HAM)	Total Ground Water Draft (HAM)	Gap between availability and Draft (HAM)	Stage of Ground Water Development (%)*	Category
Mandya	Maddur	9893.26	5537.37	4355.89	56%	***Safe (≤ 70)**

Note:- The ground water resources assessment is carried out on Taluka wise (Administrative Units) The State Govt. has taken up various Recharge/Water Conservation Schemes like for augmentation of ground water resources. In respect of semi critical area action plan will be executed with the District Administration to restore the Ground Water Table by March 2021.

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA

No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Name of the River : Tunga River
Polluted river stretch : 10Km
Priority : V
Status as on : 31.12.2022

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately:

Shivamogga City Corporation Population is 322650 (As on 2011 census)

II. Estimated Sewage Generation (MLD): 47.79MLD

III. Details of Sewage Treatment Plant:

- Existing no. of STPs and Treatment Capacity (in MLD):

  Existing 2 no of capacity STP of 35.58 MLD STP at Thyvarechatnhalli, & 5.13MLD at Purle Village, Shivamogga Tq & Dist is under operation.

- Capacity Utilization of existing STPs:13.52MLD
- MLD of sewage being treated through Alternate technology: --
- Gap in Treatment Capacity in MLD:34.27
- No. of Operational STPs: 2
- No. of Complying STPs:2
- 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	Sy.no.27/1,28P,32,33, 34,35 & 36, Thyvarechatnhalli,	35.58 MLD	13MLD	Working	Complied

	Shivamogga Tq &Dist				
2	City Corporation, Shivamogga,Sy.No.33/ P1, Purle village,Shivamogga Tq & Dist	5.13MLD	0.52MLD	Working	Complied

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	Ghandi Park,Shivamogga City,Shivamogga	0.05MLD	95%	-	June-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
-	-	-	-	-

IV. Details of Industrial Pollution:

- No. of industries in the State:

  There are no large industries located on the bank of the Tunga River.

- No. of water polluting industries in the State: -
- Quantity of effluent generated from the industries in MLD: -
- Quantity of Hazardous Sludge generated from the Industries in TPD: -
- Number of industrial units having ETPs: -
- Number of industrial units connected to CETP: Nil
- Number and total capacity of ETPs (details of existing/ under construction / proposed)

  : -

- Compliance status of the ETPs: -

- Number and total capacity of CETPs (details of existing/ under construction / proposed) :Not Applicable (Shivamogga Dist. is not having any CETP).
- Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
	Nil			

V. **Solid Waste Management:**

- Total number of Urban Local Bodies and their Population:

  1 - City Corporation, Shivamogga. Population is 322650

- Current Municipal Solid Waste Generation is about **169 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), biomethanation, MRF etc : City Corporation, Shivamogga is having MSW site at Sy No.198, 202 to 206, 208 to 210, Anupinakatte Village, Shivamogga. Installed capacity is 75TPD (Considering 8 hr Shift) and they operate the unit in two shifts (6.00AM to 10.00PM) to process the MSW.
- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%) : --
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction) : NIL
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source : There are 35 wards in Shivamogga Corporation. All 35 wards are covered under Door to Door Collection. All 35 Wards are doing source segregation.

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)-**Nil**
- 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 : --
- No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:

  Smart City Shivamogga has taken up 7 works (Drains) to divert during summer season.(I & D Work).
  Further KUWS&DB, Shivamogga has taken up I and D (Interception & Diversion) Works and it is under tender stage.

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
1	169 TPD	150 TPD (2 Shifts)	75TPD(Considering 8 hr Shift) and they operate the unit in two shifts to process the MSW	75TPD(Considering 8 hr Shift) and they operate the unit in two shifts to process the MSW	Nil

VI. Bio-medical Waste Management:

- Total Bio-medical generation : 1174 Kg/day
- No. of Hospitals and Health Care Facilities: Total No of Hospitals and Health Care Facilities is 431 including 90 No bedded HCF,336 No non bedded HCF and 5 Veterinary Hospital.
- Status of Treatment Facility/ CBMWTF : The Shivamogga Dist is having one CBMWTF i.e.M/s.Shushrutha Biomedical Waste Management Society®, Plot.No.31/C, Machenahalli Indl Area, Bhadravathi Tq,Shivamogga Dist.
  The unit has obtained Consent and Authorization from the Board for the period up to 30.06.2025.

VII. Hazardous Waste Management:

- No. of Industries generating Hazardous waste : 38
- Treatment Capacity of all TSDFs:

  Not Applicable (Shivamogga Dist. is not having TSDF)
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: Not Applicable
- Details of on-going or proposed TSDF: Not Applicable

VIII. Plastic Waste Management:

- Total Plastic Waste generation: 4318 TPA
- Treatment/ Measures adopted for reduction or management of plastic waste:

  The City Corporation, Shivamogga has prepared By laws for Plastic Waste Management Rule. Plastic raids on Commercial activities are conducted from time to time from City Corporation Shivamogga and KSPCB.

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:--

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;

Earlier Samples were collected from the drains and Bore well and Results also Submitted along with Action Plan. This Office has all collected drains and Bore well samples during July 2022. This Office is collecting the River Water Samples every month at 2 Locations.

XIV. Ground water regulation:

District Ground Water Office has reported that Shivamogga Dist lies under safe zone (There are no over exploited Taluk)

XV. Good irrigation practices being adopted by the State:

Adoption of micro irrigation practices such as drip/sprinkler.

XVI. Rain Water Harvesting:

Shivamogga Urban Development Authority (SUDA) is insisting residential Buildings/Commercial Buildings to adopt Rain Water Harvesting in its approval.

XVII. Demarcation of Floodplain and removal of illegal encroachments:

Flood plain zone encroachment details are sought from the Revenue Department.

XVIII. Maintaining minimum e-flow of river:

Karnataka Water Resources Department is the concerned Department and it is maintaining the flow as per the Norms.

XIX. Plantation activities along the rivers:

The Deputy Commissioner has informed the Forest Department Officers to take suitable action for plantation in flood plain zone.

XX. Development of biodiversity park:

The Deputy Commissioner instructed the Irrigation Department Officials to verify the encroachment if any on the river banks and informed to take suitable action on this issue along with the concerned Department.

XXI. Reuse of Treated Water: --

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: --

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: **Not Applicable**

XXIV. Regulation of Mining Activities in the State/UT:

Mines & Geology Dept is monitoring Sand Mining activity

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring:---

XXVI. Overall progress of the month:---

KARNATAKA STATE [illegible], CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.

NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS									
Sl No	Sample Nos		W-479	W-480	W-481	W-482	W-483	W-484	W-485
	Station code		2765	4105	1387	1169	1896	4106	1168
I	Date & Time of collection		12.12.2022 2.10PM	12.12.2022 1.40PM	12.12.2022 1.15PM	12.12.2022 12.30PM	12.12.2022 12.00PM	12.12.2022 11.00AM	12.12.2022 11.30AM
II	Weather		Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None
VI	Visible effluent discharge		None	None	None	None	None	None	None
VII	Human activities around the station		None	None	None	None	None	None	None
VIII	Station details		U/s of MPM, Bhadra River, Karnataka	D/s of MPM, Bhadra River, Karnataka	D/s of Bhadravathi, Bhadra River, Karnataka	Holehonnur Bridge, Bhadra River, Karnataka	Kudli Confluence point, TB River, Karnataka	U/s of Shivamogga, Tunga river, Karnataka	D/s of Shivamogga, Tunga river, Karnataka
CORE PARAMETERS									
Sl No	Parameter	Unit							
1	Temperature	°C	26	25	27	26	26	26	25
2	DO	mg/L	6.1	6.0	6.4	6.3	6.1	6.5	6.2
3	pH	pH unit	8.1	8.1	7.9	7.5	7.8	7.8	8.2
4	Conductivity	µS/cm	190	280	210	320	270	130	150
5	BOD	mg/L	1.8	2.2	2.8	3.0	1.6	1.7	2.0
6	Nitrate as N	mg/L	0.53	0.42	0.56	0.61	0.63	0.68	0.41
7	Total Coli form	MPN/100ml	280	920	2800	1700	280	280	1500
8	Faecal Coli form	MPN/100ml	34	94	310	240	33	27	170
GENERAL PARAMETERS									
SL.NO	PARAMETER	UNIT							
1	Turbidity	NTU	21	20	24	22	23	7	10
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	116	120	80	134	100	50	72
4	Chloride	mg/L	20	22	24	32	26	14	20
5	COD	mg/L	11	15	18	23	14	13	18
6	TKN	mg/L	1.40	1.70	1.65	1.20	1.40	1.50	1.20
7	Ammonia as N	mg/L	0.81	0.94	0.91	0.70	0.73	0.81	0.74
8	Hardness as $CaCO_3$	mg/L	48	74	44	86	60	28	32
9	Calcium as $CaCO_3$	mg/L	24	34	30	60	38	14	18
10	Calcium as Ca++	mg/L	9.60	13.60	12.00	24.00	15.20	5.60	7.20
11	Magnesium as $CaCO_3$	mg/L	24	40	14	26	22	14	14
12	Magnesium as Mg++	mg/l	5.83	9.72	3.40	6.32	5.35	3.40	3.40
13	Sulphate	mg/L	10.00	50.00	12.20	34.60	20.10	7.80	12.60
14	Sodium	mg/L	7	13	15	17	12	6	11
15	Total Dissolved Solids	mg/L	132	196	140	224	180	90	104
16	Total Fixed Solids	mg/L	128	184	132	214	174	86	100
17	Total Suspended Solids	mg/L	16	18	24	20	26	12	24
18	Phosphate as PO_4	mg/L	BDL	0.14	0.41	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	1	2	1	1	1
21	Fluoride	mg/L	0.27	0.41	0.15	0.21	0.35	0.11	0.14
Class/category			B	C	C	C	B	B	C
Water Quality Index			S	S	S	S	S	S	S

Analysed by

Scientific Assistant

Verified by

Deputy Scientific Officer

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of Karnataka

Pertaining to KSPCB Regional Office, Davangere.

Name of the River : Tungabhadra
Polluted river stretch : Honnalli to Haralahalli Bridge
Priority : III
Status as on : 31.12.2022

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately

Davangere (CC): - 43,4971. Harihara (CMC): - 77,447.
Honnalli (TP): - 17,928.

II. Estimated Sewage Generation (MLD): **54.64 MLD (44 + 8.84 + 1.8 from 3 Local bodies)**

III. <u>Details of Sewage Treatment Plant:</u>

- Existing no. of STPs and Treatment Capacity (in MLD):

  Davangere: 4 No's of STPs of capacities 14.8 MLD, 20 MLD, 20 MLD & 5 MLD.

  Harihara : 18 MLD.

  Honnalli : 3.3 MLD.

- Capacity Utilization of existing STPs: **54.64 MLD**.
- MLD of sewage being treated through Alternate technology: **Nil**
- Gap in Treatment Capacity in MLD: **Nil**
- No. of Operational STPs: **6 No's**
- No. of Complying STPs: **4 No's**
- No. of Non-complying STPs: **2**

Details of each existing STP in the State

No.	Location	Existing STP Capacity (MLD)	Capacity Being Utilized (MLD)	Operational Status of STP	Compliance Status of STP
1	Davangere CC	14.8	9	Operating	**Complied**
2	Davangere	20	16	Operating	**Complied**
3	Davangere	20	16	Operating	**Complied**
4	Davangere	5	3	Operating	**Complied**
5	Harihara CMC	18	8.84	Operating	**Not Complied**
6	Honnalli	3.3	1.8	Operating	**Not complied,**

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
-	-	-	-	-	-

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
-	-	-	-	-

IV. Details of Industrial Pollution: (RO, Davangere District)

- No. of industries in the State: (**Davangere Dist: 312**).
- No. of water polluting industries in the State: **2. (2 major industries located on River bank, viz; Harihara polifibers and Grasiline Division of Grasim Industries)**
- Quantity of effluent generated from the industries in MLD: C**onsented effluent generation is 49.840 MLD** and average quantity effluent generated is **32.5 MLD.**
- Quantity of Hazardous Sludge generated from the Industries in TPD: **0.0 TPD.**
- Number of industrial units having ETPs: **2.**
- Number of industrial units connected to CETP: **0**
- Number and total capacity of ETPs (details of existing/ under construction / proposed)

2 ETPs of capacities – 20 MLD (GRD) + 40 MLD (HPF)

- Compliance status of the ETPs: **Complied with effluent standards.**
- Number and total capacity of CETPs (details of existing/ under construction / proposed) - **NIL**
- Status of compliance and operation of the CETPs - Nil

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
Davangere	2	32.500 MLD	Operating and Complied with the Consent conditions	NIL

V. **Solid Waste Management:**

- Total number of Urban Local Bodies and their Population **: 3 No's (pertaining to River stretch)**

  Davangere CC – **4,34,971**
  Harihar CMC – **77,447**
  Honnalli TP – **17,928**

- Current Municipal Solid Waste Generation –

  Davangere CC – 170 TPD
  Harihar CMC - 35 TPD
  Honnalli TP - 7 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), biomethanation, MRF etc..

Sl. No	ULB	Installed capacity	Type of processing
1	CC Davangere	200 TPD	windrow platform, composting and vermi composting facilities
2	CMC Harihara	35 TPD	composting and vermi composting facilities and Biogas
3	TP Honnalli	8 TPD	Composting.

- Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%). - **Nil**
- No. and capacity of C & D waste processing plants in TPD (existing, proposed and under construction) – **Nil**
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source -

ULBs	No of wards	No of wards having door to door collection service	no. of wards practicing segregation at source
Davangere CC	45	32	32
Harihar CMC	31	20	20
Honnalli TP	18	14	14

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology) – **Nil.**
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills.
  - **Nil**
- 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

Sl.No	No. of drains falling into rivers	No. of drains having floating racks/screens
1	9	0

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
Davangere CC	170 TPD	170 TPD	Leachate Treatment Plant , windrow platform, composting and vermi composting facilities	170 TPD	-
Harihar CMC	35 TPD	35 TPD	Provided Biogas facility, composting and vermi composting	35 TPD	-
Honnalli TMC	7 TPD	7 TPD	Composting	7 TPD	-

VI. Bio-medical Waste Management:

- Total Bio-medical waste generation: **1.38 TPD (In entire Davangere district)**
- No. of Hospitals and Health Care Facilities: **29 (Bedded Hospitals > 30 beds)**
- Status of Treatment Facility/ CBMWTF: The Biomedical wastes generated from the Davangere District is being collected by **M/s. Sushanth Environmental Technologies., Davangere for further treatment and disposal.**

VII. Hazardous Waste Management:

- Total Hazardous Waste generation : **(2 major industries located on River bank, viz; Harihara Polifibers and Grasiline Division of Grasim Industries)**
  ETP sludge – Nil
  Cotton waste & Used oil filters – **2.0 MT/A.**
  Used oil – **8.9** KL/ Annum.

- No. of Industries generating Hazardous waste: **2**
- Treatment Capacity of all TSDFs: **Nil (There is no TSDF in this office jurisdiction)**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated : **Nil**
- Details of on-going or proposed TSDF: **NIL**

VIII. Plastic Waste Management:

There are No plastic waste generating industries in this office Jurisdiction.

- Total Plastic Waste generation: -- Nil

- Treatment/ Measures adopted for reduction or management of plastic waste: -- Nil

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

Nil

X. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in situ treatment: **following are the points where drains contributing towards river;**

Sl. No	**Location**	**Type of sewage**
1	Hukkadagathri village (Left bank)	Village sewage
2	Hole Haralahalli village (Left bank)	Village sewage
3	Harihara Town (Right bank)	City sewage
4	Chikkabidari Village & Sarathi halla (Right	Village sewage

	bank)	
5	Didagur village (Left bank)	Village sewage
6	Nadiharalahalli Village (Left bank)	Village sewage
7	Hirebidari village (Left bank)	Village sewage
8	Aravi village (Left bank)	Village sewage
9	Kuravathi village (right bank)	Village sewage

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT: --

XII. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT: **District level special Environment surveillance Task force committee meeting in respect of River Rejuvenation held on 30.11.2022. (Davangere District)**

XIII. Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river; - **December Month analysis report enclosed as Annexure 1.**

XIV. Ground water regulation:--

XV. Good irrigation practices being adopted by the State: --

XVI. Rain Water Harvesting: --

XVII. Demarcation of Flood plain and removal of illegal encroachments: --

XVIII. Maintaining minimum e-flow of river: --

XIX. Plantation activities along the rivers: **Letter addressed to DCF, Forest Department, Davangere to carryout plantation along the Tungabadra river bank stretch dated 27.04.2022. And they have agreed to take up the work w.r.t Plantation on river banks vide letter dated: 11.05.2022.**

XX. Development of biodiversity park: --

XXI. Reuse of Treated Water: **District level special Environment surveillance Task force committee chairman has informed M/s. Grasim industries (HPF & GRD) authorities to utilize the treated effluent maximum for various purpose in unit premises and agricultural purpose during the meeting held on 30.11.2022. I/A have informed that that, they have established full-fledged ETP comprising of primary treatment, secondary treatment based on Extended Aeration Activated Sludge Process and Tertiary treatment for effluent colour removal. The color of the effluent was purely due to lignin in the colloidal suspension form, which is nontoxic to the eco system. However, lignin in small quantity in the effluent imparts a brownish tinge to the effluent thereby creating aesthetic impact on effluent and as well as on river water.**

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: --

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: --

XXIV. Regulation of Mining Activities in the State/UT: --

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring ---

XXVI. Overall progress of the month:

Please provide overall progress achieved in terms of all the above points compared to previous month. **- During District level special Environment surveillance Task force committee held on 30.11.2022., the chairman of committee has informed to M/s. Grasim industries (HPF & GRD) authorities to utilize the treated effluent maximum for various purpose in unit premises and agricultural purpose and the unit authorities informed that they were planning to adopt latest technologies., they have established full-fledged ETP comprising of primary treatment, secondary treatment based on Extended Aeration Activated Sludge Process and Tertiary treatment for effluent colour removal. Proceeding of the River rejuvenation meeting has already furnished to B.O.**

Annexure 1. Tungabadra river results.

KARNATAKA STATE POLLUTION CONTROL BOARD, CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.

NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.		W-479	W-480	W-481	W-482	W-483	W-484	W-485
	Station code		2765	4105	1387	1169	1896	4106	2168
I.	Date & Time of collection		12.12.2022 2.10PM	12.12.2022 1.40PM	12.12.2022 1.15PM	12.12.2022 12.30PM	12.12.2022 12.00PM	12.12.2022 12.00AM	12.12.2022 11.30AM
II	Weather		Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None
VI	Visible effluent discharge		None	None	None	None	None	None	None
VII	Human activities around the station.		None	None	None	None	None	None	None
VIII	Station details.		U/s of MPM, Bhadra River, Karnataka	D/s of MPM, Bhadra River, Karnataka	U/s of Bhadravathi, Bhadra River, Karnataka	Hulihuniur Bridge, Bhadra River, Karnataka	Kudli Confluence point, TB River, Karnataka	U/s of Shivamogga, Tunga river, Karnataka	D/s of Shivamogga, Tunga river, Karnataka
CORE PARAMETERS:									
Sl.No.	Parameter	Unit							
1	Temperature	° C	26	25	27	26	26	26	25
2	DO	mg/L	6.1	6.0	6.4	6.3	6.1	6.5	6.2
3	pH	pH unit	8.1	8.1	7.9	7.5	7.8	7.8	8.2
4	Conductivity	µS/cm	190	280	210	320	270	150	150
5	BOD	mg/L	1.8	2.2	2.8	3.0	1.6	1.7	2.0
6	Nitrate as N	mg/L	0.53	0.42	0.56	0.61	0.63	0.68	0.41
7	Total Coli form	MPN/100ml	280	920	2800	1700	280	280	1500
8	Faecal Coli form	MPN/100ml	34	94	310	240	33	27	170
GENERAL PARAMETERS:									
SL.NO	PARAMETER	UNIT							
1	Turbidity	NTU	21	20	24	22	25	7	20
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	116	120	80	134	100	50	72
4	Chloride	mg/L	20	22	24	32	26	14	20
5	COD	mg/L	11	15	13	23	14	13	18
6	TKN	mg/L	1.40	1.70	1.55	1.20	1.40	1.60	1.32
7	Ammonia as N	mg/L	0.81	0.94	0.91	0.70	0.73	0.81	0.71
8	Hardness as $CaCO_3$	mg/L	48	74	44	86	60	28	32
9	Calcium as $CaCO_3$	mg/L	24	34	30	60	38	14	18
10	Calcium as Ca^{++}	mg/L	9.60	13.60	12.00	24.00	15.20	5.60	7.20
11	Magnesium as $CaCO_3$	mg/L	24	40	14	26	22	14	14
12	Magnesium as Mg^{++}	mg/l	5.83	9.72	3.40	6.32	5.35	3.40	3.40
13	Sulphate	mg/L	10.00	50.00	12.20	34.60	20.10	7.80	12.60
14	Sodium	mg/L	7	33	15	17	12	6	11
15	Total Dissolved Solids	mg/L	132	196	140	224	180	90	104
16	Total Fixed Solids	mg/L	128	184	132	214	174	86	100
17	Total Suspended Solids	mg/L	16	18	24	20	26	12	24
18	Phosphate as PO_4	mg/L	BDL	0.14	0.41	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	1	2	1	1	1
21	Fluoride	mg/L	0.27	0.41	0.15	0.21	0.35	0.11	0.14
Class/category			D	C	C	C	B	B	C
Water Quality Index			S	S	S	S	S	S	S

Analysed by
Scientific Assistant

Verified by
Deputy Scientific Officer

Scanned with OKEN Scanner

KARNATAKA STATE POLLUTION CONTROL BOARD, CEL - 2, DAVANGERE.
NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.		KLDW-466	KLDW-467	KLDW-468	KLDW-469	KLDW-470	KLDW-471	KLDW-472	KLDW-473	KLDW-474
	Station Code		38	2366	2367	2370	2708	2369	1029	4494	4495
I.	Date & Time of collection		07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022
			9.30AM	9.10AM	9.20AM	10.00AM	10.30AM	10.30AM	2.30AM	4.38AM	5.20AM
II	Weather		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None	None	None
VI	Visible effluent discharge		City sewage	Village sewage	None	City sewage	HPF & Gradiso Effluent	None	None	Village sewage	Village sewage
VII	Human activities around the station		Washing and bathing	Washing and bathing	Washing and bathing	Washing and bathing	Fishing	Fishing	Washing and bathing	Washing and bathing	Washing and bathing
VIII	Station details		Hamsah Bridge, TB river, Haveri, Karnataka	New Bridge, NH-4, TB river, Karnataka	Up Stream of M/s HPF Ltd., (Old bridge), TB river, Karnataka	Old water intake point, Harihar, TB river, Karnataka	Down Stream of M/s.HPF Ltd., TB river, Karnataka	Jack well point near Nallaharalahalli, TB river, Karnataka	Harahalli Bridge, TB river, Karnataka	Mylara, TB river, Karnataka	Arasi, TB river, Karnataka

CORE PARAMETERS:

Sl.No.	Parameter	Unit									
1	Temperature	°C	27	26	28	28	28	28	28	28	27
2	DO	mg/L	7.2	7.3	7.2	6.7	6.2	6.4	7.2	7.3	7.2
3	pH	pH unit	8.00	8.10	8.20	8.20	8.10	7.70	8.00	8.00	8.10
4	Conductivity	µS/cm	290	300	390	410	450	380	190	370	380
5	BOD	mg/L	1.8	2.2	2.8	3.3	3.6	2.5	3.0	1.7	3.0
6	Nitrate as N	mg/L	1.6	2	1.8	1.6	1.4	2.4	2.6	2.0	2.2
7	Total Coli form	MPN/100ml	350	280	350	16000	2800	920	280	2800	220
8	Faecal Coli form	MPN/100ml	40	38	49	2100	310	94	33	210	34

GENERAL PARAMETERS:

SL.NO	PARAMETER	UNIT									
1	Turbidity	NTU	5	14	2	8	34	5	5	9	15
2	P.Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	100	100	120	220	130	114	140	126	130
4	Chloride	mg/L	38	40	40	48	64	46	54	50	60
5	COD	mg/L	20	18	22	24	42	24	22	26	28
6	TKN	mg/L	1.50	1.30	1.50	1.40	1.00	1.00	1.2	1.60	2.00
7	Ammonia as N	mg/L	0.36	0.79	0.86	0.80	0.60	0.48	0.81	0.90	1.3
8	Hardness as $CaCO_3$	mg/L	124	116	110	150	140	150	180	150	160
9	Calcium as $CaCO_3$	mg/L	50	60	60	76	66	60	80	70	70
10	Calcium as Ca^{++}	mg/L	20	24	24	30	26	24	32	28	28
11	Magnesium as $CaCO_3$	mg/L	74	56	50	76	74	90	100	80	90
12	Magnesium as Mg^{++}	mg/L	18	14	12	18	18	22	24	19	22
13	Sulphate	mg/L	10	15	14	27	64	40	28	30	28
14	Sodium	mg/L	16	19	21	34	36	26	23	25	24
15	Total Dissolved Solids	mg/L	192	206	190	286	312	264	272	254	266
16	Total Fixed Solids	mg/L	182	194	182	252	190	250	256	240	252
17	Total Suspended Solids	mg/L	10	24	12	18	22	14	18	16	30
18	Phosphate as PO_4	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	3	2	3	2	1	3	2
21	Fluoride	mg/L	0.42	0.38	0.41	0.52	0.58	0.41	0.51	0.24	0.54
Class/category			B	B	B	D	D	C	B	C	B
Water Quality Index			5	5	5	18	138	5	5	8	5

Analysed by
Scientific Assistant

Verified by
Deputy Scientific Officer

KARNATAKA STATE POLLUTION CONTROL BOARD, CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.
BOARD PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER - 2022

FIELD OBSERVATIONS

Sl.No	Sample Nos		W-460	W-461	W-462	W-463	W-464	W-465
I	Date & Time of collection		07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022
			11.10AM	11.30AM	12.00NM	12.50PM	1.30PM	5.00PM
II	Weather		Clear	Clear	Clear	Clear	Clear	Clear
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None
VI	Visible effluent discharge		Village Sewage	None	None	Village sewage	None	Village Sewage
VII	Human activities		Washing and bathing	Washing and bathing	Washing and bathing	Washing and bathing	Cloth washing	Washing and bathing
VIII	Station details		Nadikeriahalli, TB river, Karnataka	Armas, TB river, Karnataka	Hirebidari, TB river, Karnataka	Kaisan Tantage, TB river, Karnataka	Sawalapura, TB river, Karnataka	Karahatti, TB river, Karnataka
CORE PARAMETERS								
Sl.No.	Parameter	Unit						
1	Temperature	°C	27	27	28	28	28	28
2	DO	mg/L	6.8	6.6	6.9	7.0	7.0	7.2
3	pH	pH unit	7.9	8.0	8.1	8.1	8.1	8.1
4	Conductivity	µS/cm	400	350	340	350	386	410
5	BOD	mg/L	1.4	2.2	2.5	2.4	2.8	2.0
6	Nitrate as N	mg/L	0.58	0.54	0.48	0.48	0.38	0.40
7	Total Coli form	MPN/ 00ml	-	-	-	-	-	-
8	Faecal Coli form	MPN/ 00ml	-	-	-	-	-	-
GENERAL PARAMETERS								
SL.NO	PARAMETER	UNIT						
1	Turbidity	NTU	12	4	3	2	4	5
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	130	126	120	114	152	150
4	Chloride	mg/L	50	50	50	60	60	70
5	COD	mg/L	18	21	27	20	17	16
6	TKN	mg/L	1.60	1.90	0.90	0.70	0.40	1.10
7	Ammonia as N	mg/L	0.90	0.93	0.50	0.42	0.23	0.62
8	Hardness as $CaCO_3$	mg/L	120	130	120	110	120	110
9	Calcium as $CaCO_3$	mg/L	70	60	70	70	60	60
10	Calcium as Ca++	mg/L	28	24	28	28	24	24
11	Magnesium as $CaCO_3$	mg/L	50	70	50	40	60	50
12	Magnesium as Mg++	mg/L	12	17	12	10	15	12
13	Sulphate	mg/L	44	33	21	21	27	24
14	Sodium	mg/L	30	26	30	36	34	40
15	Total Dissolved Solids	mg/L	262	240	228	244	226	286
16	Total Fixed Solids	mg/L	252	228	216	232	262	220
17	Total Suspended Solids	mg/L	20	16	12	14	16	8
18	Phosphate as PO_4	mg/L	BDL	BDL	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	1	1	1	1	2
21	Fluoride	mg/L	0.62	0.54	0.58	0.51	0.62	0.56
Class/Category			-	-	-	-	-	-
Water Quality Index			-	-	-	-	-	-

Analysed by
Scientific Assistant

Verified by

KARNATAKA STATE POLLUTION CONTROL BOARD, CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.
NWMP LAKE WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER - 2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos		W-475	W-476	W-477	W-478	W-492	W-493	W-459
	Station code		3692	3691	3693	3695	3694	3696	3697
I.	Date & Time of collection		09.12.2022	09.12.2022	09.12.2022	09.12.2022	06.12.2022	22.12.2022	06.12.2022
			12.40PM	12.15PM	1.00PM	10.00AM	10.30AM	10.45AM	10.00AM
II	Weather		Clear	Clear	Clear	Clear	Clear	Clear	Cloudy
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	-
IV	Colour & Intensity		Clear	Clear	Light Green	Clear	Clear	Greenish	Light greenish
V	Odour		None	None	None	None	None	None	None
VI	Visible effluent discharge		-	-	City Sewage	None	No	City sewage	City sewage
VII	Human activities around the station		None	None	None	None	Cloth washing	No	-
VIII	Station details		Kundevada Lake, Karnataka	Vinayanagar Lake, Karnataka	Bet Lake, Karnataka	Kondagi Lake, Karnataka	Shanthi Sagar, Karnataka	Ayyanakere, Karnataka	Mattadakere, Karnataka
CORE PARAMETERS:									
Sl.No.	Parameter	Unit							
1	Temperature	°C	26	26	26	26	27	23	29
2	DO	mg/L	7.1	7.2	6.2	6.9	7.3	11.6	7.9
3	pH	pH unit	8.20	8.10	7.90	7.70	8.10	9.09	9.35
4	Conductivity	µS/cm	370	390	690	610	310	1040	900
5	BOD	mg/L	1.6	1	7.6	2	1.6	18	8
6	Nitrate as N	mg/L	0.21	0.22	0.22	0.36	0.42	0.42	0.32
7	Total Coli form	MPN/100ml	240	140	54000	280	130	54000	350000
8	Fecal Coli form	MPN/100ml	34	17	4600	27	13	7000	47000
GENERAL PARAMETERS:									
SL.NO	PARAMETER	UNIT							
1	Turbidity	NTU	18	20	14	5	4	200	140
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	30	22
3	Total Alkalinity as $CaCO_3$	mg/L	140	120	264	225	130	640	320
4	Chloride	mg/L	60	50	150	120	40	200	368
5	COD	mg/L	10	12	26	22	28	226	76
6	TKN	mg/L	0.25	0.23	2.8	2.6	0.9	8.1	16
7	Ammonia as N	mg/L	0.11	0.12	1.51	1.4	0.41	4.2	7.2
8	Hardness as $CaCO_3$	mg/L	136	104	288	226	110	272	280
9	Calcium as $CaCO_3$	mg/L	58	74	174	90	60	124	72
10	Calcium as Ca^{++}	mg/L	23.2	29.6	71.2	36	24	49.6	28.8
11	Magnesium as $CaCO_3$	mg/L	78	30	110	136	50	148	208
12	Magnesium as Mg^{++}	mg/l	18.954	7.29	26.73	33.048	12.15	35.964	51.104
13	Sulphate	mg/L	6	7.2	8	11.2	10	172	60
14	Sodium	mg/L	26	22	60	38	18	120	92
15	Total Dissolved Solids	mg/L	262	198	482	398	210	780	662
16	Total Fixed Solids	mg/L	234	192	420	376	202	692	588
17	Total Suspended Solids	mg/L	8	18	22	28	24	80	90
18	Phosphate as PO_4	mg/L	BDL	BDL	0.53	0.61	0.43	2.2	1.60
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	1	2	2	1	5	5
21	Fluoride	mg/L	0.29	0.31	0.4	0.61	0.33	0.8	0.85
Class/category			B	B	D	B	D	D	D
Water Quality Index			S	S	US	S	S	US	US

Analysed by
Scientific Assistant

Verified by
Deputy Scientific Officer

KARNATAKA STATE POLLUTION CONTROL BOARD, CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.
NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.		W-479	W-480	W-481	W-482	W-483	W-484	W-485
	Station code		2765	4105	1387	1169	1896	4106	1168
I.	Date & Time of collection		12.12.2022	12.12.2022	12.12.2022	12.12.2022	12.12.2022	12.12.2022	12.12.2022
			2.10PM	1.40PM	1.15PM	12.30PM	12.00PM	11.00AM	11.30AM
II	Weather		Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None
VI	Visible effluent discharge		None	None	None	None	None	None	None
VII	Human activities around the station.		None	None	None	None	None	None	None
VIII	Station details.		U/s of MPM, Bhadra River, Karnataka	D/s of MPM, Bhadra River, Karnataka	D/s of Bhadravathi, Bhadra River, Karnataka	Holehonnur Bridge, Bhadra River, Karnataka	Kudli Confluence point, TB River, Karnataka	U/s of Shivamogga, Tunga river, Karnataka	D/s of Shivamogga, Tunga river, Karnataka
CORE PARAMETERS:									
Sl.No.	Parameter	Unit							
1	Temperature	°C	26	25	27	26	26	26	25
2	DO	mg/L	6.1	6.0	6.4	6.3	6.1	6.5	6.2
3	pH	pH unit	8.1	8.1	7.9	7.5	7.8	7.8	8.2
4	Conductivity	µS/cm	190	280	210	320	270	130	150
5	BOD	mg/L	1.8	2.2	2.8	3.0	1.6	1.7	2.0
6	Nitrate as N	mg/L	0.53	0.42	0.56	0.61	0.63	0.68	0.41
7	Total Coli form	MPN/100ml	280	920	2800	1700	280	280	1500
8	Faecal Coli form	MPN/100ml	34	94	310	240	33	27	170
GENERAL PARAMETERS:									
SL.NO	PARAMETER	UNIT							
1	Turbidity	NTU	21	20	24	22	23	7	10
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	116	120	80	134	100	50	72
4	Chloride	mg/L	20	22	24	32	26	14	20
5	COD	mg/L	11	15	18	23	14	13	18
6	TKN	mg/L	1.40	1.70	1.65	1.20	1.40	1.50	1.20
7	Ammonia as N	mg/L	0.81	0.94	0.91	0.70	0.73	0.81	0.74
8	Hardness as $CaCO_3$	mg/L	48	74	44	86	60	28	32
9	Calcium as $CaCO_3$	mg/L	24	34	30	60	38	14	18
10	Calcium as Ca++	mg/L	9.60	13.60	12.00	24.00	15.20	5.60	7.20
11	Magnesium as $CaCO_3$	mg/L	24	40	14	26	22	14	14
12	Magnesium as Mg++	mg/l	5.83	9.72	3.40	6.32	5.35	3.40	3.40
13	Sulphate	mg/L	10.00	50.00	12.20	34.60	20.10	7.80	12.60
14	Sodium	mg/L	7	13	15	17	12	6	11
15	Total Dissolved Solids	mg/L	132	196	140	224	180	90	104
16	Total Fixed Solids	mg/L	128	184	132	214	174	86	100
17	Total Suspended Solids	mg/L	16	18	24	20	26	12	24
18	Phosphate as PO_4	mg/L	BDL	0.14	0.41	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	1	2	1	1	1
21	Fluoride	mg/L	0.27	0.41	0.15	0.21	0.35	0.11	0.14
Class/category			B	C	C	C	B	B	C
Water Quality Index			S	S	S	S	S	S	S

Analysed by
Scientific Assistant

Verified by
Deputy Scientific Officer

Scanned with OKEN Scanner

KARNATAKA STATE POLLUTION CONTROL BOARD, CEL - 2 , DAVANGERE.
NWMP RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER-2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.		RLDW-466	RLDW-467	RLDW-468	RLDW-469	RLDW-470	RLDW-471	RLDW-472	RLDW-473	RLDW-474
	Station Code		38	2766	2767	2770	2768	2769	1029	4494	4495
I.	Date & Time of collection		07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022
			9.30AM	9.10AM	9.20AM	10.00AM	10.30AM	10.50AM	3.30AM	4.30AM	5.20AM
II	Weather		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None	None	None	None
VI	Visible effluent discharge		City sewage	Village sewage	None	City sewage	HPF & Grasiline Effluent	None	None	Village sewage	Village sewage
VII	Human activities around the station.		Washing and bathing	Washing and bathing	Washing and bathing	Washing and bathing	Fishing	Fishing	Washing and bathing	Washing and bathing	Washing and bathing
VIII	Station details.		Honnali Bridge, TB river, Honnali, Karnataka	New Bridge, NH-4, TB river, Karnataka	Up Stream of M/s.HPF Ltd., (Old bridge), TB river, Karnataka	Old water intake point, Harihar, TB river, Karnataka	Down Stream of M/s.HPF Ltd., TB river, Karnataka	Jackwell point near Nadhiharalahalli, TB river, Karnataka	Haralahalli Bridge, TB river, Karnataka	Mylara, TB river, Karnataka	Aravi, TB river, Karnataka

CORE PARAMETERS:

Sl.No.	Parameter	Unit									
1	Temperature	°C	27	26	28	28	28	28	28	28	27
2	DO	mg/L	7.2	7.3	7.2	6.7	6.2	6.4	7.2	7.3	7.2
3	pH	pH unit	8.00	8.10	8.20	8.20	8.10	7.70	8.00	8.00	8.10
4	Conductivity	µS/cm	290	300	298	410	450	380	390	370	380
5	BOD	mg/L	1.8	2.2	2.8	3.3	3.6	2.5	3.0	1.7	3.0
6	Nitrate as N	mg/L	1.6	2	1.8	1.6	1.4	2.4	2.6	2.0	2.2
7	Total Coli form	MPN/100ml	350	280	350	14000	2800	920	280	2800	220
8	Faecal Coli form	MPN/100ml	40	38	49	2100	310	94	33	210	34

GENERAL PARAMETERS:

SL.NO	PARAMETER	UNIT									
1	Turbidity	NTU	5	14	2	8	34	5	3	9	15
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	100	100	120	200	130	114	140	136	130
4	Chloride	mg/L	36	40	40	48	64	46	54	50	60
5	COD	mg/L	20	18	22	24	42	24	22	26	28
6	TKN	mg/L	1.50	1.30	1.50	1.40	1.00	1.00	1.2	1.60	2.00
7	Ammonia as N	mg/L	0.76	0.79	0.86	0.80	0.60	0.48	0.81	0.90	1.3
8	Hardness as $CaCO_3$	mg/L	124	116	110	150	140	150	180	150	160
9	Calcium as $CaCO_3$	mg/L	50	60	60	74	66	60	80	70	70
10	Calcium as Ca++	mg/L	20	24	24	30	26	24	32	28	28
11	Magnesium as $CaCO_3$	mg/L	74	56	50	76	74	90	100	80	90
12	Magnesium as Mg++	mg/l	18	14	12	18	18	22	24	19	22
13	Sulphate	mg/L	10	15	14	27	64	40	28	30	28
14	Sodium	mg/L	16	19	21	24	36	26	23	23	29
15	Total Dissolved Solids	mg/L	192	206	190	286	312	264	272	254	266
16	Total Fixed Solids	mg/L	182	194	182	252	290	250	256	240	252
17	Total Suspended Solids	mg/L	10	24	12	16	22	14	18	16	30
18	Phosphate as PO_4	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	2	2	2	2	2	1	2	2
21	Fluoride	mg/L	0.42	0.38	0.41	0.52	0.58	0.41	0.31	0.24	0.54
Class/category			B	B	B	D	D	C	B	C	B
Water Quality Index			S	S	S	US	US	S	S	S	S

Analysed by
Scientific Assistant

Verified by
Deputy Scientific Officer

Scanned with OKEN Scanner

KARNATAKA STATE POLLUTION CONTROL BOARD, CENTRAL ENVIRONMENTAL LABORATORY-2, DAVANGERE.
BOARD PROGRAMME RIVER WATER ANALYSIS REPORT FOR THE MONTH OF DECEMBER - 2022

FIELD OBSERVATIONS :

Sl.No.	Sample Nos.		W-460	W-461	W-462	W-463	W-464	W-465
I.	Date & Time of collection		07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022	07.12.2022
			11.10AM	11.30AM	12.00AM	12.50PM	1.31PM	5.00PM
II	Weather		Clear	Clear	Clear	Clear	Clear	Clear
III	Approximate depth		>100cm	>100cm	>100cm	>100cm	>100cm	>100cm
IV	Colour & Intensity		Clear	Clear	Clear	Clear	Clear	Clear
V	Odour		None	None	None	None	None	None
VI	Visible effluent discharge		Village Sewage	None	None	Village sewage	None	Village Sewage
VII	Human activities		Washing and bathing	Washing and bathing	Washing and bathing	Washing and bathing	Cloth washing	Washing and bathing
VIII	Station details.		Nadiharahalli, TB river, Karnataka	Airani, TB river, Karnataka	Hirebidari, TB river, Karnataka	Konan Tambige, TB river, Karnataka	Somalapura, TB river, Karnataka	Kuruvatti, TB river, Karnataka
CORE PARAMETERS:								
Sl.No.	Parameter	Unit						
1	Temperature	°C	27	27	28	28	28	28
2	DO	mg/L	6.8	6.6	6.9	7.0	7.0	7.2
3	pH	pH unit	7.9	8.0	8.1	8.1	8.1	8.1
4	Conductivity	µS/cm	400	350	340	350	396	410
5	BOD	mg/L	1.4	2.2	2.5	2.4	2.1	2.0
6	Nitrate as N	mg/L	0.38	0.34	0.48	0.48	0.38	0.40
7	Total Coli form	MPN/100ml	-	-	-	-	-	-
8	Faecal Coli form	MPN/100ml	-	-	-	-	-	-
GENERAL PARAMETERS:								
SL.NO	PARAMETER	UNIT						
1	Turbidity	NTU	12	4	3	2	4	5
2	P-Alkalinity as $CaCO_3$	mg/L	Nil	Nil	Nil	Nil	Nil	Nil
3	Total Alkalinity as $CaCO_3$	mg/L	130	120	130	134	152	150
4	Chloride	mg/L	50	50	50	60	60	70
5	COD	mg/L	18	21	27	20	17	16
6	TKN	mg/L	1.60	1.60	0.90	0.70	0.40	1.10
7	Ammonia as N	mg/L	0.90	0.93	0.50	0.42	0.21	0.62
8	Hardness as $CaCO_3$	mg/L	120	130	120	110	120	110
9	Calcium as $CaCO_3$	mg/L	70	60	70	70	60	60
10	Calcium as Ca++	mg/L	28	24	28	28	24	24
11	Magnesium as $CaCO_3$	mg/L	50	70	50	40	60	50
12	Magnesium as Mg++	mg/l	12	17	12	10	15	12
13	Sulphate	mg/L	44	23	21	21	27	24
14	Sodium	mg/L	30	26	30	36	34	40
15	Total Dissolved Solids	mg/L	262	240	238	244	276	286
16	Total Fixed Solids	mg/L	252	228	230	232	262	270
17	Total Suspended Solids	mg/L	20	16	12	14	16	8
18	Phosphate as PO_4	mg/L	BDL	BDL	BDL	BDL	BDL	BDL
19	Boron	mg/L	BDL	BDL	BDL	BDL	BDL	BDL
20	Potassium	mg/L	1	1	1	1	1	2
21	Fluoride	mg/L	0.62	0.54	0.58	0.51	0.62	0.56
Class/category			-	-	-	-	-	-
Water Quality Index			-	-	-	-	-	-

Analysed by
Scientific Assistant

Verified by

Scanned with OKEN Scanner

National Mission for Clean Ganga

Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020) For the State of Karnataka

Name of the River	Yagachi river
Polluted river stretch	Belur to Halavagilu, Hassan
Priority	V
Status as on	**December- 2022**

Overall status of the State:

Particulars		TMC Belur	CMC Hassan	Total
I.	Total Population: Urban Population & Rural Population separately	22848	155006	**177854**
II.	Estimated Sewage Generation (MLD):	2.4	16.74	19.14

III. <u>Details of Sewage Treatment Plant:</u>

Particulars	TMC Belur	CMC Hassan	Total
Existing no. of STPs and Treatment Capacity (in MLD):	2.7 MLD	10MLD	12.7
Capacity Utilization of existing STPs:	2.7	10	12.7
MLD of sewage being treated through Alternate technology:	--	--	
Gap in Treatment Capacity in MLD:	Nil	6.74 MLD	6.74MLD
No. of Operational STPs:	1	1	2
No. of Complying STPs:	0	0	0
No. of Non-complying STPs:	1	1	2

Details of each existing STP in the State

Name of the Local Body	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
TMC Belur	Nehru Nagar, Belur Town, Belur Taluk & Hassan District	2.7MLD	2.7MLD	Operational	Not Complied. Special Environment Task Force meeting was conducted on 01.02.2022. Proceedings of the same is enclosed.
CMC, Hassan	Sy No 86 &100, Bittagondanahalli village Hassan Tq & Dist	10MLD	10MLD	Operational	
Total		**12.7**	**12.7**		

Details of under construction STPs in the State

Name of the Local Body	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or House sewer connections	Completion Timeline
TMC Belur	Nil	Nil	Nil	1 drain carrying sullage effluent is to be connected to STP. **No Work Progress.** 80% of the area covered with UGD & further work in progress	31.03.2024
CMC, Hassan	Nil	Nil	Nil	1 drain carrying sewage & sullage effluent is to be connected to STP. **No Work Progress.** 75% of the area covered with UGD & further work in progress	31.03.2023
Total					

Details of proposed STPs in the State

Name of the Local Body	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
TMC Belur	Near existing STP Nehru Nagar, Belur Town, Belur Taluk & Hassan District	Up gradation of existing 2.7 MLD STP to 5.0 MLD by SBR Technology	Revised DPR is approved by Government for Rs. 14 Crores to divert the sewage discharged in to river through storm water drain. Up gradation of existing	31.03.2024

			2.7 MLD STP to 5.0 MLD.	
CMC, Hassan	a)Existing STP,Sy No 86 & 100, Bittagondanahalli village Hassan Tq & Dist - 10MLD b) Channapatna, Hassan-10MLD c) Hunsinakere, Hassan - 5 MLD d) Gavenahalli, Hassan - 2 MLD e) Sathyamangala, near veterinary college, Hassan- 2 MLD	a)Up gradation of existing 10 MLD STP to 20 MLD by SBR Technology b)Proposed10MLD c) Proposed 5MLD d) Proposed 2MLD e) Proposed 2MLD	Revised DPR is approved by Government for Rs. 165 Crores to divert the sewage discharged in to river through storm water drain. Up gradation of existing 10 MLD STP to 39 MLD.	31.03.2023

IV. <u>Details of Industrial Pollution:</u>

Particulars	TMC Belur	CMC Hassan	Total
No. of industries in the State:	Nil	5	5
No. of water polluting industries in the State:	Nil	1*	1
Quantity of effluent generated from the industries in MLD:	0	0.0	0.0
Quantity of Hazardous Sludge generated from the Industries in TPD:	0	0	0
Number of industrial units having ETPs:	0	0	0
Number of industrial units connected to CETP:	Nil	Nil	Nil
Number and total capacity of ETPs (details of existing/ under construction / proposed)	Nil	Nil	Nil
Compliance status of the ETPs:	Nil	Nil	Nil
Number and total capacity of CETPs (details of existing/ under construction / proposed)	Nil	Nil	Nil

***-Sewage**

Status of compliance and operation of the CETPs

Town	No. of industries	Industrial discharge	Status of ETPs	Status of CETPs (existing, under construction & proposed)
TMC Belur	Nil	Nil	Nil	Nil
CMC, Hassan	Nil	Nil	Nil	Nil
Total				

V. **Solid Waste Management:**

Particulars	TMC Belur	CMC Hassan	Total
Total number of Urban Local Bodies and their Population	22848	155006	**177854**
Current Municipal Solid Waste Generation	11	77	88
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), biomethanation, MRF etc	• Composting Existing – 1 Gap – 3.51 TPD • Sanitary landfill Existing– Nil Gap – 2.75 TPD	• Composting Existing – 11 Gap – 20.57 TPD • Sanitary landfill Existing–Nil Gap – 19.25 TPD	
Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%)	DPR for Rs. 1.7 Crores is approved to provide compost plant & sanitary land fill site & the same is to be undertaken. At present the solid waste is dumped in the site without any treatment.	DPR for Rs. 5 .9 Crores is approved to provide compost plant & sanitary land fill site & the same is to be undertaken. At present the solid waste is dumped in the site without any treatment.	
No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)	Nil	Nil	Nil
Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source	• Door to door collection 23/23 Wards. • Segregation practice- 23 Wards	• Door to door collection 12/35 Wards. • Segregation practice- 12 Wards	
Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)	Nil	Nil	Nil
No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills	Nil	Nil	Nil
No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers	Nil	Nil	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	Nos. of drains 1 Nos. of drains having floating racks / screen – Nil	Nos. of drains 1 Nos. of drains having floating racks / screen – Nil	Nos. of drains -2 Nos. of drains having floating racks / screen – Nil

Status of ULB wise Management of Solid Waste

Name of the ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
TMC Belur	8	1	Pit Composting	1	ULBs have been informed to submit the time line for completion.
CMC, Hassan	62	11	Pit Composting	11	
Total	**70**	**12**		**12**	

VI. Bio-medical Waste Management:

Particulars	TMC Belur	CMC Hassan	Total
Total Bio-medical generation:	45Kg/day	1557Kg/day	**Nil**
No. of Hospitals and Health Care Facilities:	Bedded: 3 Non Bedded: 63	Bedded:38 Non Bedded: 242	**Nil**
Status of Treatment Facility/ CBMWTF:	CBMWTF	CBMWTF	**Nil**

VII. Hazardous Waste Management:

Particulars	TMC Belur	CMC Hassan	Total
Total Hazardous Waste generation:	0	0.01	0.01
No. of Industries generating Hazardous waste	0	01	01
Treatment Capacity of all TSDFs	-	-	-
Avg. Quantity of Hazardous waste reaching the TSDFs and Treated	-	0.01	0.01
Details of on-going or proposed TSDF	-	-	-

VIII. Plastic Waste Management:

Particulars	TMC Belur	CMC Hassan	Total
Total Plastic Waste generation:	200kg/day	2 tonne/day	2200kg/day
Treatment/ Measures adopted for reduction or management of plastic waste:	Bailing & stored and proposed to hand over to co incineration units	Bailing & stored and proposed to hand over to co incineration units	Bailing & stored and proposed to hand over to co incineration units

Particulars		TMC Belur	CMC Hassan
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:	1 drain identified and work order has been issued to upgrade existing STP as per action plan	1 drain identified and work order has been issued to upgrade the existing & proposed STP as per action plan.
XI.	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	-	-
XII.	Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:	2 meetings were conducted under the chairmanship of DC , Hassan	2 meetings were conducted under the chairmanship of DC , Hassan
XIII.	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;	**Status of water quality of polluted rivers in Annexure-1.**	
XIV.	Ground water regulation:	As per the discussion held with Sr. Geologist, District Ground Water Authority, Hassan for the month of October 2020, as per the circular KGA/NOC/2019-20 dated 29-05-2019 with reference to Karnataka Act 2011 U/s 17 (K), so as to fulfill the objectives of the Act, in notified taluks and non notified taluks for NOC for the purpose of industrial, commercial, entertainment, infrastructure, mining and others is made compulsory. This subject was discussed in District Ground Water Authority meeting. In this regard, as per the directions, notices has been issued to obtain NOC for extracting groundwater from Karnataka Ground Water Authority / District Ground Water Authority. **Status of Ground Water Resource Assessment in Annexure-2**	
XV.	Good irrigation practices being adopted by the State:	The Dept. of Agriculture has informed that, they will submit action plan for implementation of following measures:	

	I. General Government Practice of Irrigation is maintained. II. Farmers are made aware to use water optimally.
XVI. Rain Water Harvesting:	As per the discussion held with Sr. Geologist, District Ground Water Authority, Hassan they have taken up measures to improve the ground water situation, rain water harvesting structure and some of the other artificial recharge structures to construct in their premises while giving the permission to extract ground water from the authority.
XVII. Demarcation of Floodplain and removal of illegal encroachments:	--
XVIII. Maintaining minimum e-flow of river:	The Cauvery Neeravari Nigam Ltd., is requested to submit the action plan as per MoEF & CC norms during monsoon seasons and same is not submitted
XIX. Plantation activities along the rivers:	Social Forestry Department, Hassan District has informed that they have proposed plan for plantation of saplings on the bank of Yagachi river polluted stretch for about 5 Kms in the ensuing monsoon season. The project is yet to be approved and sanctioned. Hence no progress made.
XX. Development of biodiversity park:	As of now, there are no biodiversity parks in Hassan & Belur Taluks. The Forest Department is requested to submit action plan for the proposed bio diversity parks. The status of the existing and proposed bio diversity parks and its implementations will be executed by September 2021 in coordination with the Forest Department
XXI. Reuse of Treated Water:	-
XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:	-
XXIII. Status of Preparation of Action Plan by the 13 Coastal States:	-
XXIV. Regulation of Mining Activities in the State/UT:	-
XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring	-
XXVI. Overall progress of the month: Please provide overall progress achieved in terms of all the above points compared to previous month.	a) With respect to treatment & disposal of sewage effluent the LB's have taken steps to operate the existing STPs & action plan for up gradation of the existing STPs is being prepared by KUWS&DB & the same is yet to be approved by the Government. b) With respect to Solid Waste Management by Municipalities, steps have been taken process the Solid Waste with the existing compost facilities and works followed by tendering for expanding the same along with sanitary land fill sites construction are under progress.

Annexure-1

XIII Status of Water Quality Assessment of polluted rivers in Annexure-1

Sl. No.	Details of Water Quality Monitoring locations as per NWMP	Year	DO (mg/l)	BOD (mg/l)	Fecal Coliform (MPN/100 ml)	Total coliform (MPN/100 ml)
1	Yagachi, Haluvagilu pump house, Hassan	**Dec-22**	6.7	2.4	140	1100
2	Yagachi river, Belur (abt 200mtrs from STP)	**Dec-22**	6.5	2.8	220	1400

ANNEXURE-2

6.1(vii) Status of Ground Water Resource Assessment in Annexure-4

District	Taluka	Net Annual Ground Water Availability (HAM)	Total Ground Water Draft (HAM)	Gap between availability and Draft (HAM)	Stage of Ground Water Development (%)*	Category
Hassan	**Hassan**	**13031.77**	**5926.47**	**7104.53**	**50%**	***Safe (≤ 70)**
Hassan	**Belur**	**6318.88**	**3893.65**	**2425.23**	**66**	***Safe (≤ 70)**

Note:- The ground water resources assessment is carried out on Taluka wise (Administrative Units) The State Govt. has taken up various Recharge/Water Conservation Schemes like for augmentation of ground water resources.