Monthly Progress Report for January, 2020 on the matter of Hon'ble NGT OA 673 of 2018

Compliance Report to the comments given at SI. No. 23 for Odisha at page 8 of the Minutes of the Meeting of 1st Central Monitoring Committee regarding 351 polluted stretches based on the directions of Hon'ble NGT in the matter OA NO. 673 of 2018 held on 08.01.2020

Comment	Compliance
10 river stretches are having BOD values	For deletion of ten polluted river stretches with BOD
below 3 mg/l, therefore CPCB has been	values below 3 mg/l or marginally above 3.0 mg/l, Board
requested to reconsider the number of	has already communicated the matter to Hon'ble NGT
polluted stretches in Odisha	vide letter No. 6811 dated 09.07.2019 (copy enclosed).
Sc-E, CPCB informed that for such reliefs,	
State may directly approach Hon'ble NGT	
For the balance 8 stretches for Priority-III to	Action Plans has already been submitted to CPCB.
V, the Action Plans will be submitted to	Detail status of submission of Action Plans for 19
СРСВ.	polluted stretches identified in the State is enclosed as
	Annexure- A(1).
	Present status of the 19 polluted stretches based on
	BOD values during 2019 (January-December) is enclosed
	as Annexure-A(2).

Annexure-A (1)
Status of Action Plans for Polluted River Stretches identified in the State of Odisha

	Polluted River Stretches identified by CPCB	Priority Category of Polluted River stretch (as Identified during 2017)	Revised Action Plan submitted to CPCB vide letter No. and date	Approval Status
1.	Gangua River (Along Bhubaneswar)	Priority-I	6196 dated 25.06.2019	Approved by CPCB vide letter No. 10411/I/2019/WQM- I/841 dated 12.4.2019
2	Daya (Bhubaneswar to Bargarh)	Priority-IV	Action plan included in the Action plan of Gangua River	Approved by RRC in 3 rd RRC meeting
3	Brahmani (Rourkela to Biritol)	Priority-V	6340 dated 28.06.2019	
4	Guradih nallah (Rourkela)	Priority-III		
5	Mangala (Along Puri)	Priority-V		All Action plans are
6	Nagavali (Jaykaypur to Rayagada)	Priority-V		uploaded in RRC website
7	Kathajodi (Cuttack to Urali)	Priority-III		(www.rrcodisha.org)
8	Serua (Khandaeta to Sankhatrasa)	Priority-V		
9	Ratnachira (Along Bhubaneswar, Puri)	Priority-V		
10	Nandira Jhor (D/s of Talcher)	Priority-III	6002 dated 20.06.2019	
11	Kuakhai (Along Bhubaneswar)	Priority-IV	Requested for deletion to Hon'ble	
12	Mahanadi (Sambalpur to Paradeep)	Priority-V	NGT vide letter No. 6811 dated	
13	Rushikulya (Pratappur to Ganjam)	Priority-V	09.07.2019	
14	Banguru nallah (along Talcher, Rengali)	Priority-V		
15	Bheden (along Bheden)	Priority-V		
16	Kusumi (along Talcher)	Priority-V		
17	Luna (along Bijipur)	Priority-V		
18	Sabulia (Jagannathpatna, Rambha)	Priority-V		
19	Budhabalanga (Mahulia to Baripada)	Priority-V		

Status of Polluted River Stretches identified in the State of Odisha

Poll	uted River Stretches identified by CPCB	Priority Category of Polluted River stretch (as Identified during 2017)	Priority Category of Polluted River stretch (as on 2019)
1.	Gangua River (Along Bhubaneswar)	Priority-I	Priority-I
2	Daya (Bhubaneswar to Bargarh)	Priority-IV	Priority-IV
3	Brahmani (Rourkela to Biritol)	Priority-V	Priority-V
4	Guradih nallah (Rourkela)	Priority-III	Priority-IV
5	Mangala (Along Puri)	Priority-V	Priority-IV
6	Nagavali (Jaykaypur to Rayagada)	Priority-V	Clean
7	Kathajodi (Cuttack to Urali)	Priority-III	Priority-V
8	Serua (Khandaeta to Sankhatrasa)	Priority-V	Priority-V
9	Ratnachira (Along Bhubaneswar, Puri)	Priority-V	Clean
10	Nandira Jhor (D/s of Talcher)	Priority-III	Clean
11	Kuakhai (Along Bhubaneswar)	Priority-IV	Clean
12	Mahanadi (Sambalpur to Paradeep)	Priority-V	Clean
13	Rushikulya (Pratappur to Ganjam)	Priority-V	Clean
14	Banguru nallah (along Talcher, Rengali)	Priority-V	Clean
15	Bheden (along Bheden)	Priority-V	Clean
16	Kusumi (along Talcher)	Priority-V	Clean
17	Luna (along Bijipur)	Priority-V	Clean
18	Sabulia (Jagannathpatna, Rambha)	Priority-V	Clean
19	Budhabalanga (Mahulia to Baripada)	Priority-V	Clean

<u>Gist</u>

Category	Status on 2017	Status on 2019
Priority-I	1	1
Priority-II	Nil	Nil
Priority-III	3	Nil
Priority-IV	2	3
Priority-V	13	3
		12 (Clean)

Annexure – B (I)

6.1 (i) Identification of Pollution Contributing Drains

Pollu	ted River Stretches identified by CPCB	Priority Category of	Identification of Drains (only major drains identified)
		Polluted River stretch	
1.	Gangua River (Along Bhubaneswar)	Priority-I	10 natural drains carrying wastewater of Bhubaneswar city discharges into Gangua River. Water quality data given in 6.1(v)
2.	Guradih nallah (Rourkela)	Priority-III	Carries treated wastewater of Rourkela Steel Plant and Rourkela Municipal area. Water quality data given in 6.1(v)
3	Kathajodi (Cuttack to Urali)	Priority-III	Three drains carrying wastewater of Cuttack city discharges into Kathajodi river
4	Nandira Jhor (D/s of Talcher)	Priority-III	One natural stream, Kisindajhor, carrying part of Talcher township and industrial township in Talcher area discharges into Nandira jhor. Water quality data given in 6.1(v)
5	Daya (Bhubaneswar to Bargarh)	Priority-IV	Gangua nallah, a natural storm water drain, carrying domestic wastewater of Bhubaneswar city discharges into Daya river. Water quality data given in 6.1(v)
6	Kuakhai (Along Bhubaneswar)	Priority-IV	No drain identified
7	Banguru nallah (along Talcher, Rengali)	Priority-V	No drain identified
8	Bheden (along Bheden)	Priority-V	Treated industrial wastewater of Vedanta Alumina Ltd. discharges to Bheden river through a natural stream Kharkhari nallah
9	Brahmani (Rourkela to Biritol)	Priority-V	Treated wastewater of Rourkela Steel Plant and Rourkela Municipal area discharges through Guradih nallah into Brahmani river.
10	Budhabalanga (Mahulia to Baripada)	Priority-V	Domestic wastewater of Baripada Municipality outfalls into two natural stream, Sarali nallah and Jarali nallah which ultimately discharge to Budhabalanga river
11	Kusumi (along Talcher)	Priority-V	No drain identified

Pollu	ted River Stretches identified by CPCB	Priority Category of Polluted River stretch	Identification of Drains (only major drains identified) (Drain characteristic studies are to be undertaken)
12	Mahanadi (Sambalpur to Paradeep)	Priority-V	Sambalpur: Domestic wastewater of Sambalpur Municipal Corporation flows through four natural streams such as Tangana nallah, Dhobijhore, Haradajhor and Malatijhor which ultimately discharge into Mahanadi river Sonepur: One major drain carrying domestic wastewater of the town Cuttack: One major drain carrying domestic wastewater of a part of Cuttack city Paradeep: One major drain carrying domestic wastewater of the town through Atharabanki creek
13	Mangala (Along Puri)	Priority-V	Treated wastewater of STP at Puri
14	Nagavali (Jaykaypur to Rayagada)	Priority-V	Treated wastewater of STP and ETP at Jaykaypur, Rayagada
15	Luna (along Bijipur)	Priority-V	No drain identified
16	Ratnachira (Along Bhubaneswar, Puri)	Priority-V	No drain identified
17	Rushikulya (Pratappur to Ganjam)	Priority-V	No drain identified
18	Sabulia (Jagannathpatna, Rambha)	Priority-V	No drain identified
19	Serua (Khandaeta to Sankhatrasa)	Priority-V	Domestic wastewater of part of Cuttack city through one major drain

6.1 (v) Latest Water quality of polluted river, its tributaries, drains and ground water quality in the catchment of Polluted river stretches during <u>January</u>, <u>2020</u>

Rivers

River	SI. No.	Polluted River stretch with	Monitoring station	BOD (mg/L)	Fecal coliform (FC)	Fecal	Remark
	NO.	Priority		(mg/L)	(MPN/100	Streptococci (FS) (MPN/	
		Category			mL)	100 mL)	
Gangua	1	D/s	Near Rajdhani	13.3	160000	240	Not
		Bhubaneswar	Engg. College				conforming
		(Priority-I)	Palasuni	19.9	160000	350	
			Samantarapur	13.8	160000	170	
			Vadimula	8.5	28000	170	
Daya	2	Bhubaneswar	Bhubaneswar D/s	4.5	92000	170	Not
		to Bargarh	at Kanti				conforming
		(Priority-IV)	Bhubaneswar FD/s	4.2	160000	220	
			at Manitri				
			Kanas	2.2	2200	Not analysed	
Kuakhai	3	Urali to	Bhubaneswar FU/s	0.5	790	31	Conforming
		Bhubaneswar	(at Mancheswar)				
		(Priority-IV)	Bhubaneswar U/s	0.6	1100	17	
			(at Hansapal)				
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Ground Water quality of Bhubaneswar city along Kuakhai River, Daya River and Gangua nallah

Station Name	Month	рН	BOD, mg/L	Nitrate- mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL
Khandagiri Aroa	April	6.2	0.3	0.500	1.8	1.8
Khandagiri Area	October	6.7	0.9	1.583	1.8	1.8
Old town-Samantarapur	April	6.7	0.4	0.571	23	1.8
Area	October	7.8	1	4.006	23	23
Kalpana Laymisagar Aroa	April	6.3	0.3	0.492	23	2
Kalpana-Laxmisagar Area,	October	5.9	0.2	50.414	1.8	1.8
Chandrasakharnur	April	7.1	0.3	0.549	1.8	1.8
Chandrasekharpur	October	No sample collected				
Capital Hospital Area,	April	6.0	0.6	0.589	1.8	1.8
Capital Hospital Area,	October		No	sample colle	cted	

Station Name	Month	рН	BOD, mg/L	Nitrate- mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL
Secretariate-Govenor	April	6.4	0.2	0.957	540	130
House-Old bus stand Area,	October	7.4	0.7	22.513	130	33
Drinking water Specification (IS: 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

Details of wastewater drain characteristics in Bhubaneswar falling on Gangua nalla

Drain No.	Drain Name	Length in Km	Drainage area in sq. Km.	Average Discharge (MLD)	Average BOD (mg/l)
1	Patia	4.32	16.93	17.00	160
2	Sainik School	1.13	1.44	1.55	127
3	OAP area	2.42	3.31	3.55	120
4	VaniVihar	5.63	13.67	16.40	100
5	Laxmisagar area	3.13	3.66	4.45	120
6	Baragada Area	2.16	2.89	3.45	140
7	Kedargouri	4.34	9.46	5.45	140
8	Airport area	4.33	12.99	14.30	24
9	Ghatikia	4.24	12.55	28.8	60
10	Nicco Park	5.48	10.28	12.3	100
	Total	37.18	103.23		

River	SI. No.	Polluted River stretch with Priority Category	Monitoring station	BOD (mg/L)	Fecal coliform (FC) (MPN/100 mL)	Fecal Streptococci (FS) (MPN/ 100 mL)	Remark
Kathajo di	4	Cuttack to Urali (Priority-III)	Cuttack D/s	1.9	3300	47	Not- Conforming
			Mattagajpur	1.9	68	7.8	
Serua	5	Khandaeta to Sankhatrasa (Priority-V)	Sakhatrasa	1.2	1300	7.8	Conforming
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Ground Water quality of Cuttack city along Mahanadi river, Kathajodi River and Serua river

Stn Name	Month	рН	BOD, mg/L	Nitrate- mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL
lagatawa	April	7.5	0.1	9.694	2	1.8
Jagatpur	October	6.1	0.2	32.281	1.8	1.8
Managalahaa	April	8.2	0.4	3.149	1.8	1.8
Mangalabag	October	6.5	0.1	42.010	1.8	1.8
Madhupatna-Kalyan	April	7.9	0.4	0.926	1.8	1.8
Nagar Area	October	6.5	0.2	0.809	1.8	1.8
Badambadi Area	April	8.4	0.9	3.795	1.8	1.8
Badambadi Area	October	6.7	0.4	6.470	1.8	1.8
Didanasi Tulsinur Araa	April	8.0	0.2	1.085	1.8	1.8
Bidanasi-Tulsipur Area,	October	6.5	0.2	7.351	5	5
Drinking water Specification (IS: 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

Characteristic of Drains falling on Kathajodi river

SI.	Monitoring station	2019	2019 (January-December)				
No.		BOD (mg/L)					
		Min	Max	Avg			
1	Outlet of STP at CDA-Bidanasi area	2.6	8.2	5.02			
2	Wastewater discharge to Kathajodi river	25.5	80.6	42.9			
	through sluice gate at Khannagar						
3	Outlet of STP at Mattagajpur discharge to	2.8	28.4	11.4			
	Kathajodi river *						

^{*} Monitored during 2017

Rivers

River	SI.	Polluted River	Monitoring station	BOD	Fecal	Fecal	Remark
	No.	stretch with		(mg/L)	coliform (FC)	Streptococci	
		Priority			(MPN/100	(FS) (MPN/	
		Category			mL)	100 mL)	
Guradih	6	Along Rourkela	Rourkela (before	5	13000	Not	Not
nallah		(Priority-III)	confluence with			Analysed	Conforming
			Brahmani river)				
Brahmani	7	Rourkela to	Panposh D/s at	4.5	2400	Not	• Not
		Biritola	Deogaon			Analysed	Conforming
		(Priority-V)	Rourkela D/s at	3.6	1700	Not	
			Jalda			Analysed	
			Rourkela FD/s at	2.6	2200	Not	
			Attaghat			Analysed	
			Rourkela FD/s at	1.4	1700	Not	
			Biritola			Analysed	
W	Water quality criteria for Bathing water			3.0	500	100	-
	(GSR 742 (A) Dated 25.12.2000				(Desirable) 2500	(Desirable) 500	
					(permissible)	(Maximum	
					(1-555.516)	Permissible)	

No Ground water quality monitoring in Rourkela city by State Pollution Control Board, Odisha

River	SI. No.	Polluted River stretch with Priority Category	Monitoring station	BOD (mg/L)	Fecal coliform (FC) (MPN/100 mL)	Fecal Streptococci (FS) (MPN/ 100 mL)	Remark
Nandira jhor	8	D/s Talcher (Priority-III)	Nandira D/s at Dasnali	1.4	790	49	Conforming
Banguru nallah	9	Along Talcher Rengali (Priority-V)	Along Talcher	0.9	450	23	Conforming
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Ground Water quality of Talcher city along in the catchment of Nadira jhor and Banguru nallah

Stn Name	Month	рН	BOD,	Nitrate-	TC, MPN/	FC, MPN/
			mg/l	mg/l	100 ml	100 ml
Talcher Town	April	7.6	0.4	11.285	1.8	1.8
	October	7.7	0.5	1.332	1.8	1.8
Meramundali area	April	7.2	1	1.605	1.8	1.8
	October	8	0.2	3.934	1.8	1.8
Talcher Thermal area	April	7.3	0.6	0.876	1.8	1.8
	October	7.9	0.5	1.520	920	130
Banarpal	April	7.5	0.4	2.201	1.8	1.8
	October	7.6	0.3	1.611	13	1.8
Kulad	April	7.7	0.8	23.130	4.5	1.8
	October	8.3	0.4	2.353	1.8	1.8
Drinking water Specification (IS: 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

River	SI. No.	Polluted River stretch with Priority Category	Monitoring station	BOD (mg/L)	Fecal coliform (FC) (MPN/100 mL)	Fecal Streptococci (FS) (MPN/ 100 mL)	Remark
Mahan	10	Sambalpur to	Sambalpur D/s	1.1	1300	22	Conforming
adi	adi Paradeep (Priority-V)	Paradeep (Priority-V)	Sambalpur FD/s at Shankarmath	1.0	780	22	
		Sambalpur FFD/s at Huma	1.0	780	1.8		
			Sonepur U/s	0.4	45	1.8	
			Sonepur D/s	0.4	400	11	
			Tikarpada	1.1	230	13	
			Narasinghpur	0.5	92	11	
			Munduli	0.9	780	4	
			Cuttack U/s	0.9	130	27	
			Cuttack D/s	0.9	1100	45	
			Cuttack FD/s	0.5	1100	27	
			Paradeep U/s	0.3	230	2	
			Paradeep D/s	0.3	490	23	
Bheden	11	Along Bheden (Priority-V)	Bheden	1.8	1700	Not analysed	Conforming
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Water quality of Tributaries of Mahanadi River

River	SI.	Polluted River	Monitoring station	BOD	Fecal	Fecal	Remark
	No.	stretch with		(mg/L)	coliform (FC)	Streptococci	
		Priority			(MPN/100	(FS) (MPN/	
		Category			mL)	100 mL)	
Ib River			Sundargarh	0.5	170	Not analysed	Conforming
			Jharsuguda	0.5	790	Not analysed	
			Brajarajnagar U/s	0.7	790	Not analysed	
			Brajarajnagar D/s	0.8	2200	Not analysed	
Ong			Dharuakhaman	0.4	1.8	Not analysed	Conforming
River							
Tel			Monmunda	0.8	20	Not analysed	Conforming
River							

Ground Water quality

Stn Name	Month	рН	BOD, mg/l	Nitrate- mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml
	Sambalpu	ır town Alor	ng Mahanadi			
Name Danishani wa	April	8.1	0.8	18.875	1.8	1.8
Near Panthanivas	October	6.6	0.5	6.743	220	7
Near Pailway station	April	7.6	0.6	28.175	1.8	1.8
Near Railway station	October	7	0.1	30.457	1.8	1.8
Near VSS Medical College,	April	8.1	0.9	1.072	1.8	1.8
Burla	October	7.5	0.1	1.350	20	1.8
	Paradeer	town Alon	g Mahanadi	River	_	
Badapadia market	April	8.2	0.8	42.718	1.8	1.8
complex	October	7.3	1.1	47.965	1.8	1.8
Musadiha	April	8.4	0.3	6.857	23	1.8
	October	7.6	1.5	8.415	1.8	1.8
	ıda town in t	he catchme	nt of Bheder		river	T
Burkhamunda	April	7.1	0.2	1.909	1.8	1.8
	October	7.4	0.2	21.184	49	17
Badamal Industrial Estate	April	6.8	0.9	2.840	1.8	1.8
	October	7.2	0.4	13.128	1.8	1.8
Budhipadar	April	6.4	0.6	3.356	1.8	1.8
	October	6.6	0.4	2.213	1.8	1.8
Brajarajnagar Mining belt	April	5.8	0.9	1.873	1.8	1.8
	October	7.3	0.3	30.457	1.8	1.8
Rampur area (Water tank)	April	6.8	0.5	0.827	23	1.8
	October	6.6	0.1	1.627	13	1.8
Ib thermal power station	April	6.9	0.4	0.766	1.8	1.8
	October	6.6	0.4	2.143	1.8	1.8
Belpahar area	April	6.8	0.3	0.705	1.8	1.8
	October	6.9	0.2	2.659	1.8	1.8
Drinking water Specification (IS: 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

River	SI. No.	Polluted River stretch with Priority Category	Monitoring station	BOD (mg/L)	Fecal coliform (FC) (MPN/100 mL)	Fecal Streptococci (FS) (MPN/ 100 mL)	Remark
Mangala	12	Along Puri (Priority-V)	Mangala D/s at Golasahi	2.7	1100	11	Conforming
Nuna	13	Along Bijipur, Puri (Priority-V)	Bijipur	1	1300	17	Conforming
Ratnac hira	14	Along Sakhigopal, Puri (Priority-V)	Kumardihi	0.4	780	22	Conforming
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Ground Water quality of Puri town along Mangala river

Stn Name	Month	рН	BOD, mg/l	Nitrate- mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml
Hospital-Bus stand- Mausima temple area	April	8.1	0.2	1.182	1.8	1.8
inidusinia temple area	October	7.9	0.2	28.937	240	13
Near Jagannath Temple,	April	7.8	0.3	3.742	1.8	1.8
	October	8.1	0.4	1.167	1.8	1.8
Near Sea Beach	April	8.2	0.3	0.602	23	1.8
	October	8.2	0.5	1.210	79	8
Baliapanda	April	7.9	0.6	0.492	1.8	1.8
	October	8.1	0.1	1.374	11	1.8
Drinking water Specification (IS: 10500:2012)Desirable limit		6.5-8.5	1	45	Absent	Absent

Rivers

River	SI. No.	Polluted River stretch with	Monitoring station	BOD (mg/L)	Fecal coliform (FC)	Fecal Streptococci	Remark
		Priority			(MPN/100	(FS) (MPN/	
		Category			mL)	100 mL)	
Nagavali	15	Jaykaypur to	Jayakaypur D/s	1.6	780	22	Conforming
		Rayagada (Priority-V)	Rayagada D/s	0.9	210	17	
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

No Ground water quality monitoring in Rayagada town by State Pollution Control Board, Odisha

Rivers

River	SI.	Polluted River	Monitoring station	BOD	Fecal	Fecal	Remark
	No.	stretch with		(mg/L)	coliform (FC)	Streptococci	
		Priority			(MPN/100	(FS) (MPN/	
		Category			mL)	100 mL)	
Budhab	16	Mahulia to	Baripada D/s	1.2	1100	46	Conforming
alanga		Baripada					
		(Priority-V)					
W		quality criteria for l	•	3.0	500 (Desirable)	100 (Desirable)	-
	(GSR 742 (A) Dated 25.12.2000				2500	500	
					(permissible)		
						Permissible)	

No Ground water quality monitoring in Baripada town by State Pollution Control Board, Odisha

River	SI. No.	Polluted River stretch with Priority Category	Monitoring station	BOD (mg/L)	Fecal coliform (FC) (MPN/100 mL)	Fecal Streptococci (FS) (MPN/ 100 mL)	Remark
Kusumi	17	Along Angul Talcher (Priority-V) (To be corrected as along Tangi)	Along Tangi	0.5	2200	70	Conforming
V	Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-

No Ground water quality monitoring in Tangi town by State Pollution Control Board, Odisha

Rivers

River	SI.	Polluted River	Monitoring station	BOD	Fecal	Fecal	Remark
	No.	stretch with		(mg/L)	coliform (FC)	Streptococci	
		Priority			(MPN/100	(FS) (MPN/	
		Category			mL)	100 mL)	
Rushik	18	Pratappur to	Madhopur	1.4	490	47	Conforming
ulya		Ganjam (Priority-V)	Potagarh	1.9	790	70	
Sabulia	19	Along Jagannathpatn a, Rambha (Priority-V)	Jagannathpatna, Rambha	0.9	2200	79	Conforming
Water quality criteria for Bathing water (GSR 742 (A) Dated 25.12.2000			3.0	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	-	

Ground Water quality of Berhampur town in the catchment of Rushikulya river

Stn Name	Month	рН	BOD, mg/l	Nitrate- mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml
Near MKCG Medical	April	7.8	0.2	0.620	1600	540
College	October	8.2	0.2	2.195	23	1.8
Bus stand	April	7.4	0.3	0.924	1.8	1.8
	October	8	0.5	3.166	79	13
Badabazar	April	6.8	0.6	43.378	1.8	1.8
	October	7.6	0.6	20.239	1.8	1.8
Railway station	April	7.6	0.3	25.683	23	1.8
	October	7.8	0.2	23.650	13	1.8
Drinking water Specification (IS: 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

6.1 (iii) Status on implementation of Action Plans for Restoration of identified Polluted River Stretches for ensuring compliance to Hon'ble NGT orders dated 20.09.2018, 19.12.2018 and 08.04.2019.

Industrial Effluent Management (under 17 Cat.	of Industries in Head Office, Consent Administration)
Identification of non-complying as well as illegal units	Nil
Closure Direction for non-complying and illegal units	Nil
Upgradation of existing captive ETPs or construction of new ETPs by individual industries.	 5 Nos. Rourkela Steel Plant, Rourkela has installed new ETP of capacity 1100m3 for recirculation of Lagoon effluent in Hot Strip mill. Neelachal Ispat Nigam Ltd, Jajpur – has modified it's BOD plant. Emami Paper Mills Ltd., Balasore has upgraded ETP. Grasim Industries Ltd., Ganjam has upgraded ETP. Vedanta Ltd., (Smelter and CPP) Jharsuguda installed new ETP of 50m³/hr in the smelter plant.
Up-gradation of existing CETPs with state of Art technologies	No CETP in the State of Odisha
Commissioning of new CETPs with State of Art technologies	NA
Interception and diversion of industrial effluent from drains carrying industrial effluents. Installation of OCEMS by industries and	Nil Out of 22 nos. of industries 21 nos. of industries have
connectivity of all OCEMS with SPCB/ PCC and CPCB server.	installed CEQMS and connected to server of SPCB and CPCB. Only M/s. NSPCL, NTPC SAIL Power Corporation Ltd., Rourkela has not installed CEQMS as it has adopted recirculation of cooling tower blow down water of power plant in ash slurry making.
Utilization of treated effluent and reduction of water consumption by the industries.	 3 Nos. M/s. Jindal Stainless Ltd., Kalinganagar Jajpur - installed 50m3/hr RO plant at CPP to completely reuse the cooling blow down water. M/s. Rourkela Steel Plant, Rourkela – recycled it's effluent from lagoon by treating in ETP and reused in Hot Strip Mill (1100m3/hr) out of 1975m3/hr. M/s. Neelachal Ispat Nigam Ltd., Jajpur – utilized 150m3/hr blow down effluent in pig casting and slag granulation.
Adoption of zero liquid discharge by the industries as per Direction of CPCB.	Out of 22 nos. of industries 12 nos. of industries have already adopted ZLD. 3 nos. of industries have been directed to adopt ZLD. Other 7 nos. of industries discharging to river and sea after meeting prescribed standard. Detailed list enclosed as per annexure-1.
Notification of PETP standards. Awareness of training for the concerned authorities of O & M of ETPs/ CETPs	

 $\ensuremath{\mathsf{NB}}$: Total 22 nos. of industries identified existing in the polluted river stretches of Odisha (list enclosed).

Annexure -1

SI. No.	Name of the industry	Treatment facility provided	Recipient water bodies	Connectivity of CEQMS to SPCB/ CPCB server	Remarks
1)	M/s. Bhusan Power & Steel Ltd., At- Thelkoloi, Po - Lapanga, Rengali, Dist - Sambalpur-768212	ETP	Bheden River	4 nos. of CEQMS	The unit has been directed to adopt ZLD by 31.03.2020
2)	M/s. Neelachal Ispat Nigam Ltd., Kalinga Nagar Industrial Complex, Po - Duburi, Dist - Jajpur- 755026	ETP for BOD plant	Ganda Nallah / lead to Brahmani	2 nos. of CEQMS	The unit has been directed to adopt ZLD by 31.12.2019
3)	M/s Tata Steel Limited, Kalinga Nagar Industrial Complex, Duburi - 755 026, Dist Jajpur	ЕТР	Ganda Nallah/ lead to Brahmani	3 nos. of CEQMS	The unit has adopted ZLD.
4)	M/s. Jindal Steel and Power Ltd., Chhendipada Road, (SH-63), At/Po - Jindal Nagar, Dist - Angul - 759111	ЕТР	Kurudibahali nallah	3 nos. of CEQMS	The unit has adopted ZLD.
5)	Jindal Stainless Limited (JSL), Kalinganagar Industrial Complex, Village Jakhpura	ETP	Ganda Nallah/ lead to Brahmani	1 no. of CEQMS	The unit has adopted ZLD.
6)	M/s. Rourkela Steel Plant, At- Rourkela Steel Plant, Dist - Sundargarh	ETP	Guradhi Nallah / Brahmani river	7 nos. of CEQMS	The unit recycled it's effluent from lagoon by treating in ETP and reused in Hot Strip Mill (1100m3/hr) out of 1975m3/hr and directed to adopt ZLD by Dec, 2020
7)	M/s. Tata Steel BSL Ltd., At: Narendrapur PO: Kusupanga Via: Meramandali Dist.: Dhenkanal Pin.759121, Odisha	ETP	Effluent discharged to Kisinda nallah	6 nos. of CEQMS	The unit has adopted ZLD.
8)	M/s. NTPC -SAIL Power Company Pvt. Ltd., (CPP- II), Administrative Building,	ETP	Guradhi Nallah / Brahmani		The unit has adopted ZLD.

SI. No.	Name of the industry	Treatment facility provided	Recipient water bodies	Connectivity of CEQMS to SPCB/ CPCB server	Remarks
	RSP Complex, Rourkela, Dist - Sundargarh		River		
9)	M/s. OCL India Ltd. (Dalmia Cement Bharat Limited), At. Rajgangpur, Dist. Sundergarh, Odisha	ЕТР	Liploi Nalla / Sankha River / River Brahmani	1 no.	Adopted ZLD
10)	Suidihi Distillery Ltd., Lathikatha Sundargarh	ETP	River Brahmani	1 no. (Web Cam)	Adopted ZLD
11)	M/s. Talcher Super Thermal Power Station, NTPC, At- Kaniha, Po - Deepsikha, Dist - Angul	ETP	River Brahmani	1 no.	Adopted ZLD
12)	M/s. J.K. Paper Ltd., Jaykaypur, Dist - Rayagada	ЕТР	River Nagavali	1 no.	The unit has been permitted to discharge 34000 KLD of treated Industrial effluent to River Nagavali
13)	M/s Grasim Industries Ltd, (formerly known as Jayshree Chemicals Ltd), At/PO-Jayshree-761 025, Dist-Ganjam	ЕТР	River Rushikulya	1 no.	Adopted ZLD
14)	M/s. NALCO Ltd., (Smelter Unit) Nalco Nagar, Dist - Angul - 759145	ETP	Kisinda Jhor	1 No.	The unit has been permitted to discharge 2640 KLD of treated Industrial effluent to Kisindajhor only during rainy session
15)	M/s Talcher Thermal Power Stations (TTPS), AT/PO- Talcher Thermal,Dist:Angul- 759101.	ЕТР	Nandira River	1 No.	Adopted ZLD
16)	M/s. Vedanta Ltd., (Smelter & CPP) At/Po - Bhurkhamunda, Dist - Jharsuguda - 768202	ETP	River Bheden	3 Nos.	The unit has been permitted to discharge 50m3/hr of treated Industrial effluent to Bheden River only during rainy season

SI. No.	Name of the industry	Treatment facility provided	Recipient water bodies	Connectivity of CEQMS to SPCB/ CPCB server	Remarks
17)	M/s. Vedanta Ltd., (IPP, Smelter and CPP), At - Bhurkamunda, Po- Sirpura, Dist - Jharsuguda-768202	ЕТР	River Bheden	1 No.	Adopted ZLD
18)	M/s. COSBOARD Industries Ltd., Jagatpur Industrial Estate, Phase-II, Jagatpur, Dist - Cuttack - 754021	ЕТР	River Mahanadi	1 no. of CEQMS	The unit has been permitted to discharge 1000 KLD of treated Industrial effluent to River Mahanadi.
19)	M/s. Paradeep Phosphate Ltd, PO- PPL, Township, Paradeep, Dist – Jagatsinghpur-754145	ETP	To Atharbanki Creek	3 nos. of CEQMS	The unit has been permitted to discharge 887 KLD of treated Industrial effluent to Atharbanki Creek only during monsoon.
20)	M/s. Indian Farmers and Fertilizer Co. Operative Ltd., (IFFCO), At- Musadhia, Po - Paradeep, Dist - Jagatsinghpur	ETP	River Mahanadi	1 no. of CEQMS	The unit has been permitted to discharge 7200 KLD of treated Industrial effluent to Mahanadi River
21)	M/s. Paradeep Refinery Project, IOCL, At- Paradeep, Po- Jhimani, Via – Kujang, Dist – Jagatsinghpur – 754141	ЕТР	Deep Sea (bay of Bengal near Paradeep)	1 no.	The unit has been permitted to discharge 8400 KLD of treated Industrial effluent to Deep Sea at distance of 3 km from LTL
22)	M/s. Essar Power (Orissa) Limited, At-Udayabata, PO-Paradeep, Dist- Jagatsinghpur, Odisha	ЕТР	River Mahanadi	1 no.	Adopted ZLD

6.1 (vi) Management of Plastic Waste

- (a) State Pollution Control Board, Odisha is the authority for enforcement of the Provisions of Plastic Waste Management Rules, 2016 relating to registration, manufacture of plastic products and multi layered packaging, processing and disposal of plastic wastes in the State.
- (b) The State Pollution Control Board had issued certificates of Registration to 14 nos. of (Producer-06, Brand Owners-05, Recycles-03) as on date. In case of renewal of registration of producer, unless the producer possesses and action plan endorsed by the Secretary in Charge of the Urban Department of the concerned State.
- (c) The State Pollution Control Board takes a decision on the grant of Registration within stipulate time period after an application which is complete in all respect.
- (d) The Registration granted under this Rule are initially valid for one year, unless revoked, suspended or cancelled and shall be subsequentially granted for three years.

Current status of management of Plastic waste:

- (i) As per the information received from H &UD Department, the State generates approximately 90,139 tons per annum of plastic waste (2018-19). There are 14 plastic units registered in the State falling in the category of Recyclers, Producers, Brand Owners. Out of these 14 Registered units, 6 are Producers, 5 are Recycles and 3 are Brand owners.
- (ii) All urban local bodies have been instructed for implementation of the provisions of Plastic Waste Management Rules, 2016. Major ULBs have been instructed to send segregated plastic waste to Cement Plants namely, ACC Ltd., Bargarh, OCL Limited, Rajgangpur, Shiva Cements, Sundargarh, Toshali Cement, Amphavalli, Koraput for co-processing in cement kiln. About 28 MT of plastic waste has been sent to ACC Ltd, Bargarh for co-processing during 2018-19 (upto November, 2019).
- (iii) 4.6 MT of Plastic waste has been used for construction of 9.6 Km road in Deogarh and Sambalpur district.
- (iv) Consent to Establish has been granted for M/s Hindalco Industries for establishment of Poly Crack Converts of 0.5 MT/ day plastic wastes to oil.

Management of Biomedical waste

In total 145674 Kg/day of biomedical waste is generated in the State out of which 13951 Kg/day of biomedical waste is being processed/ treated.