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STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA] Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar – 751 012

No. 10 558

Ind-VI-BW/2824 (Pt.IV) /19-20

D1.22.10.2020

Speed Post/Email

То

Dr. D. P. Mathurla Executive Director, National Mission for Clean Ganga Department for Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti 1st Floor, Major Dhyan Chand National Stadium, India Gate, New Delhi-110 002

Sub : Submission of Monthly Progress Reports related to Control of River Pollution -Reg.

Ref: Email of Dt. 08.10.2020

Sir,

In Inviting a reference to above subject, the Monthly Progress Report for the month of September-2020 as per the Revised MPR Format in compliance to the Proceedings of the 6th Central Monitoring Committee is enclosed herewith for your kind information and necessary action.

Encl : As above

Yours faithfully

Member Secretary

Member Secretary

Memo No. 10559

Date: 22.10.2020

Copy forwarded to Dr. J.C. Babu, Addl. Director, WQM-I Division, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi -110032 for kind information and necessary action.

Encl : As above

Memo No. 0560

Date: 22.10.2020

Copy forwarded to the Director, Env.-cum-Spl. Secy. to Government, Forest and Environment Department, Govt. of Odisha for kind information and necessary action.

Encl : As above

Member Secretary

<u>Compliance of Minutes of 6th Meeting of Central Monitoring Committee held on</u> <u>31.09.2020 through Video Conferencing</u>

Suggestions of 6 th CMC Meeting	Compliance by OSPCB	
 Quantum of estimated sewage generation is an Issue. 	Furnished in Section III.	
2) Action Proposed for bridging the gap of 60.49 MLD wastewater is to be informed.	As per the information received from Odisha Water Supply and Sewerage Board operating under Housing and Urban Development Department of Odisha, the total Sewage generation form six major urban local bodies of the State, such as Puri, Bhubaneswar, Cuttack, Sambalpur, Rourkela and Talcher, is 367 MLD. STPs of total 91 MLD capacities have already been commissioned. To bridge the gap, STPs are under construction in these cities. It is targeted to complete the project during 2021. Detail status is furnished in the MPR under Section III. (Page-1)	
 Updated status of Data with regard to solid waste management needs to be provided in the next MPR 	Updated status of Municipal solid waste management is under collection.	
 Sewage generated from Urban areas may be specified. 	Sewage generated from six major urban local bodies of the State, such as Puri, Bhubaneswar, Cuttack, Sambalpur, Rourkela and Talcher has been furnished is 367 MLD. Sewage generation from other ULBs is under collection.	
5) Sewage treated through STPs and amount of sewage being treated through FSTPs are to be indicated separately.	Sewage treated through STPs are furnished in Section III (Page 1) and amount of sewage being treated through FSTPs are indicated in VIII (Page 3).	
6) Status of compliance industries may also be verified through assessment of water quality of nearby drains/ wells/ tube-wells in the catchment area of the industry, in addition to the monitoring of discharge norms. industries	Actions are being taken to compile the information.	

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 ODISHA for the month of September, 2020

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately

As per Census 2011,

Total population of Odisha is 4,19,74,218.

Urban population is 70,03,656.

Rural population is 3,49,70,562

II. Estimated Sewage Generation (MLD):

Information to be received from H & UD Department

Sewage generation in the State :

(Only from Puri, Bhubaneswar, Cuttack, Sambalpur, III. Details of Sewage Treatment Plant: Rourkela and Talcher) • Existing no. of STPs and Treatment Capacity (in MLD): 5 Nos : 91 MLD • Capacity Utilization of existing STPs: 70 MLD • MLD of sewage being treated through Alternate technology: 440 KLD (0.44 MLD) • Gap in Treatment Capacity in MLD: 297 MLD • No. of Operational STPs: 5 STPs • No. of Complying STPs: 3 STPs • No. of Non-complying STPs: 2 STPs

367 MLD

		Details of ea	ach existing STP	in the State	
No.	Location	Existing STP	Capacity Being	Operational Status	Compliance
		Capacity	Utilized	of STP	Status of STP
1	CDA-Bidanasi	36 MLD	19 MLD	Operational	Complying
	area, Cuttack				
2	Mattagajpur,	33 MLD	33 MLD	Operational	Complying
	Cuttack				
3	Mangalaghat,	15 MLD	11 MLD	Operational	Complying
	Puri				
4	Bankimuhan,	5 MLD	5 MLD	Operational	Not-
	Puri				Complying
5	Mandapal,	2 MLD	2 MLD	Operational	Not-
	Talcher				Complying

Details of under construction STPs in the State

No.	Location	Capacity	Physical	Status of I&D or House sewer connections	Completion
INO.	Location	of the	Progress in	Status of fact of flouse sewer connections	Timeline
		plant in	w w		Timenne
		MLD	%0		
1	Dhanupalli,	40 MLD	92%	35.43% sewer Network completed	Targeted
1	▲ ·	40 MLD		1	U
	Sambalpur		completed	38% pumping station work completed.	for part
				House sewer connections not taken up.	commissio
					ning
					during
					March,
2		16100	750/		2021
2	Mattagajpur	16 MLD	75%	72% household connections completed	March,
			completed		2021
3	Meherpalli,	56 MLD	64%	50% sewer Network completed	December,
	Bhubaneswar		completed	41% pumping station work completed	2021
				77 % household connections completed	
4	Basuaghai,	28 MLD	67%	39% sewer Network completed	December,
	Bhubaneswar		completed	47% pumping station work completed	2021
				75 % household connections completed	
5	Kochilaput,	43.5	63%	20% sewer Network completed	December,
	Bhubaneswar	MLD	completed	27% pumping station work completed	2021
				8 % household connections completed	
6	Paikarapur,	8 MLD	88%	88% sewer Network completed	December,
	Bhubaneswar		completed	55% pumping station work completed	2021
				62% household connections completed	
7	Rokat,	48 MLD	66%	Not taken up	June, 2021
	Bhubaneswar		completed		
8	Ruptala	40 MLD	97%	67.6% sewer Network completed	Targeted
	Balughat,		completed	69% pumping station work completed	for part
	Rourkela				commissio
					ning
					during
					March,
					2021

Details of proposed STPs in the State

No.	Location	Capacity of the STP proposed	Stage/ Under Tendering/	Likely Date of Completion
		in MLD	Work to be Awarded)	
			Nil	

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

- No. of industries in the State: 6972
- No. of water polluting industries in the State:1030
- Quantity of effluent generated from the industries in MLD: 886 MLD
- Quantity of Hazardous Sludge generated from the Industries in TPD:141.9 TPD
- Number of industrial units having ETPs: 1030
- Number of industrial units connected to CETP: No CETP in the State
- Number and total capacity of ETPs (details of existing/ under construction / proposed)
 Existing : 1030 Numbers, 886 MLD

Under Construction : Nil

Proposed : Nil

Total :1030 Numbers, 886 MLD

- Compliance status of the ETPs:
- Number and total capacity of CETPs (details of existing/ under construction / proposed) Nil
- 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)

V. Solid Waste Management:

- Total number of Urban Local Bodies and their Population: 114 Urban Local Bodies
 - Total number of Urban Local Bodies : 114
 - Population: 60,35,851 (as per 2011 census)
- Current Municipal Solid Waste Generation : 1685 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

• Existing MSW Processing Facilities :

Type of Processing Facility		Numbers	Installed Capacity	Utilization	
Compost	Plant-	Micro	112	478	52 %
Compostin	ng Centre (N	ACC)			
Materials	Recovery	Facility	84	322	42 %
(MRF)					

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

Action plan to bridge the gap between Installed Capacity and Current Utilization

- ULBs will improve the coverage of wards on source segregation (currently 80% wards covered, by December 2020- 90%, by March 2020- 95%)
- Swachh Sathis and Swachh Supervisors have been assigned to create awareness on the roles and responsibilities of different waste generators.
- Naming & Shaming measures are being taken up by door-to-door collectors to achieve 100% Source Segregation
- Door-to-door collection of segregated waste are being taken up through women driven Battery Operated Vehicles
- Ama Sahar App has been adopted for real time monitoring of Waste Collection, Transportation, Processing, User Fee Collection and Disbursementof Incentives to Sanitation Workers
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and

under construction)

All 114 ULBs have designated sites for storage of Construction & Demolition waste. 126 numbers of such sites across all ULBs of Odisha have been notified for wider circulation amongst public. Further, the C&D waste is used for construction of road subgrade, temporary pathways, raising the low-lying areas, etc. thereby offsetting the use of soil for all these purposes.

• Total no. of wards, no. of wards having door to door collection service, no. of wards

Total no. of Wards	No. of Wards having Door	No. of Wards practicing
	to door collection Service	Source Segregation
2024	2024 (100%)	1627 (80%)

practicing segregation at source

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)
 - MSW processing facilities Proposed:
 - Composting Facility Micro Composting Center (MCC): 242 Nos. (Capacity:1,210 TPD)
 - Material Recovery Facilities (MRF): 235 Nos. (Capacity:1,175 TPD)
 - MSW processing facilities Functional :
 - Composting Facility- Number of Functional Micro Composting Center (MCC) : 112 Nos. (Capacity:478 TPD)
 - Number of Functional Material Recovery Facilities (MRF) : 84Nos. (Capacity: 322 TPD)
 - MSW processing facilities Under Construction:
 - Composting Facility Micro Composting Centres (MCC) : 114 Nos. (Capacity : 570 TPD)
 - Material Recovery Facilities (MRF) : 88Nos. (Capacity : 440 TPD)
- No. and area (in acres) of uncontrolled garbage dumpsites and Sanitary Landfills.
 - Garbage dumpsites: 102 numbers (200 Acre approx.)
 - Sanitary Landfill: 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
 - No. of drains reaching to River System, lakes, Water Bodies, Pond, Marsh Land, Water Lands : 225
 - Drains having floating racks/screens installed: 210

Status of ULB wise Management of Solid Waste

ULB	Total MSW	Total MSW	Existing	Utilization	Proposed MSW		
	generation in	being processed	MSW	Capacity of the	Facilities &		
	TPD	in TPD	facilities	existing MSW	Completion		
				facilities	Timeline		
Enclosed As Annexure-5							

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

- Total Bio-medical generation: 14564 Kg/Day
- No. of Hospitals and Health Care Facilities: 3398
- Status of Treatment Facility/ CBMWTF: 13951 Kg/ Day

Bio-medical wastes generating from the health care establishments are being managed either through common biomedical waste treatment and Disposal (CBWTDF) facilities or by deep-burial practice.

Bar-code System has been implemented in the following four Common Facilities (CBWTDF) :

- 1) M/s. Sani Clean Pvt. Ltd., Khurda,
- 2) M/s Mediaid Marketing Services, Bhubaneswar at SCB Medical and Hospital, Cuttack
- 3) M/s Mediaid Marketing Services, Bhubaneswar at Rourkela Govt. Hospital, Rourkela
- 4) M/s. Bio-Tech Solutions, at VSS Medical College and Hospital Burla, Sambalpur.

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

- Total Hazardous Waste generation: 6,79,656 Tonne/Annum
- No. of Industries generating Hazardous waste : 360
- Treatment Capacity of all TSDFs : One TSDF Facility in Jajpur District
 - (a) SLF Capacity : 75,000 Tonne/Annum
 - (b) Treatment Capacity : 12,000 Tonne/ Annum
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated : 60000 Tonne/ Annum
- Details of on-going or proposed TSDF

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

- Total Plastic Waste generation: 101.3 TPD
- Treatment/ Measures adopted for reduction or management of plastic waste:
 - The trade, manufacture, import, store, carry, transport and use of single use plastic andplastic carry bags are prohibited within the jurisdiction of all ULBs
 - The segregated and stored plastic waste at Materials Recovery Facilities are sold off toregistered plastic recyclers for further processing and recycling.

- Non-Recyclable Plastic Waste are sent to Cement Factory for Co-Processing.
- VIII. Details of Alternate Treatment Technology being adopted by the State/UT

Besides, establishing Sewage Treatment Plants for treatment of municipal wastewater, actions has also been taken to treat fecal sludge being generated from the urban local bodies under Septage Management System in a phased manner is envisaged to be taken up during the period from 2016-17 to 2021-22 which will lead to improved urban sanitation with positive impact on public health, environment & river water quality. Since the cost of construction and Operation and Maintenance of Septage Treatment Projects is low, such projects are now implemented in different ULBs of the State. The status of Septage Management Plants undertaken in the State of Odisha is given in Annexure-1.

- IX. Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment: Drains contributing to river pollution have been identified by H & UD Department. Detail information is under preparation
- X. Details of Nodal Officer appointed by Chief Secretary in the State/UT:
- XI. Details of meetings carried under the Chairmanship Chief of Secretary in the State/UT:
- XII. 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-2.

- XIII. Ground water regulation:
 - 1. So far no such cases of illegal groundwater abstraction are noticed.
 - Govt. of Odisha has formulated an act for regulation of groundwater namely "The Odisha Groundwater (Regulation, Development and Management) Act, 2011"
 - 3. Central Ground Water Board (CGWB) and District Level Evaluation Committee(DLEC) strictly control the groundwater abstraction by the industries.
 - 4. Chief Engineer and Director, Groundwater Development, Bhubaneswar monitors the fluctuation of the groundwater level in all 30 districts in 10 years interval.
- XIV. Good irrigation practices being adopted by the State:

Inflow from the catchment and outflow from the river of the basins are managed effectively by the Chief Engineer and Basin Managers for 11 Nos. of river basins of Odisha.

XV. Rain Water Harvesting:

Rain water harvesting.

Rooftop Rainwater Harvesting Structures (RRHS)

	Govt	Private	
2018-19	358 nos.	9438 nos.	(in 11 towns of 9 districts)
2019-20	Nil	Nil	
2020-21 (Provisio	300 Nos m)	6000 Nos	A provision of Rs. 37 crores has been kept for construction of RRHS.

Ground Water Recharge		
i) Through Wells (recharge shaft on	2019-20	nil
Tanks and pond)	202 0-2 1	65 nos. in 11 districts (work will be completed in 2020-21)
ii)Through Check dams	up to 03/2020	15612 nos. in 30 districts
	up to 07/2020	15740 nos. in 30 districts (A provision of
		Rs. 67 crores has been kept for construction
		of check dams in 30 districts)

XVI. Demarcation of Floodplain and removal of illegal encroachments:

No cases of encroachment have been noticed so far.

XVII. Maintaining minimum e-flow of river:

E-flow is maintained.

Watershed Management – Integrated Watershed Management Programme is executed throughout the State by Odisha Watershed Development Mission.

XVIII. Plantation activities along the rivers:

1094699 nos. of sapling and seedling have been planted during monsoon 2018 along the bank of the rivers, dam sites, barrage sites and canal sites, out of which 329962 nos. of plants are alive (30.14% - Survival Status)

XIX. Development of biodiversity park:

Information under collection

XX. Reuse of Treated Water:

All Water polluting industries are being regulated under the consent administration of the Board. 806 MLD treated industrial wastewater are being recycled/ reused in the process or being utilized for plantation/ irrigation purposes. For reuse of treated domestic wastewater, bulk users have been identified. Proposal for reuse of treated wastewater is enclosed as Annexure-3

- XXI. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:
- XXII. Status of Preparation of Action Plan by the 13 Coastal States: Odisha Coastal Zone Management Authority has been requested to prepare action plans for coastal stretch along Puri, Gopalpur and Paradeep and of Atharabanki Creek in the State of Odisha. Information is awaiting.
- XXIII. Regulation of Mining Activities in the State/UT: Enclosed as Annexure-4.
- XXIV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring :
 - Show Cause Notices have been issued to six industries under Section 25 and 33A Water (PCP) Act, 1974 and amendments thereunder
 - Directionshave been issued to four industries under section 33 A of Water (PCP) Act, 1974 and amendments thereunder

Annexure-1

Details of Septage Management in the State of Odisha

Coverage of all ULBs under Septage Management System in a phased manner is envisaged to be taken up during the period from 2016-17 to 2021-22 which will lead to improved urban sanitation with positive impact on public health, environment & river water quality. Since the cost of construction and Operation and Maintenance of Septage Treatment Projects is low, such projects are now implemented in different ULBs of the State.

The status of Septage Management Plans undertaken in the State of Odisha is given below.

Total Septage Treatment Capacity : 1767 KLD

(Commissioned (10 Nos in 10 ULBs.) : 440 KLD

Under Construction (82 Nos. in 82 ULBs : 1367 KLD)

ULB-wise status of Septage Treatment Plants are as follows

с Э.	04 Status of Sept Prioritized work	age Management Projects in Odisha.	[As on 20 th Oct., 2020] Progress as on 20 th October 2020
	Construction of septage treatment facilities in 92 nos ULBs of the State	 i)Construction of 10 nos of Septage Treatment Plants in 10 ULBs of the State (1) Baripada (50 KLD). (2) Berhampur (40 KLD). (3) Bhubaneswar (75 KLD). (4) Puri (50 KLD). (5) Rourkela (40 KLD). (6) Sambalpur (20 KLD). (7) Dhenkanal (27 KLD). (8)Cuttack (60 KLD). (9)Balasore (60 KLD) & (10) Angul (18 KLD). ii. Construction of 30 Nos of SeTPs in 30 Nos of ULBs (1) Balangir (30 KLD). (2) Bhawanipatna (30 KLD). (3) Titilagarh (10 KLD). (4) Kesinga (10 KLD). (5) Khariar (10 KLD). (6) Kantabanjhi (10 KLD). (5) Khariar (10 KLD). (6) Kantabanjhi (10 KLD). (7) Barbil (20 KLD). (8) Joda (20 KLD). (9) Kamakshyanagar (10 KLD). (10) Aska (10 KLD). (11) Hinjilicut (10 KLD). (12) Polasara (10 KLD), (13) Sorada (10 KLD). (14) Jatni (20 KLD). (15) Khurda (20 KLD). (16) Paradeep (20 KLD). (17) Banki (10 KLD). (18) Nayagarh (10 KLD). (19) Nimapara (10 KLD). (20) Jharsuguda (40 KLD). (21) Brajarajnagar (30 KLD). (22) Sundargarh (20 KLD). (23) Belpahar (10 KLD). (24) Anandapur (10 KLD). (27) 2nd SeTP Rokat , Bhubaneswar (75 KLD). (28) Choudwar (12 KLD). (29) Burla (20 KLD) & (30) Hirakud (20 KLD). 	 OWSSB (1 no.) : 2nd SeTP at Rokat Bhubaneswar Practical Action Team - (1 No.) : Chowdwar (12 KLD) EOs of ULBs - (16 Nos.) : It is targeted to complete the construction of SeTPS during the year 2020-21.
		 iii). Construction of 41 Nos of SeTPs in 41 ULB (1) Baragarh (30 KLD), (2) Biramitrapur (10 KLD) (3) Keonjhar (30 KLD), (4) Talcher (20 KLD), (5) Deogarh (10 KLD), (6) Jeypore (40 KLD), (7) Nabarangpur (20 KLD), (8) Malkangiri (20 KLD) (9) Patnagarh (10 KLD), (10)Boudhagarh (10 KLD), (11) Sonepur (10 KLD), (12) Vyasanag (30 KLD), (13) Kendrapara (20 KLD), (1 Odgaon (10 KLD), (15) Dasapalla (10 KLD), (1 Khandapara (10 KLD), (17) Dhamanagar (1 KLD), (18) Chandabali (10 KLD), (19) Phulba (20 KLD), (20) Karanjia (10 MLD), (2 Jagatsinghpur (20 KLD), (22) Rayagada (KLD), (23) Sunabeda (20 KLD), (24) Konark (KLD), (25) Khalikote (10 KLD), (26) Pattamun (10 KLD), (27) Rairangpur (10 KLD), (7) 	 a), EOs of the ULBs shall look after the construction of SeTPs in the ULBs. b) construction of Acceptance has been issued by OWSSB. c) * It is targeted to complete the construction of SeTPs during the year 2021-22. b) 10 c) 10 <lic) 10<="" li=""> <lic) 10<="" li=""> c) 10 <lic) 10<="" li=""> c) 10 <lic) 10<="" li=""> <lic) 10<="" li=""> <lic) 10<="" li=""> <lic) 10<="" li=""> c) 10 <lic) 10<="" li=""> <lic) 10<="" li=""> c) 10 <lic) 10<="" li=""> <lic< td=""></lic<></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)></lic)>

Progress Report Sept. 2020

SI. No.	Prioritized work	Intervention	Progress as on 20 ¹¹ October 2020
		Balguda (10 KLD), (31) G Udaigiri (10 KLD), (32) Gudari (10 KLD), (33) Gunupur (10 KLD), (34) Kasingar (10 KLD), (35) Para'akhemundi (20 KLD), (36) Purusthotampur (10 KLD), (37) Rajgangpur (20 KLD), (38) Bhadrak (30 KLD), (39) Binika (10 KLD), (40) Rairkhol - (10 KLD), (41) Digapahandi (10 KLD).	
		 iv) Construction of 7 nos. of SeTPs in 5 ULBs (i) Padampur- 10 KLD (2) Bijepur- 10 KLD. (3) Barapalli- 10 KLD, (4) Junagarh - 10 KLD, (5) Kotpad - 10 KLD (6) Berhampur - 2nd Plant, (7) Khariar Road. 	* Tender invited for 2nd time by OWSSB or dtc 21.09.2020 * Tender opened & under scrutiny.
		 v) Construction of 4 nos of SeTPs in 4 ULBs (1) Jajpur (2) Jaleswar (3) Banapur & (4) Bhanjanagar. 	DPR will be prepared after availability o suitable lands.

Latest Water quality of polluted river, its tributaries, drains and ground water quality in the catchment of Polluted river stretches during September, 2020

	ne of polluted r stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)			
1.	Gangua nallah (D/s	Rajdhani Engineering College	7.0	2.9	4.7	160000	14000	220	NC			
	Bhubaneswar)	Palasuni	6.5	2.0	4.3	160000	28000	230	NC			
	(Priority-I)	Samantarapur	7.0	1.7	6.5	92000	13000	280	NC			
		Vadimula	Not Monitored									
2.	Daya River (Bhubaneswar	Bhubaneswar D/s at Kanti	7.0	5.1	3.4	2400	1300	21	NC			
	to Bargarh (Priority-IV)	Bhubaneswar FD/s at Manitri	7.0	6.5	2.6	3500	1700	<1.8	С			
	(1110110) 10)	Kanas	7.6	6.5	1.8	2200	1300	13	С			
3.	Kuakhai River (Urali to	Bhubaneswar FU/s	7.4	8.2	1.2	3500	790	46	С			
	Bhubaneswar) (Priority-IV)	Bhubaneswar U/s	7.7	7.3	1.4	2200	490	17	С			
(MC	Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)		6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)				

Polluted River stretch : September, 2020

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 Area	April, 2020	6.1	0.3	n.a.	<1.8	<1.8
Old town-Samantarapur Area	April, 2020	7.1	0.4	n.a.	33	4.5
Kalpana-Laxmisagar Area,	April, 2020	6.1	0.3	n.a.	79	4.5
Chandrasekharpur	April, 2020	6.5	0.3	n.a.	<1.8	<1.8
Capital Hospital Area,	April, 2020	5.1	0.7	n.a.	<1.8	<1.8
Secretariate-Govenor House-Old bus stand Area	April, 2020	No sampl	-	ea declared a n COVID 19 P	as Containmo andemic	ent Zone to
Drinking water Specification (IS : 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

n.a. : Not analysed

SI. No.	Туре	Quantity (MLD)	BOD (mg/L)	FC (MPN/ 100 mL)
1	Drain Name	-	-	-
2	Patia	-	5.5	7900
3	Sainik School	-	13	160000
4	OAP area	-	5.9	35000
5	VaniVihar	-	17.5	54000
6	Laxmisagar area	-	16.5	160000
7	Baragada Area	-	17.5	160000
8	Kedargouri	-	6.8	92000
9	Airport area	-	5	17000
10	Ghatikia	-	4.9	54000
11	Nicco Park	-	14.5	160000

Drain Water quality of Bhubaneswar city falling on Gangua nallah (During September, 2020)

	ne of polluted r stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
4.	KathajodiRiver	Cuttack D/s	8.1	8.1	2.7	1700	1300	23	С
	(Cuttack to Urali) (Priority-III)	Cuttack FD/s at Mattagajpur	8.2	7.7	3.2	3500	1300	4	NC
5.	SeruaRiver (Khandaeta to Sankhatrasa) (Priority-V)	Cuttack FD/s at Sankhatrasa	8.3	8.3	2.9	4900	1700	12	С
(MC	hing Water Quality DEF Notification G.S 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	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
Jagatpur	April, 2020	6.8	0.2	n.a.	2	<1.8
Mangalabag	April, 2020	7.3	0.2	n.a.	2	<1.8
Madhupatna-Kalyan Nagar Area	April, 2020	6.9	0.5	n.a.	1.8	1.8
Badambadi Area	April, 2020	7.3	0.6	n.a.	<1.8	<1.8
Bidanasi-Tulsipur Area,	April, 2020	7.6	0.2	n.a.	<1.8	<1.8
Drinking water Specification (IS : 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

n.a. : Not analysed

Characteristic of Drains falling on Kathajodi river (September, 2020)

SI.	Station Name			Pa	arameter	S	
No.		рН	BOD,	COD,	TSS,	тс	FC
			mg/l	mg/l	mg/l	MPN/	'100ml
1	Outlet of STP, Cuttack at CDA-Bidanasi area (36 MLD)	7.1	2.7	14.0	11.0	17000	4900
2	Wastewater discharge to Kathajodi river through sluice gate at Khan nagar	7.2	55.0	105.1	44.0	160000	160000
3	Wastewater discharge to Kathajodi river at Mattagajpur	7.4	12.0	27.2	19.0	23000	13000

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
6. Guradih nallah Along Rourkela (Priority-III)	Rourkela (before confluence with Brahmani river)	7.9	2.8	5.0	220	170	240	Drain
7. Brahmani (Rourkela to	Panposh D/s at Deogaon	7.7	3.6	3.9	4900	1100	4	NC
Biritola) (Priority-V)	Rourkela D/s at Jalda	7.6	4.0	3.5	1100	230	12	NC
(Filonty-V)	Rourkela FD/s at Attaghat	7.5	7.0	2.7	2700	1700	14	С
	Rourkela FFD/s at Biritola	7.6	7.2	1.8	3300	1300	22	с
Bathing Water Quality (MOEF Notification G. Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	

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

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
8. Nandira jhor D/s Talcher	Nandira D/s at Dasnali	8.3	6.4	1.8	3300	1700	33	С
(Priority-III) 9. Banguru nallah Along Talcher	Along Talcher	7.4	6.0	1.3	2300	780	23	C
(Priority-V) Bathing Water Quality (MOEF Notification G.S Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	

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

Stn Name	Month	рН	BOD, mg/l	Nitrate- mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml
Talcher Town	April, 2020	7.6	0.4	NA	<1.8	<1.8
Meramundali area	April, 2020	7.9	0.8	NA	<1.8	<1.8
Talcher Thermal area	April, 2020	7.6	0.7	NA	<1.8	<1.8
Banarpal	April, 2020	7.2	0.5	NA	<1.8	<1.8
Kulad	April, 2020	7.5	1.1	NA	<1.8	<1.8
Drinking water Specification (IS : 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

n.a. : Not analysed

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
10. Mahanadi	Sambalpur D/s	7.7	7.4	1.5	4900	1700	27	С
(Sambalpur to Paradeep) (Priority-V)	Sambalpur FD/s at Shankarmath	7.5	74	1.3	790	330	<1.8	с
	Sambalpur FFD/s at Huma	7.7	7.4	1.3	1700	790	17	с
	Sonepur U/s	7.7	7.2	1.1	3300	1300	13	С
	Sonepur D/s	7.8	6.8	1.2	3400	1700	11	С
	Tikarpada	7.2	6.4	1.1	230	130	49	С
	Narasinghpur	8.1	7.9	1.2	2400	790	22	С
	Munduli	8.1	7.3	0.9	790	230	32	С
	Cuttack U/s	8.3	8.1	1.1	1100	220	14	С
	Cuttack D/s	8	8.9	1.3	2300	1300	17	С
	Cuttack FD/s	8.4	8.5	1.1	3300	1700	12	С
	Paradeep U/s	7.7	6.6	NA	1400	220	NA	С
	Paradeep D/s	7.1	6	NA	1700	270	NA	С
11. Bheden	Jharsuguda							
Along Bheden		7.2	8.2	1.1	130	45	12	
(Priority-V)								С
Bathing Water Quality (MOEF Notification G. Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	

Water quality of Tributaries of Mahanadi River (September, 2020)

Name of river	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
lb River	Sundargarh	7.6	8.2	1.1	790	490	NA	С
	Jharsuguda	6.9	7.8	1.7	790	130	NA	С
	BrajrajnagarU/S	7.0	8.0	1.1	490	170	NA	С
	BrajrajnagarD/S	7.3	7.4	1.3	2200	1100	NA	С
Ong River	Dharuakhaman	8.1	7.4	1.2	130	78	NA	С
Tel River	Monmunda	7	7.2	1.1	330	230	NA	С
Bathing Water Quality (MOEF Notification G. Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	

Ground Water quality

Stn Name	Month	рН	BOD, mg/l	Nitrate- mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml
	Sambalpur t	own Along				
Near Panthanivas	April, 2020	7.9	0.7	NA	<1.8	<1.8
Near Railway station	April, 2020	7.4	0.4	NA	23	2
Near VSS Medical College, Burla	April, 2020	7.9	0.8	NA	<1.8	<1.8
	Paradeep to	own Along N	/lahanadi Riv	/er	•	
Badapadia market complex	April, 2020	8.3	0.7	NA	<1.8	<1.8
Musadiha	April, 2020	8.1	0.3	NA	7.8	2
Jh	arsuguda town in the	catchment	of Bheden ri	ver and Ib riv	ver	
Burkhamunda	April, 2020	6.9	0.4	NA	<1.8	<1.8
Badamal Industrial Estate	April, 2020	6.5	0.8	NA	<1.8	<1.8
Budhipadar	April, 2020	6.4	0.3	NA	<1.8	<1.8
Brajarajnagar Mining belt	April, 2020	7.1	0.7	NA	<1.8	<1.8
Rampur area (Water tank)	April, 2020	7.1	0.4	NA	<1.8	<1.8
Ib thermal power station	April, 2020	7.2	0.3	NA	<1.8	<1.8
Belpahar area	April, 2020	7.1	0.2	NA	<1.8	<1.8
Drinking water Specification (IS : 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

n.a. : Not analysed

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
12. Mangala (Along Puri) (Priority-V)	Mangala D/s at Golasahi	7.3	6.2	1.7	2200	1700	13	С
13. Nuna (Along Bijipur, Puri) (Priority-V)	Luna at Bijipur	8.1	7.5	1.3	3500	1100	49	С
14. Ratnachira (Along Sakhigopal, Puri) (Priority-V)	Kumardihi	7.0	7.1	1.8	220	170	17	с
Bathing Water Quality (MOEF Notification G.S Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	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, 2020	7.9	0.2	NA	<1.8	<1.8
Near Jagannath Temple,	April, 2020	7.9	0.4	NA	<1.8	<1.8
Near Sea Beach	April, 2020	8.2	0.3	NA	13	<1.8
Baliapanda	April, 2020	7.8	0.4	NA	4.5	<1.8
Drinking water Specification (IS : 10500:2012)Desirable limit		6.5-8.5	-	45	Absent	Absent

NA : Not analysed

Characteristic of Drain falling on Mangala river (September, 2020)

SI.	Station Name	Parameters						
No.		рН	BOD,	COD,	TSS,	тс	FC	
			mg/l	mg/l	mg/l	MPN/100ml		
1	Outlet of STP, Puri at Mangalaghat 15 MLD)	8.2	5.5	41.6	48.0	33000	23000	

	me of polluted er stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC <i>,</i> MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
15.	Nagavali (Jaykaypur to Davagada)	Jayakaypur D/s	7.2	6.4	1.4	1300	270	23	с
	Rayagada) (Priority-V)	Rayagada D/s	7.8	7.3	<1.0	490	170	27	с

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

Polluted River stretch : September, 2020

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
16. Budhabalanga (Mahulia to Baripada) (Priority-V)	Baripada D/s	7.3	7.2	1.6	3300	1300	70	С
Bathing Water Quality (MOEF Notification G. Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	3.0	-	500 (Desirable) 2500 (permissible)	100 (Desirable) 500 (Maximum Permissible)	

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

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
17. Kusumi Along Tangi (Priority-V)	Along Tangi				No	ot Monitored		
Bathing Water Quality (MOEF Notification G. Dt. 25.09.2000)	S.R. No. 742(E)	6.5- 8.5	5.0	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

Polluted River stretch : September, 2020

Name of polluted river stretch	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C) / Non- Conforming (NC)
18. Rushikulya	Madhopur	8.0	7.6	NA	1300	220	12	С
Pratappur to Ganjam (Priority-V)	Potagarh	8.0	7.5	NA	3500	1300	14	С
19. Sabulia Along Jagannathpatna, Rambha (Priority-V)	Jagannathpatna, Rambha				Nc	ot Monitored		
Bathing Water Quality (MOEF Notification G Dt. 25.09.2000)	.S.R. No. 742(E)	6.5- 8.5	5.0	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 College	April, 2020	7.2	0.2	NA	<1.8	<1.8
Bus stand	April, 2020	7.9	0.4	NA	17	4.5
Badabazar	April, 2020	7.1	0.7	NA	<1.8	<1.8
Railway station	April, 2020	7.3	0.3	NA	<1.8	<1.8
Drinking water Specification (IS : 10500:2012) Desirable limit		6.5-8.5	-	45	Absent	Absent

NA: Not analysed

Annexure-2 (b)

Status of Polluted River stretches in the State of Odisha during the period 2017-2020 as on date

SI.	Polluted River	Driari	ty Catagony of	Dolluted Dive	r atratab	Remarks
No.	Stretches identified by	Phon	ty Category of	Polluted Rive	rstretch	(As on 2020)
	СРСВ	2017 (BOD mg/l, max)	2018 (BOD mg/l, max)	2019 (BOD mg/l, max)	2020 (upto September) (BOD mg/l, max)	-
1.	Gangua River (Along Bhubaneswar)	Priority-I (39.0)	Priority-I (70.8)	Priority-I (39.2)	Priority-III (19.9)	Priority has been reduced from I to III (Improved)
2	Daya (Bhubaneswar to Bargarh)	Priority-IV (7.3)	Priority-IV (7.4)	Priority-IV (7.3)	Priority-V (4.7)	Priority has been reduced from IV to V (Improved)
3	Brahmani (Rourkela to Biritol)	Priority-V (6.0)	Priority-IV (7.6)	Priority-V (5.3)	Priority-IV (6.3)	Priority has been increased from V to IV (Deteriorated)
4	Guradih nallah (Rourkela)	Priority-III (11.3)	Priority-IV (10.1)	Priority-IV (8.5)	Priority-IV (7.6)	Priority has been reduced from III to IV (Improved)
5	Mangala (Along Puri)	Priority-V (5.7)	Priority-V (5.8)	Priority-IV (7.4)	Priority-V (4.6)	No Improvement
6	Nagavali (Jaykaypur to Rayagada)	Priority-V (3.5)	Clean (2.8)	Clean (2.2)	Clean (2.1)	Clean (Improved)
7	Kathajodi (Cuttack to Urali)	Priority-III (11.2)	Priority-V (5.7)	Priority-V (3.9)	Priority-V (3.6)	Priority has been reduced from III to V (Improved)
8	Serua (Khandaeta to Sankhatrasa)	Priority-V (4.8)	Priority-V (5.5)	Priority-V (3.1)	Priority-V (3.8)	No Improvement
9	Ratnachira (Along Bhubaneswar, Puri)	Priority-V (3.3)	Priority-V (3.5)	Clean (2.7)	Clean (1.7)	Clean (Improved)
10	Nandira Jhor (D/s of Talcher)	Priority-III (13.0)	Priority-V (3.5)	Clean (1.9)	Clean (1.9)	Clean (Improved)
11	Kuakhai (Along Bhubaneswar)	Priority-IV (7.7)	Clean (1.6)	Clean (1.9)	Clean (1.8)	Clean (Improved)
12	Mahanadi (Sambalpur to Paradeep)	Priority-V (3.2)	Clean (2.3)	Clean (2.3)	Clean (2.7)	Clean (Improved)
13	Rushikulya (Pratappur to Ganjam)	Priority-V (3.4)	Priority-V (3.7)	Clean (2.6)	Clean (2.1)	Clean (Improved)
14	Banguru nallah (Along Talcher, Rengali)	Priority-V (3.2)	Priority-V (3.9)	Clean (1.9)	Clean (1.6)	Clean (Improved)
15	Bheden (Along Bheden)	Priority-V (3.6)	Clean (2.8)	Clean (2.0)	Clean (1.8)	Clean (Improved)
16	Kusumi (Along Talcher)	Priority-V (3.2)	Clean (1.7)	Clean (2.6)	Clean (2.0)	Clean (Improved)
17	Nuna (Along Bijipur)	Priority-V (3.1)	Clean (2.7)	Clean (2.5)	Clean (1.6)	Clean (Improved)
18	Sabulia (Jagannathpatna, Rambha)	Priority-V (5.0)	Clean (2.4)	Clean (2.2)	Clean (1.7)	Clean (Improved)
19	Budhabalanga (Mahulia to Baripada)	Priority-V (3.5)	Clean (2.8)	Clean (1.6)	Clean (1.9)	Clean (Improved)

Summary of Number of Polluted River Stretches under Different Category during the Period 2017-2020 as on date

Category	No. of polluted River stretch (2017)	No. of polluted River stretch (2018)	No. of polluted River stretch (2019)	No. of polluted River stretch (2020) (upto September)
Priority-I	1	1	1	Nil
Priority-II	Nil	Nil	Nil	Nil
Priority-III	3	Nil	Nil	1
Priority-IV	2	3	3	2
Priority-V	13	7	3	4
		8 (Clean)	12 (Clean)	12 (Clean)
Total :	19	19	19	19

N.B.Clean - BOD < 3 mg/l

Water quality of Rivers in Odisha during September, 2020

Total River water quality Monitoring Station : 128

No. of stations conforming to Bathing Water quality : 121

(a) Mahanadi River System

Name of River	Sl. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Ib	1	Sundargarh	7.6	8.2	1.1	790	490	NA	C
	2	Jharsuguda	6.9	7.8	1.7	790	130	NA	С
	3	BrajrajnagarU/S	7.0	8.0	1.1	490	170	NA	C
	4	BrajrajnagarD/S	7.3	7.4	1.3	2200	1100	NA	C
Bheden	5	Jharsuguda	7.2	8.2	1.1	130	45	12	C
Hirakud Reservoir	6	Hirakud	7.2	7.8	1.5	490	110	NA	с
Mahanadi	7	Sambalpur U/S	7.6	7.6	1.1	130	78	NA	С
	8	Sambalpur D/S	7.7	7.4	1.5	4900	1700	27	С
	9	Sambalpur FD/S at Shankarmath	7.5	74	1.3	790	330	<1.8	С
	10	Sambalpur FD/S at Huma	7.7	7.4	1.3	1700	790	17	С
	11	Power Channel U/S	7.2	7.6	1.2	790	220	NA	С
	12	Power Channel D/S	7.5	7.4	1.5	2200	1300	NA	С
	13	Sonepur U/S	7.7	7.2	1.1	3300	1300	13	С
	14	Sonepur D/S	7.8	6.8	1.2	3400	1700	11	С
	15	Tikarpada	7.2	6.4	1.1	230	130	49	C
	16	Narasinghpur	8.1	7.9	1.2	2400	790	22	С
	17	Munduli	8.1	7.3	0.9	790	230	32	C
	18	Cuttack U/s	8.3	8.1	1.1	1100	220	14	С
	19	Cuttack D/s	8.0	8.9	1.3	2300	1300	17	C
	20	Cuttack FD/s	8.4	8.5	1.1	3300	1700	12	С
	21	Paradeep U/S	7.7	6.6	NA	1400	220	NA	С
	22	Paradeep D/S	7.1	6.0	NA	1700	270	NA	С
Ong	23	Dharuakhaman	8.1	7.4	1.2	130	78	NA	С
Tel	24	Monmunda	7.0	7.2	1.1	330	230	NA	С
Kathajodi	25	Cuttack U/s	8.2	8.3	1.1	1400	490	NA	С
	26	Cuttack D/s	8.1	8.1	2.7	1700	1300	23	С
	27	Cuttack FD/s at Mattagajpur	8.2	7.7	3.2	3500	1300	4	NC
	28	Cuttack FFD/s at Kamasasan	8.2	7.7	1.1	790	490	NA	С

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Serua	29	Cuttack FD/s at Sankhatrasa	8.3	8.3	2.9	4900	1700	12	С
Kuakhai	30	Bhubaneswar FU/s	7.4	8.2	1.2	3500	790	46	С
	31	Bhubaneswar U/s	7.7	7.3	1.4	2200	490	17	С
Daya	32	Gelapur	7.4	7.9	1.3	2200	1100	NA	С
	33	Bhubaneswar D/s	7.0	5.1	3.4	2400	1300	21	NC
	34	BhubaneswarFD/s	7.0	6.5	2.6	3500	1700	<1.8	С
	35	Kanas	7.6	6.5	1.8	2200	1300	13	С
Birupa	36	Choudwar	7.8	8.1	1.2	2300	1300	NA	С
Gangua nallah	37	Rajdhani Engineering College	7.0	2.9	4.7	160000	14000	220	NC
	38	Palasuni	6.5	2	4.3	160000	28000	230	NC
	39	Samantarapur	7.0	1.7	6.5	92000	13000	280	NC
	40	Vadimula				Not M	1onitored		
Kushabhadra	41	Bhingarpur	7.6	6.5	2.2	2400	790	NA	С
	42	Nimapara	7.6	6.2	2	1100	230	NA	С
	43	Gop	7.9	7.3	1.8	3500	1400	NA	С
Gobari	44	Kendrapada U/s	7.0	5.2	NA	780	200	NA	С
	45	Kendrapada D/s	6.9	4.6	NA	2300	340	NA	С
Mangala	46	Mangala U/s at Malatipatpur	7.8	7.6	1.3	230	130	NA	С
	47	Mangala D/s at Golasahi	7.3	6.2	1.7	2200	1700	13	С
Bhargavi	48	Chandanpur	7.9	6.6	1.3	700	220	NA	С
Devi	49	Machhagaon	6.9	6.2	NA	1100	220	NA	С
Luna	50	Luna at Bijipur	8.1	7.5	1.3	3500	1100	49	С
Sabulia	51	Rambha, Jagatnnathpatna			Not	Monitore	d		С
Kusumi	52	Tangi			Not	Monitore	d		С
Kansari	53	Banapur				Monitore			С
Badasankha	54	Langalaeswar				Monitore			С
Ratnachira	55	Kumardihi	7.0	7.1	1.8	220	170	17	С
Addition a 55 Kullardini Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)			6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

NA : Not analysed

(B) Brahmani River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non-
									Conforming (NC)
Brahmani	1	Panposh U/S	7.4	6.8	1.1	170	110	NA	c
	2	Panposh D/S	7.7	3.6	3.9	4900	1100	4	NC
	3	Rourkela D/S at Jalda	7.6	4.0	3.5	1100	230	12	NC
	4	Rourkela FD/s at Attaghat	7.5	7.0	2.7	2700	1700	14	С
	5	Rourkela FFD/s atBiritola	7.6	7.2	1.8	3300	1300	22	С
	6	Bonaigarh	7.6	6.0	1.4	790	220	NA	С
	7	Rengali	7	6.6	1.2	330	130	NA	С
	8	Samal	7	7.4	1.2	220	110	NA	С
	9	Talcher FU/S	7	7.8	1	790	170	NA	С
	10	Talcher U/s	7.1	8.6	1.1	1700	780	NA	С
	11	Mandapal	7.3	8.4	1.1	3300	1300	NA	C
	12	Talcher D/S	7.0	7.2	1.6	3500	1300	NA	C
	13	Talcher FD/S	7.5	7.0	1.2	1700	700	NA	C
	14 15	Dhenkanal U/s Dhenkanal D/s	7.2 7.4	7.2 8.2	1.3 1.9	170 2300	130 780	NA NA	C C
	15	Bhuban	7.4	6.8	1.9	3300	1300	NA	с С
	10	Kabatabandha	7.4	8.2	NA	700	1300	NA	C C
	18	Dharmasala U/s	7.4	8.0	NA	790	220	NA	C C
	19	Dharmasala D/s	7.3	7.8	NA	1300	270	NA	C
	20	Pottamundai	7.1	5.8	NA	1100	220	NA	C
Kharasrota	21	Khanditara	7.5	8.1	NA	230	130	NA	C
	22	Binjharpur	7.4	7.7	NA	330	230	NA	C
	23	Ali	6.9	5.2	NA	220	78	NA	С
Nandira jhor	24	Nandira U/s	8.3	7.4	1.2	230	78	NA	С
	25	Nandira D/s	8.3	6.4	1.8	3300	1700	33	С
Kisindajhor	26	Kisindajhor	7.6	6.2	1.6	2400	790	NA	С
Sankh	27	Sankh U/s	7.4	6.8	1.2	270	220	NA	С
Koel	28	Koel U/s	7.6	6.6	1.4	230	130	NA	С
Guradih nallah	28	Rourkela (before confluence with Brahmani river)	7.9	2.8	5.0	220	170	240	Drain
Badajhor	30	Badajhor	7.6	6.4	1.5	2400	490	NA	С
Damsala	31	Dayanabil	7.5	7.7	NA	220	130	NA	C
Gondanallah	32	, Marthapur	7.7	7.6	NA	1100	220	NA	С
Karo	33	Barbil	7.0	6.9	1.2	490	230	NA	С
Lingra	34	Lingira U/s	8.0	5.6	1.1	220	78	NA	C
	35	Lingira D/s	8.1	5.4	1.3	2300	1300	NA	С

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Ramiala	36	Kamakhyanagar	7.9	6.6	1.1	780	450	NA	С
Bangurunallah	37	Bangurunallah	7.4	6.0	1.3	2300	780	23	С
Singadajhor	38	Singadajhor	7.6	7.4	1.2	330	130	NA	С
Tikira	39	KanihaU/s	7.7	6.4	1.4	220	110	NA	С
	40	KanihaD/s	7.9	5.8	1.7	3300	1300	NA	С
Bangurusingadajhor	41	Bangurusingadajhor	7.8	5.8	1.4	2200	1700	NA	С
Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)			6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

(C) Baitarani River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Kundra nallah	1	Joda	6.9	6.7	1.4	490	330	NA	С
Kusei	2	Deogaon	7.6	6.7	1.2	220	130	NA	С
Baitarani	3	Naigarh	7.0	6.6	1.2	1300	790	NA	С
	4	Unchabali	7.0	6.4	1.1	2200	490	NA	С
	5	Champua	7.1	6.2	1.2	1300	130	NA	С
	6	Tribindha	7.4	6.6	1.1	130	78	NA	С
	7	Joda	7.4	6.8	1.1	170	78	NA	С
	8	Anandpur	7.4	6.7	1.7	270	170	NA	С
	9	Jajpur	7.4	7.9	NA	1300	270	NA	С
	10	Chandbali U/s	7.5	5.6	1.1	790	220	NA	С
	11	Chandbali D/s	7.4	6.0	1.4	1100	230	NA	С
Dhamra	12	Dhamra	7.2	6.0	1.3	2400	790	NA	C
Salandi	13	Bhadrak U/s	7.2	6.4	1.4	230	130	NA	С
14 Bhadrak D/s		7.1	6.4	1.8	1300	780	NA	С	
-	Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)			5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

NA : Not analysed

(D) Rushikulya River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Russelkunda Reservoir	1	Russelkunda Reservoir	8.3	7.8	NA	1300	270	NA	С
Badanadi	2	Aska	8.0	6.6	NA	270	130	NA	С
Rushikulya	3	Aska	8.1	6.9	NA	330	230	NA	С
	4	Nalabanta	8.0	7.3	NA	330	130	NA	С
	5	Madhopur	8.0	7.6	NA	1300	220	12	С
	6	Potagarh	8.0	7.5	NA	3500	1300	14	С
-	Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)		6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

(E) Subarnarekha River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Subarnarekha	1	Rajghat	7.7	7.2	1.1	1300	780	NA	С
Bathing Water C (MOEF Notificat 25.09.2000)	•	. No. 742(E) Dł.	6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

(F) Budhabalanga River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS <i>,</i> MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Budhabalanga	1	Baripada D/s	7.3	7.2	1.6	3300	1300	70	С
	2	Balasore U/s	7.2	6.4	1.1	490	220	NA	С
	3	Balasore D/s	7.3	6.0	1.8	3300	1300	NA	С
	4	Hatiagond (Sona)	7.6	6.8	1.2	490	220	NA	С
•	Bathing Water Quality (MOEF Notification G.S.R. No. 742(E) Dt. 25.09.2000)		6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

NA : Not analysed

(G) Bahuda River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Bahuda	1	Damodarpally	8.0	7.2	NA	2300	780	NA	С
Bathing Water Q (MOEF Notificati 25.09.2000)	•	. No. 742(E) Dł.	6.5- 8.5	5.0	3.0	-	500 (D) 2500 (P)	100 (D) 500 (P)	-

(H) Nagavali River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Nagavali	1	Penta U/s	7.9	6.4	<1.0	1700	790	NA	С
	2	Jayjkaypur D/s	7.2	6.4	1.4	1300	270	23	С
	3	Rayagada D/s	7.8	7.3	<1.0	490	170	27	C

(I) Vansadhara River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Vansadhara	1	Muniguda	7.8	7.0	1.0	490	170	NA	С
	2	Gunupur	8.0	7.2	<1.0	230	130	NA	C

NA. : Not analysed

(J) Kolab River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Kerandi	1	Sunabeda	7.8	7.1	<1.0	230	130	NA	С

(K) Indravati River system

Name of River	SI. No.	Name of Monitoring Station	рН	DO, mg/L	BOD, mg/L	TC, MPN/ 100 mL	FC, MPN/ 100 mL	FS, MPN/ 100 mL	Water Quality Status (Conforming (C)/ Non- Conforming (NC)
Indravati	1	Nawarangpur	7.7	7.4	1.0	490	170	NA	С

Proposed Utilization of Treated wastewater of STPs

(A) Cuttack

(i) Proposed utilization of wastewater of 33 MLD STP at Mattagajpur, Cuttack

Presently the treated wastewater is being discharge to Kathajodiriver.

- 1. It is proposed to utilize part of the treated wastewater from STP for agricultural use in the nearby cultivation area which is 5 Km from STP.
- 2. A part of treated wastewater may be utilized in the Central Rice Research Institute, Bidyadharpur which is around 5 Km away from STP.

(ii) Proposed utilization of wastewater of 36 MLD STP at Bidanasi, CDA, Cuttack

Presently the treated wastewater is being discharge to Kathajodiriver through Peta Nallah. 5% of treated wastewater is being reused in the Plant and lawns developed both inside and outside of the plant.

- 1. It is proposed to utilize the treated wastewater from STP in the development of Peta nallah as water body for recreational facility which is flowing adjacent to the STP.
- 2. A part of treated wastewater may be utilized for water different gardens and parks (BijuPatnaik Park and BirenMitra Park) which are around 5 Km away from STP.

(iii) Proposed utilization of wastewater of 16 MLD STP at Mttagajpur, Cuttack

The treated wastewater will be discharged to Kathajodiriver as per DPR.

- 1. It is proposed to utilize the part of the treated wastewater from STP for agricultural use in the nearby cultivation area which is 5 km from STP.
- 2. A part of treated wastewater may be utilized in the Central Rice Research Institute, Bidyadharpur which is around 5 Km away from STP.

(B) Puri

(i) Proposed utilization of wastewater of 15 MLD STP at Mangalaghat, Puri

Presently the treated wastewater is being discharge to Mangalariver.

- 1. It is proposed to utilize part of the treated wastewater from STP in Railway coach washing yard at Puri which is around 8 Km away from the STP.
- 2. The balance treated water from the STP may be utilized for development of Musa River as water body for recreational facility which is 3 Km away from the STP.

(ii) Utilization of wastewater of 5 MLD STP at Bankimuhan, Puri

Presently the treated wastewater is being utilized for casuarinaplantiation at Baliguali, Puri.

(C) Bhubaneswar

(i) Proposed utilization of wastewater of 56 MLD STP at Meherpalli, Bhubaneswar

The treated wastewater will be discharged to Gangua nallah as per DPR.

- 1. It is proposed to utilize part of the treated wastewater from STP in washing of Railway platforms at Bhubaneswar Railway Station and for washing of Railway coaches.
- 2. A part of treated water from STP may be used for Ground water recharge inside the plant. Some quantity of treated water may be used in-situ for watering of plantation and landscaping developed around the STP.

(ii) Proposed utilization of wastewater of 28 MLD STP at Basuaghai, Bhubaneswar

The treated wastewater will be discharged to Gangua nallah as per DPR.

- 1. It is proposed to utilize part of the treated wastewater from STP by the Bhubaneswar Smart City Authority for their use.
- 2. Some quantity of treated water may be used in-site for watering of plantation and landscaping around the STP.
- 3. Part of the treated water can be used for watering of parks and landscaping developed by the Bhubaneswar Municipal Corporation.

(iii) Proposed utilization of wastewater of 43.5 MLD STP at Kochilaput, Bhubaneswar

The treated wastewater will be discharged to the nearest natural drain as per DPR.

- 1. It is proposed to utilize part of the treated wastewater from STP in the firms of OUAT which is 10 km away from STP.
- 2. Part of treated water may be utilized by Airport Authority for their non-potable use which is 5 km away from the STP.
- 3. Some quantity of treated water may be used in-site for watering of plantation and landscaping around the STP.
- 1. Part of the treated water can be used for watering of parks and landscaping developed by the Bhubaneswar Municipal Corporation (Madhusudan Park, Kharabela Park, Forest Park etc.)

(iv) Proposed utilization of wastewater of 8 MLD STP at Paikarapur, Kalinganagar, Bhubaneswar

The treated wastewater will be discharged to the nearest natural drain as per DPR.

- 1. It is proposed to utilize part of the treated wastewater from STP in watering different nearby parks developed by Govt. and semi Govt. organisations.
- 2. A part of treated water may be utilized for ground water recharge inside the plant and watering of plantation and landscaping developed around the STP.
- 3. Part of the treated water may be used in institutions like CET, Bhubaneswar, SOA University etc which are within 5 km from STP.

(v) Proposed utilization of wastewater of 48 MLD STP at Rokat, Bhubaneswar

The treated wastewater will be discharged to Budhi nallah flowing nearby as per DPR.

- 1. It is proposed to utilize part of the treated wastewater from STP in Railway coach Factory of Indian Railways at Mancheswar, Bhubaneswar which is within 2- 2.5 km away from the location of STP.
- 2. Part of treated wastewater may be utilized in IDCO Industrial Estate, Mancheswar, Bhubaneswar which is 5 km away from the STP

- 3. Part of treated wastewater may be utilized in Gulf course at Infocity, Bhubaneswar which is 10 Km away from the STP
- 4. Part of treated wastewater may be utilized for watering of gardens developed by Infosys, TCS, KISS campus and other institutions which are within 10 km away from STP.
- 5. Part of treated wastewater may be utilized in Nandankanan Botanical Garden and lake which is 20 km away from STP.
- 6. A part of treated water may be utilized for ground water recharge inside the plant area.

(D) Sambalpur

Proposed utilization of wastewater of 40 MLD STP at Dhanupalli, Sambalpur

The treated wastewater will be discharged to Mahanadi river as per DPR.

- 1. The bulk treated wastewater from STP may be supplied to the Bhusan Steel and Power, Jharsuguda which is within 50 km away from the STP.
- 2. The bulk treated wastewater from STP may also be supplied to the Vedanta Aluminium factory at Jharsuguda which is also within 50 km away from the STP.
- 3. A part of treated water from the STP may be utilized for agricultural purpose in the area surrounding STP.

(E) Rourkela

Proposed utilization of wastewater of 40 MLD STP at Balughat, Rourkela

The treated wastewater will be discharged to Brahmani river as per DPR.

- 1. The treated wastewater from STP may be used for meeting water requirement of Rourkela Steel Plant .
- 2. A part of treated water from STP may be used in Railway coach washing platform.

(F) Talcher

Proposed utilization of wastewater of 2 MLD STP at Mandapal, Talcher

The treated wastewater is being discharged to Brahmani river..

1. It is proposed to utilize the treated wastewater from STP in the Talcher Thermal Power Plant of NTPC which is situated 7 Km from Talcher town.

Regulation of mining activities in Odisha

Overview of mining activities in Odisha

In Odisha, 249major mineral mines of different categories are under the consent administration of State Pollution Control Board. Major mineral mines are under Coal, Iron and Manganese, Chromite, Bauxite, limestone and Dolomite sector. The details of the mines as well as mines having valid consent till 22.10.2020 is given in Table ó 1.

Sl. No.	Mineral Ore	No. of Mines	Mines having valid consent
1.	Coal	32	29
2.	Iron & Manganese	164	70
3.	Chromite	21	13
4.	Bauxite	07	06
5	Limestone and Dolomite	25	09
Total		249	127

Table – 1: Major mines under consent administration of State Pollution Control Board

There are also 1481 nos. of other mines which are mostly Graphite, Quartzite, Pyrophyllite, Fireclay, Soapstone, China-clay, Gemstone, Mineral sand, Stone quarry and Sand mines etc. The major mineral mines i.e. Coal, Iron, Manganese, Chromite and Bauxite are mostly concentrated in seven mining clusters of Joda-Barbil-Koira, Talcher-Angul, Ib-Valley, Hemgiri block, Sukinda, Sundargarh and Raygada-Koraput area. The distribution of mines in these clusters are presented in Table ó 2.

SI. No.	Cluster	Mineral	Nos. of Mines in cluster	Total nos. of mines in the different sector	Percentage of total mines in the cluster
1.	Joda-Barbil ó Koira (Keonjhar and Sundergarh)	Iron & Manganese	128	164	90%
2.	Talcher (Angul)	Coal	15	32	47%
3.	Ib Valley (Jharsuguda)	Coal	10		31%
4.	Hemgiri block (Sundargarh)	Coal	05		16%

Table – 2: Mines in different cluster of Odisha

5.	Sukinda (Jajpur)	Chromite	17	21	81%
6.	Sundargarh (Sundargarh)	Limestone & Dolomite	22	25	88%
7.	Raygada-Koraput (Rayagad and, Koraput)	Bauxite	05	07	71%
	_1	Total	202	249	81%

The mines in cluster constitute about 81% of total mines in the respective sectors.

Measures taken for abatement of pollution due to mining activities

Consent is granted to the mines under the above provisions stipulating conditions related to prevention and control of environmental pollution. Status compliance of the stipulated conditions is periodically verified by the Board officials and appropriate action is taken based on the status compliance of the stipulation. The pollution mitigation measures of individual mines in a specific sector are summarized in Table 3.

Sl. Mines	Water pollution mitigation measures	Air pollution mitigation measures
No.		
1. Coal	 Garland drain and provision of settling pond/ mine sump for surface runoff management Effluent Treatment Plant for mine drainage water Sewage Treatment Plant for domestic effluent Oil and Grease Trap for treatment of workshop effluent Concurrent back filling of mined out voids using internal burden and followed by biological reclamation 	 Deployment of surface miner with inbuilt dust suppression system replacing Blasting and Dumper óShovel combination method of mining Wet drilling and controlled blasting of over burden(OB) to minimize dust generation Water sprinkling system at various dust generating sources to control fugitive dust emission Black topping and proper maintenance of permanent coal transportation roads to reduce fugitive dust generation Avoiding creation of ruts and pot holes on haul roads of mine to minimize generation of fugitive dust Plantation

Table 3: Pollution Mitigation Measures taken by mines in different Sectors

2.	Iron	• Toe wall, garland drain and	• Wet drilling and controlled
	&Manganese	sedimentation basin for runoff management	blasting to minimize dust generation
		• check dam and check weirs at	• Water sprinkling on haul roads
		strategic location of the mine for	and dry-fog system in mineral
		runoff management	handling plants for control of
		• Stabilization of OB by covering it	fugitive dust
		with geotextile/coir matting and	• Proper maintenance of haul
		plantation	roads to prevent generation of
		• Sewage Treatment Plant for	dust
		domestic effluent in large mines	 Disposal of tailings generated
		having colony/Discharge of	from ore beneficiation plant into
		domestic effluent to soak pit via	tailing pond and recirculation of
		septic tank	overflow water/discharge after
		• Oil and Grease separation system	settling of tailings
		for treatment of workshop effluent	Plantation
3.	Chromite	• Effluent Treatment Plant for	• Wet drilling and controlled
		treatment of mine drainage water	blasting to minimize dust
		and surface runoff water	generation
		• Toe wall and garland drain	• Water sprinkling on haul roads
		• Stabilization of OB by coir matting	to minimize dust generation
		and plantation	• Plantation
		• Sewage Treatment plant for	
		domestic effluent/or discharge into	
		soak pit via septic tank	
4.	Limestone and	• Toe wall and garland drain	• Wet drilling and controlled
	Dolomite	• Settling pond	blasting to reduce dust
			generation
			• Water sprinkling on haul roads
			to prevent dust generation
			• plantation
5.	Bauxite	• Check dam for surface runoff	• Deployment of ripper dozer to
		management	minimize dust generation
		• Effluent Treatment Plant for	• Water sprinkling on haul roads
		workshop and canteen effluent	to control dust emission
		• Back filling of mined out area using	• Plantation
		overburden	
	1		

Status of ULB wise	Management of Solid Waste
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SI. No.	ULB Name	Total MSW Generation in TPD		Total MSW being processed in TPD		Exis MS facil	w	Utiliza Capacity existing facilit	of the MSW	Prope MS Facil	W	Completion Timeline	
		Wet Waste	Dry Waste	Wet Waste	Dry Waste	мсс	MRF	Wet Waste	Dry Waste	мсс	MRF		
1	Anandpur (M)	4	4	4	4	1	1	100%	100%	1	1	31-12-2020	
2	Angul (M)	5	5	5	5	3	2	100%	100%	0	0		
3	Asika (NAC)	4	4	4	4	2	1	100%	100%	0	0		
4	Athagad (NAC)	1	1	0	0	0	0	0%	0%	1	1	31-12-2020	
5	Athmallik (NAC)	1	1	1	0	1	0	100%	0%	0	1	31-12-2020	
6	Attabira NAC	2	2	2	0	1	0	100%	0%	0	1	31-12-2020	
7	Balangir (M)	5	5	5	3	1	1	100%	60%	2	2	31-12-2020	
8	Balasore (M)	10	10	0	0	0	0	0%	0%	4	4	31-12-2020	
9	Balimela (NAC)	1	1	1	1	1	1	100%	100%	0	0		
10	Balliguda NAC	1	1	1	0	1	0	100%	0%	0	1	31-12-2020	
						1	0	0%	0%	1	1	31-12-2020	
11	Balugaon (NAC)	1	1	0	0	0		100%	100%	0	0		
12	Banki (NAC)	2	2	2	2	1	1	0%	0%	1	1	31-12-2020	
13	Banpur (NAC)	1	1	0	0	0	0		83%	1	1	31-12-2020	
14	Barbil (M)	6	6	5	5	1	1	83%	100%	2	2	31-12-2020	
15	Bargarh (M)	1	1	1	1	1	1	100%		2	4	31-12-2020	
16	Baripada (M)	10	10	10	0	2	0	100%	0%	-	0	0112 2020	
17	Barpali (NAC)	3	3	3	2.5	1	1	100%	83%	0	2	31-12-2020	
18	Basudebpur (M)	5	5	0	0	0	0	0%	0%	2	-	-	
19	Bellaguntha (NAC)	2	2	2	0	1	0	100%	0%	0	1	31-12-2020	
20	Belpahar (M)	3	3	3	0	1	0	100%	0%	1	2	31-12-2020	
21	Berhmapur (MC)	65	49	0	8	0	4	0%	16%	1	0	31-12-2020	
22	Bhadrak (M)	8	8	0	0	0	0	0%	0%	4	4	31-12-2020	
23	Bhanjanagar NAC	2	2	0	0	0	0	0%	0%	1	1	31-12-2020	
24	Bhawanipatna (M)	5	4	3	4	1	1	60%	100%	2	2	31-12-2020	
25	Bhuban (NAC)	2	2	2	2	2	1	100%	100%	0	0		
26	Bhubaneswar (MC)	248	166	5	5	1	1	2%	3%	25	25	31-12-2020	
27	Bijepur (NAC)	2	2	1	1	1	1	50%	50%	0	0		
28	Binika (NAC)	1	1	1	1	1	1	100%	100%	-	0		
29	Biramitrapur (M)	2	2	2	0	1	0	100%	0%	1	2	31-12-202	
30	Boudhgarh (NAC)	2	2	2	0	1	0	100%	0%	0	1	31-12-202	
3	Brajarajnagar (M)	4	4	4	0	1	0	100%	0%	2	3	31-12-202	
32	2 Buguda (NAC)	2	2	2	2	1	1	100%	100%	0	0		
33	Byasanagar (M)	4	4	4	3	1	1	100%	75%	1	1	31-12-202	
34	Champua NAC	2	2	0	0	0	0	0%	0%	1	1	31-12-202	
3	5 Chandbali (NAC)	2	2	0	0	0	0	0%	0%	1	1	31-12-202	
3		4	4	4	4	1	1	100%	100%	0	0		
3		2	2	2	2	1	1	100%	100%	0	0		
3		6	5	2	2	1	1	33%	40%	1	1	31-12-202	
3		142	104	11.7	2	3	1	8%	2%	16	18	31-12-202	
4		2	2	2	2	1	1	100%	100%	0	0		
4		2	2	2	2	1	1	100%	100%	0	0		

SI.	ULB Name	Total MSW Generation in TPD				MS	ting SW ities	Utiliza Capacity existing facili	of the MSW	SW Facilities		Completion Timeline
No.		Wet Waste	Dry Waste	Wet Waste	Dry Waste	мсс	MRF	Wet Waste	Dry Waste	мсс	MRF	
42	Dhamnagar (NAC)	2	2	0	0	0	0	0%	0%	1	1	31-12-202
43	Dharmagarh NAC	2	2	2	2	1	1	100%	100%	0	0	
44	Dhenkanal (M)	8	В	8	8	5	3	100%	100%	0	0	
45	Digapahandi (NAC)	2	2	2	2	1	1	100%	100%	0	0	
46	G. Udayagiri (NAC)	2	2	2	2	1	1	100%	100%	0	0	
47	Ganjam (NAC)	1	1	0	0	0	0	0%	0%	1	1	31-12-202
48	Gopalpur (NAC)	2	2	2	2	1	1	100%	100%	0	С	
49	Gudari (NAC)	2	2	0	0	0	0	0%	0%	1	1	31-12-202
50	Gunupur (M)	4	4	C	0	0	0	0%	0%	1	1	31-12-202
51	Hindol NAC	2	2	2	2	1	1	100%	100%	0	0	
	LD-BD		1 .		1		1	1	1000	0	0	
52	Hinjilicut (M)	3	3	3	3	1	1	100%	100%		0	04.00
53	Jagatsinghpur (M)	6	5	0	0	٥	0	0%	0%	2	2	31-12-202
54	Jajpur (M)	6	5	5	5	1	1	83%	100%	1	1	31-12-202
55	Jaleshwar (M)	3	3	0	0	0	0	0%	0%	1	1	31-12-202
56	Jatani (M)	6	5	5	5	1	1	83%	100%	1	1	31-12-202
57	Jeypore (M)	10	10	5	5	1	1	50%	50%	2	2	31-12-202
58	Jharsuguda (M)	8	8	5	0	1	0	63%	0%	2	3	31-12-202
59	Joda (M)	6	5	6	5	2	2	100%	100%	0	0	
60	Junagarh (NAC)	2	2	0	0	0	0	0%	0%	1	1	31-12-202
61	Kabisurjyanagar (NAC)	2	2	2	2	1	1	100%	100%	a	0	
62	Kamakshyanagar (NAC)	1	1	1	1	1	1	100%	100%	0	0	
63	Kantabanji (NAC)	1	1	1	1	1	1	100%	100%	0	0	
64	Karanjia (NAC)	2	2	0	0	0	0	0%	0%	1	1	31-12-202
65	Kashinagar (NAC)	1	1	0	0	0	0	0%	0%	1	1	31-12-202
66	Kendrapara (M)	5	5	5	5	1	1	100%	100%	1	1	31-12-202
67	Keonjhargarh (M)	6	6	5	0	1	0	83%	0%	1	2	
68	Kesinga (NAC)	2	2	2	2	1	1	100%				31-12-202
69	Khalikote (NAC)	2	2	2	2	1	1	100%	100%	0	0	
70	Khandapada (NAC)	2	2	0	0	0	0	0%	0%	0	0	24 40 202
71		2	2	2	2	1	1	0.0000000000	-	1	1	31-12-2020
72			2	2	2	1	1	100% 100%	100%	0	0	
73		5	4	5	4	1	1	100%		0	0	74 40 000
74		2	2	2	0	1	0	100%	100%	1	1	31-12-2020
75		2	2	1	1	1	1	50%	-	0	1	31-12-2020
76		8	8	5	5	1	1	63%	50% 63%	0	0	04.40.05
77		2	2	2	2	2	2	100%		1	1	31-12-2020
78		2	2	2	1.5	1	1		100%	0	0	
79		4	4	0	0	0	0	100%	75%	0	0	
80		3	3	3	0	1	0	100%	0% 0%	1	1	31-12-2020

SI	ULD Manie		tal MSW eration in TPD		MSW beir ssed in TI		Exist MS acilit	พั	Capa exis	ilization city of th ting MSV cilities	ne M	nopose MSW acilitie	Completion
No.	h.	Wet		Wet e Waste			cc	MRF	We Was	(5) (1) (2) (2) (2)		CC MI	RF
8	Nayagarh (M)	3	3	3	0		1	0	100		-		
82		2	2	0	0		0	0	0%		-	-	
8:	-3. (=)	2	2	2	0		1	0	100				
84		2	2	2	2		1	1	100				
8		1	1	1	1		1	1	100				
8		2	2	2	0		1	0	100	0.00) (
8		9	7	9	7		2	2	100				
8			7	3	3		1		439				
8		2	2	2	2		1	1					
4		Total Genera	MSW tion in	Total MS processe	W being	M	sting SW lities		Utilization Capacity of the existing MSW facilities		Prop M	osed SW lities	Completion Timeline
SI. No.	ULB Name	Wet	Dry	Wet Waste	Dry Waste	мсс	MR	RF ,	Wet Waste	Dry Waste	мсс	MRF	31-12-2020
		Waste 2	Waste 2	2	0	1	0		100%	0%	0	1	31-12-2020
92	Pipih (NAC)	2	2	2	2	1	1		100%	100%	0	0	24 40 2020
93	Polasara (NAC)	29	27	20	20	4	4		69%	74%	3	3	31-12-2020
94	Pun (M)	23	2	0	0	0	0		0%	0%	1	1	31-12-2020
95	Purusottampur (NAC)	1	1	1	1	1	1		100%	100%	0	0	
96	Rairangpur (M)	2	2	2	2	1	1		100%	100%	1	1	31-12-2020
97	Rajagangapur (M)	0	0	0	0	1	1		0%	0%	0	0	
98	Rambha (NAC)	1	1	0	C	0	0		0%	0%	1	1	31-12-2020
99	RANPUR NAC	52	44	15	7.5	3	3		29%	17%	7	7	31-12-2020
100	Raurkela (MC)	7	7	7	0	2	0		100%	0%	1	3	31-12-2020
101	Rayagada (M)	1	1	1	1	1	1		100%	100%	0	0	
102	Redhakhol (NAC) Sambalpur (MC)	46	41	15	0	3	0	1	33%	0%	8	10	31-12-2020
103 104	Sonepur (M)	3	3	3	3	1	1		100%	100%	0	0	
104		3	3	3	3	1	1		100%	100%	0	0	
105	Sunabeda (M)	5	5	5	5	1	1		100%	100%	1	1	31-12-2020
100	Sundargarh (M)	5	4	5	4	2	1		100%	100%	0	1	31-12-2020
107	Surada (NAC)	2	2	2	2	1	1		100%	100%	0	0	
109	Talcher (M)	6	6	5	5	1	1		83%	83%	1	1	31-12-2020
110	Tarbha (NAC)	1	1	1	1	1	1		100%	100%	0	0	
111	Titilagarh (M)	3	3	3	3	1	1		100%	100%	0	0	
112	Tusura NAC	1	1	0	0	0	0)	0%	0%	1	1	31-12-2020
113	Udala (NAC)	2	2	2	2	1	1		100%	100%	0	0	
114	Umerkote (M)	0	0	0	D	1	1		0%	0%	0	0	
	Total:	923	762	478.2	321.5	112	84	4	52%	42%	126	151	