

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (UBS) DEPARTMENT

Letter No.1282446/UBS/2020

Dated:30-01-2023

From
The Special Chief Secretary to Government,
MA & UD Department,
A.P. Secretariat,
Velagapudi,
Guntur District

To
The Secretary,
Ministry of Jal Sakti,
MoHUA.,
Government of India,
New Delhi.(w.e.)

Sir,

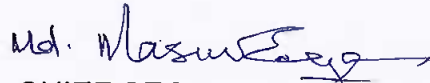
Sub:- MA & UD Department - National Green Tribunal – Orders of the
National Green Tribunal Principal Bench, New Delhi in OA
No.673/2018 - Monthly Progress Report for the month of
DECEMBER, 2022 - Furnished – Regarding.

Ref:- Orders of the National Green Tribunal Principal Bench, New Delhi in
OA No.673/2018, dated.24.09.2020.

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In compliance to the directions of the Hon'ble National Green Tribunal Principal Bench, New Delhi in the reference cited, I am herewith enclose the Monthly Progress Report in the prescribed format for the month of December, 2022 for taking further necessary action.

Yours faithfully,



For SPECIAL CHIEF SECRETARY TO GOVERNMENT



National Mission for Clean Ganga
Format for submission of Monthly Progress Report for Month of December
2022 in the NGT Matter OA No. 673 of 2018(in compliance to NGT order
dated 24.09.2020)
For the State of Andhra Pradesh

Overall status of the State:

I. Total Urban Population :@1.5 Crore

II. Estimated Sewage Generation (MLD) : 1503.20 MLD

III. Details of Sewage Treatment Plants:

- Existing STPs and Treatment Capacity (15 ULBs) : 615.45 MLD (48Nos)
- Present Gap in Treatment Capacity in MLD : 888.75 MLD
- Quantity of Treated Sewerage : 477.40 MLD
- Capacity of under construction STP's (33 ULBs) :428.17.MLD (58 Nos)
- Operational STPs : 48 Nos
- Complying STPs :43Nos
- Non-complying STP : 5Nos (Pulivendula,&Ongole
Commissioned and Under Trail Run) 3 Nos. Each in
Pulivendula, Kadapa & Puttaparthi under
RehabilitationQuantity of Reuse of Treated water : 119.90 MLD
- No of STPs Under Construction at APTIDCO Houses : 117.75 MLD (130 Nos)
(0.20 to 3.70 MLD)
- Gap after completion of above STPs : 341.83 MLD
- STPs Proposed Under SBM 2.0
(below 1 lakh population) : 569.08 MLD (66 ULBs)
(Originally Proposed in 74 ULBS and reduced to
66 ULBs as certain STPs have been taken up with
State Grants and AIIB Funding)
- STPs Proposed Under AMRUT 2.0 : 353.27 MLD
For Rs. 1829.28Crs. Submitted to Government of India.

III (A) Details of each existing STP in the State:

Sl. No	City / Town	Location of STP	Date of Commissioning	Existing STP Capacity (in MLD)	Utilization capacity (in MLD)	Operational Status of STP	Compliance Status of STP
1	GVMC	Old town	05/2019	38.00	38.00	Operational	Complied
2		Appughar	09/2010	25.00	25.00	Operational	Complied
3		Mudasarlova	04/2008	13.00	13.00	Operational	Complied
4		Narava	08/2001	54.00	54.00	Operational	Complied
5		Anakapalle	04/2018	15.00	15.00	Operational	Complied
6		Madinabagh	2018	2.00	2.00	Operational	Complied
7		Yathapalem Colonies	04/2008	2.50	2.50	Operational	Complied
8		Srinagar	04/2008	0.50	0.50	Operational	Complied
9		Karnavanipalem	12/2019	5.00	0.0	Operational	Complied
10		Mantripalem	04/ 2008	1.00	1.00	Operational	Complied
11		Aganampudi	12/2015	6.00	6.00	Operational	Complied
12		RathiCheruvu	09/ 2019	2.00	2.00	Operational	Complied
13		Kommadi / Madhurawada	08/2018	4.00	4.00	Operational	Complied
14		Bakkannapalem	08/ 2011	1.00	1.00	Operational	Complied
15		Marikavalasa	12/ 2012	2.00	2.00	Operational	Complied
16		Vambay Colony	08/ 2011	3.00	3.00	Operational	Complied
17		YSR Nagar	08/ 2011	2.00	2.00	Operational	Complied
18		Boyapalem	08/ 2011	1.00	1.00	Operational	Complied
19		Narava	10/2022	54.00	15.00	Under Trail Run	Complied
			Sub Total	231	187.00		

Sl. No	City / Town	Location of STP	Date of Commissioning	Existing STP Capacity (in MLD)	Utilization capacity (in MLD)	Operational Status of STP	Compliance Status of STP
20	Rajamahendravaram	Hukumpeta	01/2009	30.00	30.00	Operational	Complied
21	Vijayawada	Ajith Singh Nagar-1	05/2011	40.00	40.00	Operational	Complied
22		Ajith Singh Nagar-2	05/2012	20.00	20.00	Operational	Complied
23		Ramalingeswar Nagar-1	06/2012	20.00	20.00	Operational	Complied
24		Ramalingeswar Nagar-2	10/2006	10.00	10.00	Operational	Complied
25		Autonagar -1	03/2005	10.00	10.00	Operational	Complied
26		Autonagar -2	12/2018	10.00	10.00	Operational	Complied
27		Jakkampudi	07/2017	20.00	20.00	Operational	Complied
			Sub Total	130.00	130.00		
28	Tirupathi	Thukivakam	09/.2018	50.00	33.00	Operational	Complied
29	Kadapa	Nanapally	08/2012	20.00	10.00	Under Rehabilitation	-

30	Pulivendula	Rotarypuram	01/2009	6.50	2.50	Under Rehabilitation	-
31		Rotarypuram	10/2022	10.00	0.00	Under Trail Run	-
				16.50	2.50		
32	Tadipatri	Gannevaripalle	10/2010	3.50	3.50	Operational	Complied
33			10/2010	8.00	8.00	Operational	Complied
			Sub Total	11.50	11.50		
34	Puttaparthi	1.Sai Nagar	07/2001	0.50	0.50	Operational	Complied
35		2. Gokulam	07/.2001	0.50	0.20	Operational	Complied
36		3. Prasanthi Gram	07/2001	0.50	0.0	Under Rehabilitation	-
			Sub Total	1.50	0.70		
37	Narsaraopeta	CPT Road	02/2018	15.55	9.50	Operational	Complied
38	Nellore	Janardhan Reddy Colony	-	5.00	5.00	Operational	Complied
39		Allepuram	-	55.00	55.0		
40			Drivers Colony	-	11.00	0.00	Operational
			Sub Total	71.00	60.00		
41	Kurnool	Jammichettu	03/2019	0.80	0.80	Operational	Complied
42		SankalBagh	03/2019	0.80	0.80	Operational	Complied
43		Tungabhadra PumpHouse	03/2018	0.80	0.80	Operational	Complied
			Sub Total	2.40	2.40		
44	Tadepalli	Mahanadu-1	12/2018	0.20	0.20	Operational	Complied
45		Mahanadu-2	12/2018	0.20	0.20	Operational	Complied
				0.40	0.40		
46	Kondapalli	Security Colony	12/2021	0.80	0.40	Operational	Complied
47	Yemmiganuru	Soganur Road	06/2022	19.80	0.00	Operational	-
48	Ongole	Koppolu	10/2022	15.00	0.00	Under Trail Run	-
		Grand Total		615.45	477.40		

III (B) Details of Under Construction STPs in the State:

S. No.	Location	Scheme Name	No. of STP	Capacity of the plant (in MLD)	Physical Progress in %	Completion Timeline	Status
1	Srikakulam	AMRUT	1	10.00	45%	Dec - 2023	Proposals submitted to the Govt for tenders

2	Vizianagaram	AMRUT	1	5.00	54%	Dec - 2023	Proposals submitted to the Govt for re tenders
3	Kakinada	AMRUT	1	5.00	72%	March 2023	In Progress
4	Rajamahendravaram	AMRUT	1	5.00	64%	May2023	In Progress
5	Bhimavaram	AMRUT	1	5.00	75%	March 2023	In Progress
6	Tadepalligudem	AMRUT	1	5.00	5%	Dec - 2023	In Progress
7	Eluru	AMRUT	1	5.00	93%	June-2023	In Progress
8	Machilipatnam	AMRUT	1	5.00	48%	Sep -2023	Proposals submitted to the Govt for Closer
9	Gudivada	AMRUT	1	5.00	73%	March 2023	In Progress
10	Vijayawada	JNNURM	1	20.00	90%	March-2023	In Progress
11	Tenali	AMRUT	1	10.00	80%	March-2023	In Progress
		14 FC	1	2.00	30%	March - 23	Work stopped due to court case
12	Chilakaluripeta	AMRUT	1	5.00	30%	June2023	In Progress
13	Kavali	AMRUT	1	15.00	90%	March-2023	In Progress
14	Nellore	HUDCO	1	20.00	85%	March - 23	In Progress
			1	14.00	0%	Sept-2023	The site issue resolved, work will be Grounded
15	Tirupati	Smart City	1	25.00	72%	March 2023	In Progress
16	Srikalahasti	AMRUT	1	7.00	46%	March 2023	In Progress
17	Madanapalle	AMRUT	1	5.00	22%	March 2023	In Progress
18	Kadapa	AMRUT	1	20.00	0%	Dec -2023	A.S. Accorded, Re Tender to be floated
19	Anantapuramu	AMRUT	1	10.00	-	Dec - 2023	LoA issued to the Agency. Agreement to be Concluded
20	Dharmavaram	AMRUT	2	8.00	-	Dec - 2023	LoA issued to the Agency. Agreement to be Concluded
21	Guntakal	AMRUT	1	8.00	2%	March 2024	A.S. Accorded, Re Tender to be floated

22	Kurnool	AMRUT	1	2.00	91%	March 2023	In Progress
		AMRUT	1	10.00	25%	Sep- 2023	In Progress
23	Nandyal	AMRUT	1	10.00	41%	May -2023	In Progress
24	Adoni	AMRUT	1	5.00	29%	May -2023	In Progress
25	Guntur	OTSFA	1	10.00	70%	Dec -2023	-
			1	20.00	60%	Dec -2023	-
			1	42.00	51%	Dec -2023	-
			1	28.00	51%	Dec -2023	-
			1	23.00	0%	March - 2024	The site issue resolved, Work will be Grounded
26	Pulivendula	PLAN	1	1.50	97%	Feb-2023	In Progress
			1	1.50	5%	June -2023	In Progress
			5	2.50 (0.50 MLD x 5 Nos)	35%	March 2023	In Progress
			1	0.02	5%	March 2023	-
			1	0.07	5%	March 2023	-
			1	0.08	5%	March 2023	-
			1	0.10	5%	March 2023	-
27	Rayachoti	PLAN	5	6.90	5%	Dec -2023	In Progress
			1	15.50	2%	Dec -2023	-
29	Kondapalli	CSR Fund	1	2.00	45%	Dec -2023	In Progress
30	Kanigiri	AIIB	1	6.00	2%	March 2024	Sites handed over, Designs under finalization
31	Sullurpet	AIIB	3	8.00	4%	March 2024	Sites handed over, Designs under finalization
32	Allagadda	AIIB	1	5.00	2%	March 2024	Sites handed over, Designs under finalization
34	Nandikotkur	AIIB	1	5.00	0 %	March 2024	Sites handed over, Designs under finalization
34	Madakasira	AIIB	1	5.00	2%	March 2024	Sites handed over, Designs under finalization
Grand Total			58	428.17			

III (C) Details of Proposed STPs in the State:

Phase	Description	No. of ULBs	Proposed STP capacities (MLD)	Cost of Total STPs (crores)
I	Municipal Corporations	17	539.00	1617.00
II	ULBs having population above 1,00000 Lakh	18	221.00	663.00
III	ULBs having Population ranging between 75,000 to 1.00 Lakh	8	43.00	129.00
IV	ULBs having Population less than 75,000	78	499.00	1497.00
V	Taxes and others etc @20%			781.20
	Total		1302.00	4687.20

III D) STPs under Sanction process:

S.No	Name of the Scheme	No. of ULBs	Capacity of STPs in MLD	Amount Rs. In Crores
1	AMRUT 2.0	27	343.31	1806.79
2	NRCP	1	50.60	95.50
3	Swachha Bharat Mission	66	569.08	943.71
	Total	94	962.99	2846.00

III D) Details of Under Construction STPs in APTIDCO Houses:

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
1	3	4	5	6	7	8
1	Srikakulam	Patrunivalasa	2.10	6.10	96%	March -2023
2	Vizianagaram	Saripalli	1.50	4.92	78%	March -2023
3	GVMC	Satyanarayanapuram	1.50	7.92	75%	Feb -2023
4	GVMC	Parawada	0.50		75%	Feb -2023
5	TadepalliGudem	a. Kondruprolu-I	2.00	19.80	62%	Feb -2023
6		b. Kondruprolu-II	0.75		59%	Feb -2023
7	Palakollu	Penukulapadu	3.50		53%	Feb -2023
8	Kavali	Maddurupadu	1.50	18.99	95%	March -2023
9	Atmakur	Nellorepalem	1.00		95%	March -2023
10	Gudur	Gandhinagar	3.70		95%	March -2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
11	Kurnool	Jagannadhagattu	0.50	45.16	85%	March -2023
12			0.50		85%	March -2023
13			1.00		90%	March -2023
14			1.50		85%	March -2023
15			2.00		90%	March -2023
16	Nandyal	SRBC Colony	1.00		85%	March -2023
17			1.00		85%	March -2023
18		Nandhamuri Nagar	1.00		75%	March -2023
19			1.00		75%	March -2023
20	Adhoni	Siriguppa Road	1.00		85%	March -2023
21			1.00		85%	March -2023
22	Peddapuram	Valuthimmapuram	2.00	40.36	82%	March -2023
23	Mandapeta	Gollapunta	3.00		65%	March -2023
24	Pithapuram	Gorsa	0.50		75%	March -2023
25	Ramachandrapuram	Kothuru (Ph-I)	0.75		65%	March -2023
26	Amalapuram	Bodasukurru	1.00		0%	March -2023
27	Rajamahendravaram	Bommuru-I	1.50		82%	March -2023
28	Rajamahendravaram	Torredu	0.50		61%	March -2023
29	Samalkota	Jaggamvaripeta	0.50		75%	March -2023
30	Samalkota	Uppuvarisatram	0.50		80%	March -2023
31	Tenali	Chinaravuru	0.60	17.02	99%	Under Trail Run
32	Ponnuru	Nidubrolu	1.25		96%	Under Trail Run
33	Chilakaluripeta	Purushothapatnam	2.80		100%	Under Trail Run
34	GVMC	Dabbanda	0.90	8.00	60%	March -2023
35	GVMC	Aganampudi (Tri Junction)	1.10		30%	March -2023
36	Vijayawada	Jakkampudi I (A)	0.90	14.90	90%	March -2023
37	Vijayawada	Jakkampudi II (B)	0.60		75%	March -2023
38	Vijayawada	Jakkampudi III (C)	0.90		80%	March -2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
39	Vijayawada	Jakkampudi IV (D)	0.90	20.59	75%	March -2023
40	Gudivada	Mallayapalem I	1.60		20%	March -2023
41	Gudivada	Mallayapalem II	2.70		20%	March -2023
42	Machilipatnam	Gosangam II	0.50		20%	March -2023
43	Machilipatnam	Rudravaram II	0.70		15%	March -2023
44	Mangalagiri	RGK Colony -I	0.80	19.71	100%	Under Trail Run
45	Guntur	Vengalayapalem I & II	1.50		75%	March -2023
46	Repalle	Repalle II	0.60		0%	March -2023
47	Piduguralla	Kondamodu II	1.30		40%	March -2023
48	Macherla	Gorrilamandhi-II	0.50		65%	March -2023
49	Srikalahasthi II	S.W. Hostel -II	0.90	21.73	70%	Feb - 2023
50	Chittoor	Murukumbattu -II	1.30		85%	Feb - 2023
51	Puttur	Nandimangalam -II	0.20		52%	Feb - 2023
52	Punganur	Ethuru -II	0.70		72%	Feb - 2023
53	Madanapalli	Venkappakota -II	0.90		71%	Feb - 2023
54	Srikalahasthi I	Rajiv Nagar -I	1.00		72%	Feb - 2023
55	Kakinada	Kakinada(Paralovapeta)	1.50	17.66	5%	April - 2023
56	Rajahmundry	Bommuru-II	1.50		10%	April - 2023
57		Namavaram	0.75		10%	April - 2023
58	Ramachandrapuram	KothuruIII	1.00		8%	April - 2023
59	Naidupeta-II	Biradawada	0.90	25.08	75%	April - 2023
60	Sullurupeta-II	Mannrupoluru	0.80		80%	April - 2023
61	Venkatagiri-II	Chevireddypalli	0.80		86%	April - 2023
62	Nellore	Akkacheruvupadu-II	1.60		75%	April - 2023
63	Nellore	Kallurupalli-II	1.10		75%	April - 2023
64	Nellore	Kondlapudi II&III	1.20		81%	April - 2023
65	Kandukur	Uppucheruvu-I	1.40	7.89	42%	May - 2023
66	Markapur	Pedanagulavaram Road -I	0.50		12%	May - 2023
67	Vizianagaram	Sonia nagar	0.50	18.14	58%	April - 2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
68	Nellimarla	Nellimarla	0.30		59%	April - 2023
69	Rajam	Kancharam	0.20		0%	April - 2023
70	Amadalavalasa	Byrsastrulla-pet	0.30		55%	April - 2023
71	Bobbili	Bobbili	0.80		48%	April - 2023
72	Saluru	Saluru	0.60		51%	April - 2023
73	Parvathipuram	Parvathipuram	0.40		48%	April - 2023
74	Tanuku	Indiramma Colony	0.20	20.73	-	June - 2023
75	Tanuku	BalaBalaji	0.30		-	June - 2023
76	Jangareddygudem	Markandeyapuram -II	0.40		-	June - 2023
77	Nidadavolu	Tirugudem -II	0.50		-	June - 2023
78	Kovvuru	Pedathallapunta -II	0.30		-	June - 2023
79	Eluru	Ponangi road	2.50		-	June - 2023
80	Eluru	Kotturu road	0.20	12.89	-	June - 2023
81	Vinukonda	Vellaturu road II	0.70		-	June - 2023
82	Kanigiri	Chakirala -III	0.50		-	June - 2023
83	Giddaluru	Modempalli -III	0.60		-	June - 2023
84	Addanki	Singarakonda -III	0.50	23.65	-	June - 2023
85	Nuziveedu	M.R. Apparao colony II	1.30		-	June - 2023
86	Tiruvuru	PT Kotturu II	0.40		-	June - 2023
87		PT Kotturu II	0.40		-	June - 2023
88	Jaggaihpeta	Gurukulapathasala II	1.60		-	June - 2023
89	Nandigama	Hanumanthupalem II	0.20		-	June - 2023
90	Vuyyuru	Gemini School -II	0.90		-	June - 2023
91	Vuyyuru	Gandigunta -II	0.30		-	June - 2023
92	Vuyyuru	Raghava estates -II	0.10	6.10	-	June - 2023
93	Adavitakkilapadu	Adavitakkilapadu	2.00		93%	March - 2023
94	Kadapa	Chinnachowk -I	1.00	19.07	21%	May - 2023
95	Kadapa	Chalamareddypalli -II	1.00		21%	May - 2023
96	Jammalamadugu	Gudemcheruvu -II	1.00		4%	May - 2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
97	Rayachoti	Sibyala -II	0.50	7.36	6%	May - 2023
98	Yerraguntla	Yerraguntla road -II	1.00		21%	May - 2023
99	Nandyal	Alyyalurimitta	1.00		10%	May - 2023
100	Allagadda	Chinthakuntla Village-III	0.60	37.67	15%	May - 2023
101	Tadipatri I &II	Gannavaripalli -I&II	2.75		16%	June - 2023
102	Dharmavaram	Regatipalli-II	0.75		18%	June - 2023
103	Hindupur	Kotipi-II	0.70		18%	June - 2023
104	Kadiri	Hindupur road-II	0.60		18%	June - 2023
105	Pamidi	VKA Reddy colony-II	0.70		18%	June - 2023
106	Puttaparthi	Karnataka nagepalli-II	0.25		10%	June - 2023
107	Ananthapur	Pandameru-3	1.25		10%	June - 2023
108	Guntakal	Dhonimukkala-3	1.25		18%	June - 2023
109	Raydurgam	Mallapuram-3	0.60		18%	June - 2023
110	Ichapuram	Ichapuram	0.10	14.50	0%	June - 2023
111	Palasa	Palasa	0.40		5%	June - 2023
112	GVMC	Appikonda	0.40		5%	June - 2023
113	GVMC	Mulagada	0.20		6%	June - 2023
114	GVMC	Nadipur	0.50		5%	June - 2023
115	GVMC	Sangivalasa	0.30		5%	June - 2023
116	GVMC	Kondakoppaka	0.20		7%	June - 2023
117	GVMC	Sirasapalli	0.30	17.08	30%	June - 2023
118	GVMC	AtchauLova-1	1.00		28%	June - 2023
119	GVMC	AtchauLova-2	1.00		28%	June - 2023
120	Yelamanchili	Yelamanchili	0.20		35%	June - 2023
121	Narsipatnam	Narsipatnam-1	0.60		30%	June - 2023
122		Narsipatnam-2	0.30		30%	June - 2023
123	CRDA	Ananthavaram	0.20	16.46	77%	June - 2023
124		Dondapadu	0.50		80%	June - 2023
125		Thulluru	0.20		77%	June - 2023

Sl. No	Name of the ULB	Name of the Location	Capacity in MLD	Estimate Amount (Rs.In.Crs)	Physical Progress in %	Completion Timeline
126		Manadadam	0.20		88%	June - 2023
127		Inavolu	0.30		74%	June - 2023
128		Nowluru	0.30		78%	June - 2023
129		Penumaka	0.30		86%	June - 2023
130		Nidamaruru	0.30		86%	June - 2023
			117.75	489.47		

III E) Details of STPs submitted to Govt. for sanction under AMRUT 2.0

S. No.	Name of the ULB	Capacity of STP in MLD	Project Cost in Rs. Crs
1	Srikakulam	5.00	53.66
2	Vizianagaram	5.00	28.00
3	GVMC	0.76	3.80
4	Kakinada	23.00	86.56
5	Bhimavaram	1.86	12.39
6	Tadepalligudem	8.26	124.26
7	Eluru	11.10	194.42
8	Gudivada	24.70	103.34
9	Machilipatnam	10.14	39.70
10	Guntur	10.37	70.73
11	Narsaraopeta	3.00	21.40
12	Chilakaluripeta	15.50	64.54
13	Tenali	8.00	32.00
14	Ongole	27.63	150.56
15	Kavali	3.96	33.43
16	Nellore	12.00	70.24
17	Madanapalle	1.29	6.45
18	Chittoor	13.57	52.28
19	Kadapa	9.64	66.22
20	Tadipatri	6.00	13.23

21	Hindupur	23.00	79.00
22	Dharmavaram	8.66	33.30
23	Anantapur	25.00	48.00
24	Guntakal	2.24	13.15
25	Nandyal	26.12	168.21
26	Kurnool	36.07	134.19
27	Adoni	21.44	103.73
	Total	343.31	1806.79

III E) STATUS OF STPs UNDER RIVER STRETCHES

- Total Estimated Sewage Generation (in MLD) 2022 :302.00 MLD
- Existing no. of STP with Treatment Capacity (11 Nos):162.40 MLD
- Present Gap in Treatment Capacity (in MLD) : 139.60 MLD
- Capacity of under Construction STPs (in MLD) : 57.00 MLD
- Gap after completion of ongoing Projects : 82.60 MLD

S. No	Name of River Stretch	Name of the ULB	Ongoing STP Capacity (in MLD)	Status of Ongoing Works	Status of DPRs
1.	Tungabhadra	Kurnool	10 MLD	25%	Administrative sanction for an amount of Rs.79.78Cr has been accorded by the Government for construction of 35.60MLD capacity of STPs and submitted to Govt. of India for sanction of funds under AMRUT 2.0
			2 MLD	91%	
2	Kundu	Nandyal	10 MLD	41%	Comprehensive DPR on UGD scheme is prepared for Rs.85.00 Cr with STPs capacity of 26 (21+5) MLD to cater the needs up to the year 2035. DPR submitted to the Govt. for according Administrative Sanction.

S. No	Name of River Stretch	Name of the ULB	Ongoing STP Capacity (in MLD)	Status of Ongoing Works	Status of DPRs
1.	Nagavali	Srikakulam	10 MLD	45%	Comprehensive proposal for providing UGD scheme to cater the needs up to 2035 year is prepared for an amount of Rs.190.36 Crs with an additional STP capacity of 12 MLD.
2.	Godavari	Rajamahendravaram	5 MLD	64 %	DPR on Comprehensive UGD scheme prepared with additional STP's with a capacity of 72.37 MLD for an amount of Rs.404.00 Cr. GoI accorded Administrative Approval & sanctioned an amount of 88.43 Crores for Project "Pollution abatement and conservation of River Godavari under NRCP" on 17/03/2022. SNA account opened and the Govt. was requested to accord administrative sanction for Rs.95.50 Crores (incl. Centage charges) for construction of 50.60 MLD STP and other auxiliary components
3.	Krishna	Vijayawada	20 MLD	90%	DPR is prepared for providing Comprehensive UGD scheme to meet the demand up to the year 2035 @ Rs.246.38 Crs including up-gradation of 2 STPs of 30.00 MLD capacity. Proposals for upgradation of existing 20 MLD STP, Bio-Gas Energy plants is prepared with an estimated cost of Rs.14.93 Crores and submitted the proposal to Government for according administrative sanction.

III F) Status of STPs & NSTPs in Below 1 Lakh Population ULBs:

State Level Technical Committee and State High Power Committee Approved the following Details regarding construction of STPs in below 1 lakh population cities on 07.06.2022 and 10.06.2022 respectively.

- Proposed STPs (below 1 lakh population) : 74 ULBs
- Proposed Capacity for year 2040 : 659.00 MLD
- Total Project Cost : 1445 Cr

As mentioned above, CSAPs and DPRs for 74 ULBs were completed and submitted to SBM, Director and CPHEEO, Director – New Delhi upon approval from SLTC and SHPC for release of funds.

Note: In the above-mentioned 74 ULBs

- Puttaparthi is having 3 existing STPs, therefore excluded as requested by the Municipal Commissioner vide Roc. No.20/2020-E1, Dt:18.08.2022.
- 5 ULBs (Sullurpet, Nandikotkur, Allagadda, Madakasira and Kanigiri) are funded under Asian Infrastructure Investment Bank (AIIB) for construction of STPs.
- Pulivendula and Rayachoti are funded under State Special Grants.
- For the remaining **66 ULBs, cluster wise tenders were floated on 04.11.2022 for 569 MLD in 13 clusters with due date of receipt of tender is on 17.01.2023.**

Cluster Wise Abstract for 66 ULBs:

Sl.No.	Description	No. of ULBs	Proposed STP capacities (MLD)	Cost of Total STPs (crores)
1	Cluster 1	06	45.381	76.074
2	Cluster 2	06	47.174	78.979
3	Cluster 3	07	45.650	75.401
4	Cluster 4	06	45.062	74.479
5	Cluster 5	06	50.050	82.864
6	Cluster 6	05	49.705	82.266
7	Cluster 7	04	35.944	59.385
8	Cluster 8	05	47.986	79.286
9	Cluster 9	04	31.100	51.623
10	Cluster 10	05	43.600	72.390
11	Cluster 11	04	41.600	68.640
12	Cluster 12	04	43.012	71.247
13	Cluster 13	04	42.816	71.078
	Total	66	569.080	943.712

Cluster 1 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Srikakulam	Amadalavalasa	STP 01	2.100
		STP 02	1.200
		STP 03	1.000
		STP 04	1.000
		NSTP 01	0.049
		NSTP 02	0.142
		NSTP 03	0.061
		NSTP 04	0.391
		NSTP 05	0.180
		NSTP 06	0.186
		NSTP 07	0.101
		NSTP 08	0.277
		NSTP 09	0.077
		NSTP 10	0.208
		NSTP 11	0.279
	Ichapuram	STP 01	4.800
		NSTP 01	0.778
		NSTP 02	0.371
		NSTP 03	0.451
	PalasaKasibugga	STP 01	10.068
		NSTP 01	0.645
		NSTP 02	0.014
		NSTP 03	0.014
Manyam	Palakonda	STP 01	5.000
	Parvathipuram	STP 01	7.400
		NSTP 01	0.185
		NSTP 02	0.130
		NSTP 03	0.284
		NSTP 04	0.126
		NSTP 05	0.161
		NSTP 06	0.112
		NSTP 07	0.092
	Salur	STP 01	7.500
2	6	33	45.381

Cluster 2 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Vizianagaram	Rajam	STP 01	4.600
		STP 02	1.500
		STP 03	1.500
		NSTP 01	0.159
		NSTP 02	0.134
		NSTP 03	0.160
		NSTP 04	0.174
		NSTP 05	0.146
		NSTP 06	0.169
		NSTP 07	0.157

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
	Bobbili	STP 01	3.500
		STP 02	2.500
		STP 03	2.500
		NSTP 01	0.151
		NSTP 02	0.157
		NSTP 03	0.062
		NSTP 04	0.203
		NSTP 05	0.065
		NSTP 06	0.066
	Nellimarla	STP 01	4.000
Anakapalli	Narsipatnam	STP 01	4.800
		STP 02	4.500
		NSTP 01	0.182
		NSTP 02	0.244
		NSTP 03	0.105
		NSTP 04	0.071
	Yellamanchali	STP 01	4.000
		NSTP 01	0.295
		NSTP 02	0.131
		NSTP 03	0.441
		NSTP 04	0.102
		NSTP 05	0.109
		NSTP 06	0.161
		NSTP 07	0.500
		NSTP 08	0.138
		NSTP 09	0.301
		NSTP 10	0.091
		NSTP 11	0.400
Kakinada	Tuni	STP 01	8.700
3	6	39	47.174

Cluster 3 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Kakinada	Samalkot	STP 01	8.600
	Pithapuram	STP 01	1.100
		STP 02	1.000
		STP 03	1.000
		STP 04	1.000
		STP 05	1.000
		STP 06	1.000
		STP 07	1.000
		STP 08	1.000
	Peddapuram	STP 01	7.300
		NSTP	0.350
	Gollaprolu	STP 01	3.900
	Yeleswaram	STP 01	4.700

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
East Godavari	Nidadavole	STP 1	3.700
		STP 2	3.000
	Kovvur	STP 01	4.000
		STP 02	2.000
2	7	17	45.650

Cluster 4 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Konaseema	Amalapuram	STP 01	7.400
		NSTP 01	0.256
		NSTP 02	0.306
	Ramachandrapuram	STP 01	6.700
	Mandapeta	STP 01	4.700
		STP 02	4.000
	Mumidivaram	STP 01	4.100
West Godavari	Palacole	STP 01	5.100
		STP 02	4.000
	Narsapur	STP 01	4.600
		STP 02	3.900
2	6	11	45.062

Cluster 5 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
West Godavari	Tanuku	STP 01	10.700
		NSTP 01	0.066
		NSTP 02	0.071
Eluru	JangareddyGudem	STP 01	5.00
		STP 02	4.50
	Nuzivid	STP 01	5.200
		STP 02	4.600
		NSTP 01	0.228
Krishna	Pedana	STP 01	2.400
		STP 02	1.600
		NSTP 01	0.345
	Vuyyuru	STP 01	4.000
		STP 02	3.000
NTR District	Tiruvuru	STP 01	5.000
		STP 02	2.800
		NSTP 01	0.150
		NSTP 02	0.150
		NSTP 03	0.240
4	6	18	50.050

Cluster 6 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
NTR	Jaggiahpeta	STP 01	5.400
		STP 02	5.000
	Nandigama	STP 01	3.091
		STP 02	2.770
		STP 03	1.850
Palnadu	Macherla	STP 1	9.900
	Sattenapalli	STP 1	9.470
	Piduguralla	STP 1	5.900
		STP 2	5.200
		NSTP 01	0.534
		NSTP 02	0.590
2	5	11	49.705

Cluster 7 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Palnadu	Vinukonda	STP 1	5.700
		STP 2	5.500
Prakasam	Markapur	STP 01	12.400
		NSTP 01	0.344
	Giddalur	STP 1	6.100
	Chimakurthy	STP 1	5.900
2	4	6	35.944

Cluster 8 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Baptla	Repalle	STP 1	5.600
		STP 2	2.400
	Bapatla	STP 01	3.000
		STP 02	5.000
		STP 03	2.180
	Chirala	STP 01	7.120
		STP 02	5.000
	Addanki	STP 01	7.000
		STP 02	2.400
Guntur	Ponnur	STP 01	7.800
		NSTP 01	0.486
2	5	11	47.986

Cluster 9 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Nandyal	Dhone	STP 1	11.300
	Atmakur	STP 01	7.200
		NSTP 01	0.586
		NSTP 02	0.181
		NSTP 03	0.253
Kurnool	Gudur	STP 1	3.800
YSR Kadapa	Jammalamadugu	STP 01	7.430
		NSTP 01	0.175
		NSTP 02	0.175
3	4	9	31.100

Cluster 10 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
YSR Kadapa	Badvel	STP 01	13.900
		NSTP 01	0.243
		NSTP 02	0.654
		NSTP 03	0.447
	Mydukur	STP 01	8.100
	Yerraguntla	STP 01	3.000
		STP 02	2.200
		NSTP 01	0.111
SPS Nellore	Kandukur	STP 01	9.600
		NSTP 01	0.143
	Atmakur	STP 01	4.800
		NSTP 01	0.078
		NSTP 02	0.138
		NSTP 03	0.186
2	5	14	43.600

Cluster 11 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Ananthapur	Rayadurg	STP1	10.700
	Gooty	STP1	3.600
		STP2	4.400
	Kalyandurgam	STP 1	8.000
Sri Satya Sai	Kadiri	STP 1	14.900
2	4	5	41.600

Cluster 12 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Sri Balaji	Gudur	STP 01	7.400
		STP 02	6.500
		NSTP 01	0.106
	Venkatagiri	STP 01	9.580
		NSTP 01	0.338
	Naidupet	STP 01	7.900
		NSTP 01	0.788
Annamaya	Rajampeta	STP 01	10.400
2	4	8	43.012

Cluster 13 Details:

District Name	Name of the ULB	Total No. of Projects (STP+NSTP)	Proposed Capacity (MLD)
Chittoor	Punganur	STP 1	5.000
		STP 2	4.200
		NSTP 1	0.507
		NSTP 2	0.157
	Palamaneru	STP 1	8.700
		NSTP 1	0.273
		NSTP 2	0.270
	Nagari	STP 01	7.000
		STP 02	6.100
	Puttur	STP 01	4.900
		STP 02	5.000
		NSTP 01	0.709
1	4	12	42.816

IV. Details of Industrial Pollution:

- No. of industries in the State: 9964No's
- No. of water polluting industries in the State: 1443 No's
- Quantity of effluent generated from the industries in MLD: 4542.5

Effluent Break-Up Details:

- Once through Cooling water: 3826.13 MLD
- Trade effluents:412.70 MLD
- cooling tower/Boiler blow down: 254.14 MLD
- Domestic waste water: 49.57 MLD

From the total waste water generation from the industries, major portion is once through cooling water (about 85%) and temperature to be maintained for discharge of once through cooling system is not more than 5⁰C temperature of intake water.

- ✓ From the Cooling tower/Boiler blow down (about 5.6%).
- ✓ The remaining about 9.4% is generated from Trade effluent & Domestic Discharges.
- ✓ APPCB is not permitting any industry to discharge industrial / trade effluents into the rivers.
- Number of industrial units having ETPs: 1093 No's
- Number of industrial units connected to CETP: 350 No's
 - i. Existing: 1094 no's ETPs
 - ii. Under construction: Nil
 - iii. Proposed: Nil
- **Compliance status of the ETPs:**
 - ✓ APPCB is regularly monitoring the compliance status of ETPs and action is being initiated for non-compliance industries.
- Number and total capacity of CETPs (details of existing/ under construction / proposed)
 - i. Existing: 8No's with total capacity of 22.5 MLD
M/s. APIIC Mega Food Park, CETP (Phase-I), Sy.No.11, Mallavalli (V),
Bapulapadu (M), Krishna District (0.3 MLD) – is under stabilization.
 - ii. Proposed: 1 no
 - 1.5 MLD at Atchuthapuram SEZ, Visakhapatnam – Under Approval

V. Solid Waste Management:

- Total Number of Urban Local Bodies: **123** and their Population: **1.5** Crore
- Current Municipal Solid Waste Generation: **6890** TPD for 123 ULBs
- The Source Segregation in the State is 98.17% and 100 % door to door collection in the state.
- Interim Action Plan is implemented to provide immediate solution to Solid Waste Management in all ULBs

Door to Door Garbage collection & Source Segregation

- Total No. of wards in 123 ULBs: 3928
- No. of wards having door to door collection system: 3928
- No. of wards practicing segregation at source: 3856
- 1.21 crores Dustbins in three Colors (3 Bins to each house holds) have been distributed, on free of cost to ensure segregation at household level.

Waste to Energy Projects

- Waste to Energy Plants are being used for final disposal of combustible dry waste collected by the ULBs on daily basis. There are Two Waste to Energy projects established in the State.
- Guntur & Visakhapatnam Waste to Energy Plants with 15 MW capacity each are established & synchronized with grid and running at full load capacity.
- These two plants are processing around 1800 TPD of waste covering 72 ULBs (Visakhapatnam-27 ULBs & Guntur-45 ULBs).
- For Disposal combustible waste, 51 ULBs are mapped to 7 Cement Plants treating 355 TPD.

Wet Waste Processing Plants

- Total 42 Waste to Compost plants/Bio-methanation Plants are established covering 51 ULBs. Out of which 29 numbers are Waste to Compost Plants, 4 numbers are Bio CNG plants & 9 are ISWM plants.
- The installed capacity of these 42 Wet Waste Plants are 1900 TPD and at present treating 1870 TPD.
- Total 16 Waste to Compost/Bio-methanation Plants (14 Waste to Compost & 2 Bio-methanation) covering 16 ULBs are in progress with an installed capacity of 398 TPD.
- Work orders issued to 37 Agencies for establishment of 37 Integrated Solid Waste Management Projects. Out of these 37 Plants, 9 Plants are completed & Functional.
- Windrow Compost Units are established in 72 ULBs, treating 1920 TPD of Wet Waste as an interim measure till the establishment of ISWM Projects/Waste to Compost Plants for which work awarded.
- Compost produced is being sold to Farmers by Processing Plant Developers & in ULB operated Plants, Compost is being used in Parks, Greenery in Central Medians, Avenue Plantation etc.
- CNG gas produced is being sold to the Commercial establishments like Hotels, Restaurants etc.,

Construction & Demolition Waste Processing Plants

- Construction and Demolition waste processing plants with an installed capacity of 200 TPD are existing at Greater Visakhapatnam Municipal Corporation, Vijayawada Municipal Corporation and Tirupati Municipal Corporation & treating 100 TPD by each plant.
- Construction & Demolition Waste Crushing and Storage Units are established in Kakinada Municipal Corporation and Kurnool Municipal Corporation Treating 20 TPD.

Bio remediation of Legacy Waste

- 123 Dumpsites with an area of 1011 Acres are existing in the state.
- Out of 32 ULBs under the category of Above 1 Lakh Population, Bio remediation of legacy waste was completed in Vijayawada & Tirupati Corporations.
- Work is under Progress in the remaining 30 ULBs.

- Work commissioned in all 91 ULBs under the category of below 1 Lakh Population.
- So far, 16.85 lakh Tons of Legacy Waste has been treated, out of 85.00 Lakh Tons quantified.
- No Dump sites of legacy waste are within 1 KM buffer of both sides of the rivers in the State.

Material Recovery facilities (MRFs)

- Material Recovery facilities have been established in all 123 ULBs & Processing the dry waste @ 945 TPD.
- Sorted out recyclables are being sold to Identified Recyclers by the ULBs

Status of ULB wise Management of Solid Waste

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
1	Amudalavalasa	19.00	Existing WtC	11.00	90%	WtE Vizag	6.00	Established	2.00	90%
2	Ichchapuram	18.00	Existing WtC	11.00	90%	WtE Vizag	6.00	Established	1.00	90%
3	Palasa- kasibugga	28.00	Existing WtC	17.00	90%	WtE Vizag	10.00	Established	1.00	90%
4	Rajam	21.00	Existing WtC	12.00	90%	WtE Vizag	7.00	Established	2.00	90%
5	Bobbili	29.00	Existing WtC	16.00	90%	WtE Vizag	12.00	Established	1.00	90%
6	Salur	24.00	Existing WtC	16.00	90%	WtE Vizag	7.00	Established	1.00	90%
7	GVMC	918.00	Existing WtC	519.00	90%	WtE Vizag	353.00	Established	46.00	90%
8	Narsipatnam	30.00	Existing WtC	16.00	90%	WtE Vizag	12.00	Established	2.00	90%
9	Yellamanchili	23.00	Existing WtC	13.00	90%	WtE Vizag	8.00	Established	2.00	90%
10	Adoni	81.00	Existing CNG	23.00	90%	Connected to Cement Factories	14.00	Established	44.00	90%
11	Nuzivid	29.00	Existing WtC	16.00	90%	WtE Guntur	10.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
12	Tiruvuru	17.00	Existing WtC	9.00	90%	WtE Guntur	6.00	Established	2.00	90%
13	Tenali	80.00	Existing WtC	44.00	90%	WtE Guntur	32.00	Established	4.00	90%
14	Sattenpalle	28.00	CNG - Pidugurala	13.00	90%	WtE Guntur	10.00	Established	5.00	90%
15	Narsaraopet	57.00	CNG - Pidugurala	13.00	90%	WtE Guntur	30.00	Established	14.00	90%
16	Piduguralla	31.00	Existing CNG	13.00	90%	WtE Guntur	12.00	Established	6.00	90%
17	Allagadda	20.00	Existing WtC	11.00	90%	Connected to Cement Factories	4.00	Established	5.00	90%
18	Rayadurgam	30.00	Existing WtC	18.00	90%	Connected to Cement Factories	4.00	Established	8.00	90%
19	Puttaparty	15.00	Existing WtC	8.00	90%	Connected to Cement Factories	3.00	Established	4.00	90%
20	Yemmiganur	46.00	CNG – Adoni	23.00	90%	Connected to Cement Factories	8.00	Established	15.00	90%
21	Anantapur	131.00	Windrow composting	81.00	90%	Connected to Cement Factories	20.00	Established	30.00	90%
22	Atmakur K	22.00	Windrow composting	13.00	90%	Connected to Cement Factories	3.00	Established	6.00	90%
23	Badvel	35.00	ISWM Functional	20.00	90%	Connected to Cement Factories	6.00	Established	9.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
24	Dhone	29.00	Windrow composting	18.00	90%	Connected to Cement Factories	5.00	Established	6.00	90%
25	Markapur	35.00	Existing WtC	19.00	90%	WtE Guntur	14.00	Established	2.00	90%
26	Giddalur	19.00	Existing WtC	11.00	90%	Connected to Cement Factories	3.00	Established	5.00	90%
27	Kanigiri	22.00	Existing WtC	12.00	90%	WtE Guntur	8.00	Established	2.00	90%
28	Chirala	42.00	Existing WtC	25.00	90%	WtE Guntur	15.00	Established	2.00	90%
29	Gudivada	58.00	Windrow composting	32.00	90%	WtE Guntur	23.00	Established	3.00	90%
30	Palamaneru	25.00	Existing WtC	15.00	90%	Connected to Cement Factories	3.00	Established	7.00	90%
31	Punganur	27.00	Existing WtC	16.00	90%	Connected to Cement Factories	4.00	Established	7.00	90%
32	Madanpalle	67.00	Existing CNG	28.00	90%	Connected to Cement Factories	11.00	Established	28.00	90%
33	Sullurpet	22.00	Windrow composting	12.00	90%	Connected to Cement Factories	7.00	Established	3.00	90%
34	Srikakulam	65.00	ISWM Functional	36.00	90%	WtE Vizag	26.00	Established	3.00	90%
35	Palakonda	16.00	Windrow composting	8.00	90%	WtE Vizag	6.00	Established	2.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
36	Vizianagaram	119.00	ISWM Functional	65.00	90%	WtE Vizag	48.00	Established	6.00	90%
37	Parvathipuram	26.00	Clustered with Existing WtC, Bobbili	14.00	90%	WtE Vizag	9.00	Established	3.00	90%
38	Nellimarla	14.00	Windrow composting	8.00	90%	WtE Vizag	5.00	Established	1.00	90%
39	Gudur N	36.00	Windrow composting	19.00	90%	Connected to Cement Factories	13.00	Established	4.00	90%
40	Guntakal	62.00	Windrow composting	32.00	90%	Connected to Cement Factories	11.00	Established	19.00	90%
41	Jaggaiahpet	26.00	Windrow composting	14.00	90%	WtE Guntur	8.00	Established	4.00	90%
42	Jammalamadugu	22.00	Existing WtC	12.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
43	Pedana	16.00	Windrow composting	9.00	90%	WtE Guntur	5.00	Established	2.00	90%
44	Vuyyuru	20.00	Windrow composting	11.00	90%	WtE Guntur	6.00	Established	3.00	90%
45	Guntur	363.00	Windrow composting	200.00	90%	WtE Guntur	145.00	Established	18.00	90%
46	Mangalagiri - Tadepalle	70.00	Windrow composting	38.00	90%	WtE Guntur	28.00	Established	4.00	90%
47	Ponnur	29.00	Existing WtC	16.00	90%	WtE Guntur	9.00	Established	4.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
48	Chilakaluripet	49.00	Windrow composting	27.00	90%	WtE Guntur	20.00	Established	2.00	90%
49	Bapatla	34.00	Windrow composting	19.00	90%	WtE Guntur	10.00	Established	5.00	90%
50	Repalle	25.00	Windrow composting	13.00	90%	WtE Guntur	8.00	Established	4.00	90%
51	Vinukonda	30.00	ISWM Functional	16.00	90%	WtE Guntur	9.00	Established	5.00	90%
52	Macherla	28.00	Existing WtC	19.00	90%	WtE Guntur	8.00	Established	1.00	90%
53	Kadapa	167.00	Windrow composting	93.00	90%	Connected to Cement Factories	28.00	Established	46.00	90%
54	Dharmavaram	62.00	Windrow composting	35.00	90%	Connected to Cement Factories	11.00	Established	16.00	90%
55	Kadiri	43.00	Windrow composting	24.00	90%	Connected to Cement Factories	7.00	Established	12.00	90%
56	Gooty	24.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	7.00	90%
57	Hindupur	74.00	Windrow composting	40.00	90%	Connected to Cement Factories	13.00	Established	21.00	90%
58	Kurnool	224.00	Windrow composting	128.00	90%	Connected to Cement Factories	36.00	Established	60.00	90%
59	Kalyandurgam	21.00	WtC Functional	11.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
60	Madakasira	12.00	Windrow composting	7.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%
61	Machilipatnam	89.00	Windrow composting	49.00	90%	WtE Guntur	36.00	Established	4.00	90%
62	Mydukur	22.00	Windrow composting	12.00	90%	Connected to Cement Factories	3.00	Established	7.00	90%
63	Nandigama	22.00	Windrow composting	12.00	90%	WtE Guntur	7.00	Established	3.00	90%
64	Nandikotkur	23.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
65	Gudur K	14.00	Windrow composting	8.00	90%	Connected to Cement Factories	2.00	Established	4.00	90%
66	Nandyal	98.00	Windrow composting	59.00	90%	Connected to Cement Factories	16.00	Established	23.00	90%
67	Proddutur	79.00	Windrow composting	44.00	90%	Connected to Cement Factories	13.00	Established	22.00	90%
68	Pulivendula	32.00	Existing WtC	19.00	90%	Connected to Cement Factories	5.00	Established	8.00	90%
69	Rajahmundry	168.00	ISWM Functional	93.00	90%	WtE Vizag	67.00	Established	8.00	90%
70	Rajampeta	23.00	Windrow composting	13.00	90%	Connected to Cement Factories	4.00	Established	6.00	90%
71	Rayachoti	44.00	ISWM Functional	26.00	90%	Connected to Cement Factories	7.00	Established	11.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
72	Tadipatri	53.00	Existing WtC	31.00	90%	Connected to Cement Factories	9.00	Established	13.00	90%
73	Tirupati	208.00	Existing CNG	110.00	90%	Connected to Cement Factories	35.00	Established	63.00	90%
74	Ongole	123.00	Windrow composting	68.00	90%	WtE Guntur	49.00	Established	6.00	90%
75	Chimakurthy	17.00	Windrow composting	9.00	90%	WtE Guntur	5.00	Established	3.00	90%
76	Addanki	20.00	Existing WtC	11.00	90%	WtE Guntur	6.00	Established	3.00	90%
77	Kandukur	28.00	Windrow composting	14.00	90%	WtE Guntur	10.00	Established	4.00	90%
78	Kakinada	159.00	ISWM Functional	87.00	90%	WtE Vizag	64.00	Established	8.00	90%
79	Vijayawada	507.00	Existing WtC	279.00	90%	WtE Guntur	203.00	Established	25.00	90%
80	Gollaprolu	11.00	Windrow composting	6.00	90%	WtE Vizag	3.00	Established	2.00	90%
81	Pithapuram	25.00	Windrow composting	13.00	90%	WtE Vizag	8.00	Established	4.00	90%
82	Peddapuram	24.00	Windrow composting	13.00	90%	WtE Vizag	7.00	Established	4.00	90%
83	Samalkota	28.00	Windrow composting	16.00	90%	WtE Vizag	8.00	Established	4.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
84	Yeleswaram	16.00	Windrow composting	9.00	90%	WtE Vizag	5.00	Established	2.00	90%
85	Ramachandrapuram	21.00	Windrow composting	12.00	90%	WtE Vizag	6.00	Established	3.00	90%
86	Mandapeta	26.00	Windrow composting	14.00	90%	WtE Vizag	8.00	Established	4.00	90%
88	Tuni	12.00	Clustered with Existing WtC, Narsipatnam	6.00	90%	WtE Vizag	4.00	Established	2.00	90%
88	Mummidivaram	26.00	Windrow composting	14.00	90%	WtE Vizag	8.00	Established	4.00	90%
89	Amalapuram	26.00	Windrow composting	14.00	90%	WtE Vizag	8.00	Established	4.00	90%
90	Eluru	106.00	Windrow composting	59.00	90%	WtE Guntur	42.00	Established	5.00	90%
91	Tadepalligudem	51.00	Windrow composting	28.00	90%	WtE Guntur	20.00	Established	3.00	90%
92	Tanuku	44.00	Windrow composting	24.00	90%	WtE Guntur	13.00	Established	7.00	90%
93	Palakollu	33.00	Windrow composting	18.00	90%	WtE Guntur	10.00	Established	5.00	90%
94	Narsapuram	29.00	Windrow composting	16.00	90%	WtE Guntur	9.00	Established	4.00	90%
95	Bhimavaram	69.00	Windrow composting	38.00	90%	WtE Guntur	28.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
96	Nidadavole	21.00	Windrow composting	12.00	90%	WtE Guntur	6.00	Established	3.00	90%
97	Kovvur	19.00	Clustered with Rajahmundry ISWM	10.00	90%	WtE Vizag	6.00	Established	3.00	90%
98	JangareddyGudem	26.00	Windrow composting	14.00	90%	WtE Guntur	8.00	Established	4.00	90%
99	Chittoor	92.00	Windrow composting	55.00	90%	Connected to Cement Factories	16.00	Established	21.00	90%
100	SriKalahasti	39.00	Windrow composting	23.00	90%	Connected to Cement Factories	7.00	Established	9.00	90%
101	Nagari	30.00	Windrow composting	17.00	90%	Connected to Cement Factories	6.00	Established	7.00	90%
102	Puttur	26.00	Windrow composting	15.00	90%	Connected to Cement Factories	5.00	Established	6.00	90%
103	Nellore	300.00	Windrow composting	165.00	90%	Connected to Cement Factories	120.00	Established	15.00	90%
104	Venkatagiri	25.00	ISWM Functional	13.00	90%	Connected to Cement Factories	8.00	Established	4.00	90%
105	Yerraguntla	17.00	Windrow composting	10.00	90%	Connected to Cement Factories	4.00	Established	3.00	90%
106	Naidupet	22.00	Windrow composting	12.00	90%	Connected to Cement Factories	7.00	Established	3.00	90%
107	Atmakur N	15.00	Windrow composting	8.00	90%	Connected to Cement Factories	5.00	Established	2.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
108	Kavali	51.00	Windrow composting	28.00	90%	WtE Guntur	20.00	Established	3.00	90%
109	Kondapalli	21.00	ISWM Functional	12.00	90%	WtE Guntur	6.00	Established	3.00	90%
110	Akiveedu	11.00	Windrow composting	6.00	90%	WtE Guntur	2.00	Established	3.00	90%
111	Dachepali	11.00	Clustered with Existing Bio CNG Piduguralla	6.00	90%	WtE Guntur	3.00	Established	2.00	90%
112	Gurazala	9.00	Clustered with Existing WtC, Macherla	5.00	90%	WtE Guntur	3.00	Established	1.00	90%
113	Darsi	12.00	Windrow composting	6.00	90%	WtE Guntur	4.00	Established	2.00	90%
114	BuchireddyPalem	12.00	Windrow composting	6.00	90%	Connected to Cement Factories	4.00	Established	2.00	90%
115	Penukonda	10.00	Clustered with Existing WtC, Puttaparthi	5.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%
116	Bethamcharla	14.00	Windrow composting	9.00	90%	Connected to Cement Factories	2.00	Established	3.00	90%
117	Kamlapuram	7.00	Windrow composting	4.00	90%	Connected to Cement Factories	1.00	Established	2.00	90%
118	Kupam	15.00	Windrow composting	9.00	90%	Connected to Cement Factories	3.00	Established	3.00	90%

S. No	Name of the ULB	Waste Generated (TPD)	Wet waste processing	Plant Capacity (TPD)	Capacity Utilization	Dry Waste Processing				
						RDF	Waste Sent in TPD	MRF	Plant Capacity TPD	Capacity Utilization
119	Y.S.R. - Tadigadapa	29.00	Clustered with Existing WtC, Vijayawada	19.00	90%	WtE Guntur	9.00	Established	1.00	90%
120	Chintalapudi	4.00	Windrow composting	2.00	90%	WtE Guntur	1.00	Established	1.00	90%
121	Podili	6.00	Clustered with Existing WtC, Kanigiri	3.00	90%	WtE Guntur	2.00	Established	1.00	90%
122	Alluru	9.00	Windrow composting	5.00	90%	Connected to Cement Factories	3.00	Established	1.00	90%
123	B.KothaKota	6.00	Windrow composting	3.00	90%	Connected to Cement Factories	1.00	Established	2.00	90%

VI. Bio-medical Waste Management:

- Total Bio-medical waste generation: 14.30Tones/ day
- No. of Hospitals and Health Care Facilities: 13,220Nos.

Status of Treatment Facility/ CBMWTF	:	Presently, there are 12 Nos. of Common Bio-medical Waste Treatment and disposal Facilities (CBMWTFs) operating in the State of Andhra Pradesh for treatment and for disposal of Bio-Medical waste as per the BMW Management Rules 2016.
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VII. Hazardous Waste Management:

- Total Hazardous Waste generation is about: 54802.58Tones during the month of December, 2022 and cumulative quantity (April toDecember2022) is 3,62,196tones.
- No of industries generating Hazardous Waste:2748 Nos as per Hazardous Waste inventory, 2021 -22.
- **For the month of December, 2022, the Quantity of Hazardous Waste Treated & Disposed is as follows:**
 - i) Utilizable waste is28663.39TPM (suitable to use as raw material or as alternative fuel viz. Co-processing in Cement Plants so as to conserve the resources),
 - ii) Recyclable waste is2529.215 TPM (suitable for recycling /recovery of material viz. oil reclamation units, lead and zinc recovery units).
 - iii) Incinerable waste is 583.97 TPM (not suitable for any recycling / reuse and having high calorific value i.e. > 2500 K cal/kg) and
 - iv) Land fillable waste is 22585.59TPM (not suitable for any recycling / reuse and having low calorific value i.e. < 2500 K cal/kg) is reaching and treated at the TSDFs in Visakhapatnam and Nellore.

Note: The above data is obtained from the APEMC online portal. The above data may vary during verification of annual returns submitted by the industry.

- **Details of on-going or proposed TSDF:**

Two TSDF are existing in the State of Andhra Pradesh

- ✓ M/s Coastal Waste Management Project Unit-1, Parwada, Visakhapatnam.
- ✓ M/s Coastal Waste Management Project Unit-2 a division of Mumbai Waste Management Limited, S.P.S.R. Nellore District.

Status of compliance and operation of the CETPs:

S. No	Name and Address of the CETP & contact person	Design capacity (in MLD)	Current Operating capacity (in MLD)	Type and No. of member units	Compliance status
1.	Brandix India Apparel City Private Limited, APSEZ, Atchutapuram Pudimadaka Road, Visakhapatnam.	6*	3.62	Textile park- 14 units	Complied
2.	Ramky Pharma City (India) Ltd, JN Pharma City, Parawada Mandal, Visakhapatnam.	9.53	7.09	Pharmaceutical & Bulk drugs-93	Complied
3.	Kondapally Envirotech Pvt. Ltd., (KEPL), IDA, Kondapalli (V), Ibrahimpatnam (M), NTR District.	0.2	0.0025	Pharmaceutical & Bulk drugs-14 units	Complied
4.	Vijayawada Auto Cluster Development Company, Industrial Estate, Auto Nagar, Vijayawada.	0.2	0.028	Food beverages, Herbal pharma, Oil solvents & lubricants - 35 units.	Complied
5.	Machilipatnam Imitation Jewellery Park Pvt. Ltd., Jewellery Park, Pothepalli, Machilipatnam.	0.07	0.003	Electro Plating – 48 Units	Complied
6.	Nagari Dyeing Owners Association, Chinthalapatteda (V), Nagari (M), Chittoor District.	4	1.25	Manual Dyeing units - 105 units	Complied
7.	Atchuthapuram Effluent Treatment Plant, Atchutapuram Visakhapatnam.	1.5	0.55	Pharmaceutical & Bulk drugs-39 units	Complied
8.	M/s Andhra Pradesh Industrial Infrastructure Corporation Limited (APIIC), 1.0 MLD CEPT, MPSEZ, Menakur (V), Naidu pet (M), SPSR Nellore District.	1.0	0.11	Pharmaceutical – 8 Units	Complied
	Total	22.5	12.6535		

VIII. Plastic Waste Management:

Total plastic waste generation	36620.101 TPA (As per Annual Report for the F.Y. 2021-22).
Implementation of Plastic Waste Management Rules 2016 in Urban Local Bodies	• 74 Nos of recyclers registered with APPCB. Total recycling capacity is 57,193TPA. • The State has issued G.O.Ms.No.349, dated 29.10.2018 for implementation of Plastic Waste Management Rules, 2016 in the ULBs. • Banned on Plastic Flexi Banners in A.P vide G.O.Ms. No.75, dated 31.10.2022 of Environment, Forests, Science & Technology Department, under Environment (Protection) Act, 1986 w.e.f. 26.01.2023. • The plastic waste in Urban Local Bodies is being collected through the Public Health Workers of the ULBs. The segregated plastic waste, which is recyclable, is sent to recyclers i.e., from MRFs and the segregated plastic, which is not suitable for recycling is sent to nearby Cement Plants and also being used in road construction in some ULBs. 51 ULBs have so far, tied up with nearby Cements Plants to send non-recyclable Plastic Waste. • The manufacture, sale& usage of plastic carry bags of below 120 microns' thickness is banned in the State of Andhra Pradesh. Teams of PCB are making inspections and surprise raids to ensure no sale & usage of banned plastic carry bags. • About 3124.93 Tons of plastic waste seized which includes SUP and other banned items uptoDecember. • In Visakhapatnam, Vizianagaram, Vijayawada, Kurnool & Tirupati, under extended producer responsibility, Plastic Waste Collection system has been established. • Instructions issued to the Municipal Commissioners of Head Quarter ULBs to conduct stakeholders' meetings under the Chairmanship of the District Collectors to ensure setting up collection centers under EPR in Municipal Corporations & bigger ULBs. • In Visakhapatnam, Vijayawada, Tirupati, Rajamahendhravaram, Kakinada & Amalapuram Plastic Waste is being used in construction of Roads and the details are as follows:

Sl. No.	Name of the ULB	Length of Road Constructed	Quantity of Plastic Waste utilized for constructions of Road
1	Visakhapatnam	8.0Kms	14.5 Tons
2	Vijayawada	5.0Kms	5.0 Tons
3	Tirupati	0.9Kms	0.9 Tons
4	Rajamahendhravaram	3.0Kms	4.2 Tons
5	Kakinada	1.2 Kms	2.0 Tons
6	Amalapuram	1.0 Km	0.2 Tons

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

Details of Faecal Sludge Treatment Plants:

No. of Completed FSTPs	:	5 (75 KLD)
No. of In-progress FSTPs	:	60 (905 KLD)
No. of FSTPs to be retendered	:	11 (175 KLD)
No. of FSTPs DPRs to be Prepared:		15 (180 KLD)

IX(A): Details of Completed FSTPs:

S.No.	Name of ULB	Capacity (in KLD)	Operational Status of FSTP
1	Narsapur	15	Operational
2	Rajam	15	Operational
3	Palamaneru	15	Operational
4	Bobbili	15	Operational
5	Vinukonda	15	Operational

IX(B): Details of In-Progress FSTPs:

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
1	Dhone	20	95 % of Work Completed Jan - 2023
2	Gooty	15	March -23
3	Jammalamadugu	15	March -23
4	Kadiri	25	March -23
5	Kalyanadurgam	10	March -23
6	Madakasira	5	March -23
7	Pulivendula	20	March -23
8	Puttaparthi	10	March -23
9	Rayachoti	25	March -23
10	Rayadurg	20	March -23
11	Allagadda	10	March -23
12	Atmakur (K)	15	March -23
13	Badvel	25	March -23

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
14	Gudur (K)	5	March -23
15	Mydukuru	15	March -23
16	Nandikotkur	15	March -23
17	Yelamanchili	15	March -23
18	Punganur	15	March -23
19	Rajampeta	15	March -23
20	Yerraguntla	10	March -23
21	Atmakur (N)	10	March -23
22	Giddalur	10	March -23
23	Gudur (TPT)	20	March -23
24	Kandukur	20	March -23
25	Kanigiri	15	March -23
26	Markapur	20	95 % of Work Completed, Jan - 2023
27	Nagari	20	March -23
28	Naidupet	15	March -23
29	Puttur	15	March -23
30	Sullurpeta	15	March -23
31	Venkatagiri	15	March -23
32	Addanki	10	March -23
33	Bapatla	25	70% work Completed Feb - 23
34	Chimakurthy	10	March -23
35	Chirala	25	70% work Completed Feb - 23
36	Macherla	15	March -23
37	Mangalagiri	25	March -23
38	Piduguralla	15	March -23
39	Ponnur	15	70% work Completed Feb - 23
40	Repalle	15	March -23
41	Sattenapalli	15	March -23
42	Salur	15	March -23
43	Amalapuram	15	March -23
44	Gollaprolu	5	March -23
45	Kovvur	10	March -23
46	Mandapeta	15	March -23
47	Mummidivaram	10	March -23
48	Peddapuram	15	March -23
49	Pithapuram	15	March -23
50	Ramachandrapuram	15	March -23
51	Samalkota	15	March -23
52	Tuni	15	March -23
53	Yeleshwaram	10	March -23
54	Amudalavalasa	10	March -23
55	Parvathipuram	15	March -23

S.No	Name of the ULB	Plant Capacity (in KLD)	Expected Date of Completion
56	Ichapuram	10	March -23
57	Narsipatnam	20	March -23
58	Nellimarla	10	March -23
59	Palakonda	10	March -23
60	Palasa-Kasibugga	15	March -23
		905	

IX (C) Details of FSTPs to be retender:

S.No	Name of the ULB	Capacity of Plant (KLD)	Status
1	Jangareddigudem	15	Tender will be floated by end of January 2023
2	Nidadavolu	15	
3	Palacole	20	
4	Pedana	10	
5	Tadepalli	20	
6	Tanuku	25	
7	Vuyyuru	15	
8	Jaggiahpetta	15	
9	Nandigama	15	
10	Nuzividu	15	
11	Tiruvuru	10	
	Total	175	

IX(D) Details of FSTPs for which Tenders to be floated:

S.No	Name of ULB	Capacity of Plant (KLD)	Status
1	Akiveedu	10	Tender will be floated by end of January 2023
2	Kondapalli	20	
3	Dachepali	10	
4	Gurazala	10	
5	Darsi	10	
6	BuchireddyPalem	10	
7	Penukonda	10	
8	Bethamcharla	10	
9	Kamalapuram	10	
10	Kuppam	15	
11	Y.S.R. -Tadigadapa	25	
12	Chintalapudi	10	
13	Podili	10	
14	Alluru	10	
15	B.KothaKota	10	
	Total	180	

- X.** Identification of polluting sources including drains contributing to river pollution and action as per NGT order on insitu treatment:
- A total 32 No`s of outfall points of the major disposal drains have been identified which are contributing to River Pollution. All the above 32 No`s of outfall points are provided with Meshes/Screens to prevent solid waste from falling in to the Rivers.
- XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT:**
- Commissioner & Director of Municipal Administration has been appointed as a Nodal Officer for Polluted River stretches as per G.O.Rt.No.103 EFS&T Department Dated: 25-11-2020.
- XII.** Details of meetings carried under the Chairmanship of Chief Secretary in the State/UT:
- XIII. Latest water quality of polluted river, its tributaries, drains with flow details:**
- APPCB has been monitoring the 5 polluted river stretches at 27 locations on monthly basis and the data is being uploaded in RRC Website <https://rrc.ap.gov.in/Views/Monitoring.aspx> every month. **The monitoring of water quality data for the month of December, 2022 is enclosed.**
 - **As per the analysis of samples collected at 27 locations in the month of December 2022 the B.O.D value is less than 3.0 mg/lit. (Details enclosed)**
- XIV.** Ground water regulation:
- XV.** Good irrigation practices being adopted by the State:
- XVI.** Rain Water Harvesting:
- XVII.** Demarcation of Floodplain and removal of illegal encroachments:
- XVIII.** Maintaining minimum e-flow of river:
- XIX.** Plantation activities along the rivers:
- XX.** Development of biodiversity park:

XXI. Reuse of Treated Water:

- 9 ULBs Utilizing Re – Use of Treated Waste Water

S.No	Name of the ULB	Installed Capacity (in MLD)	Qty of treated sewage utilised
1	2	3	4
1	Visakhapatnam	177.00	39.00
2	Rajamahendravaram	30.00	20.00
3	Tirupathi	50.00	33.00
4	Narsaraopeta	15.55	8.50
5	Tadipatri	11.50	6.50
6	Puttaparthi	1.50	0.30
7	Kurnool	2.40	0.096
8	Kadapa	20.00	10.00
9	Pulivendula	6.50	2.50
	Total in MLD	314.45	119.90

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

2 River stretches are identified as Modal Rivers.i.e.,Under Category - IV River Tungabhadra & under Category – V River Krishna. (Details **enclosed.**)

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

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

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

Water quality status of polluted river stretches in Andhra Pradesh - 2022

I. River Godavari:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Godavari at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2022 is as follows:

S. No.	Code	Location Point
1	4367	Koundinyamukti (Kukunur) border point between Andhra Pradesh & Telangana States, West Godavari Dist.
2	4359	After confluence with Sabari at Kunavaram (waddigudem), East Godavari Dist.
3	0014	Polavaram, West Godavari Dist.
4	1218	Upstream of Rajahmundry at Kumaradevam
5	2370	At Rajahmundry Upstream of Nalla channel
6	2371	At Rajahmundry Downstream of Nalla channel
7	1219	Downstream of Rajahmundry at Dhawaleswaram
8	4365	Upstream of Narasapuram town before confluence with sewage, West Godavari Dist.
9	4366	Downstream of Narasapuram town after confluence with town sewage, West Godavari Dist.
10	4358	Near GMC Balayogi bridge, Govalanka, East Godavari Dist.

Month-wise data of water quality of river Godavari, 2022

Parameter	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Standard		
														Class A	Class B	Class C
pH	4367	8.06	8.47	8.46	8.64	8.13	7.77	8.4	7.77	8.13	7.92	8.20	8.31	6.0 - 8.5	6.0 – 9.0	
	4359	7.44	7.66	8.45	8.42	7.78	7.61	----	7.71	7.71	8.39	7.90	8.27			
	0014	7.45	8.03	7.80	8.01	8.27	8.16	7.57	7.73	8.06	7.95	8.07	8.3			
	1218	7.41	7.99	7.93	8.05	8.12	7.94	7.58	7.73	8.02	8.05	8.28	8.23			
	2370	7.45	7.47	7.83	7.96	7.49	7.50	7.34	7.66	7.96	7.76	8.23	7.93			
	2371	7.74	7.55	7.58	7.98	7.90	7.48	7.7	7.65	8.01	8.02	8.41	7.89			
	1219	7.75	7.31	7.87	8.01	7.05	7.83	8.05	8.13	8.26	7.94	8.23	7.64			
	4365	8.05	7.85	8.21	8.44	7.88	7.77	7.48	7.79	7.94	8.13	7.9	7.97			
	4366	8.01	4.85	8.27	8.43	7.68	7.84	7.48	7.8	7.98	7.9	8.12	7.97			
	4358	7.41	7.72	8.17	7.77	7.46	7.86	7.79	8.31	7.93	8.09	8.37	8.18			
DO	4367	8.5	8.5	7.2	7.5	6.5	6.0	6.8	7.0	6.4	7.8	6	6.9	6.0	5.0	4.0
	4359	8.1	8.1	7.0	7.2	6.5	6.2	----	7.0	7.0	7.1	7.5	8.2			
	0014	8.8	8.7	6.0	7.0	6.5	6.4	7.0	6.8	6.4	7.8	6	7.0			
	1218	8.5	8.0	7.0	7.4	6.4	6.3	6.8	6.7	6.3	7.4	6.1	6.8			
	2370	7.1	7.0	7.0	7.0	6.0	6.8	7.2	7.4	7.6	7.4	7.8	7.4			
	2371	6.8	6.3	6.5	6.5	5.9	6.7	7.4	7.6	6.7	7.1	7.6	8.0			
	1219	8.0	6.9	7.0	7.2	6.2	6.5	7.4	7.6	7.7	7.4	7.4	4.8			
	4365	7.2	8.0	6.7	6.6	6.0	5.6	5.6	7.4	6.2	7.4	7	6.4			
	4366	5.8	6.5	5.8	6.4	5.8	5.5	5.4	7.6	6.1	7.2	6.2	6.1			
	4358	6.4	7.0	7.5	6.2	6.0	7.0	6.5	7.1	7.0	6.8	7.1	7.8			
BOD	4367	2.0	2.3	2.2	1.9	2.0	1.9	1.9	1.8	1.8	2.6	1.6	2.4	2.0	3.0	3.0
	4359	2.0	2.0	2.0	2.0	1.8	1.6	----	2.0	2.0	2.0	2.0	1.8			
	0014	1.8	1.7	2.0	1.8	1.0	2.2	2.0	2.0	2.1	2.1	1.8	2.4			
	1218	1.6	2.0	1.8	1.5	1.1	1.3	2.2	2.1	2.3	2.4	2	2.5			
	2370	2.4	1.4	1.8	2.0	1.9	2.4	2.2	2.2	2.0	2.0	2.2	2.1			
	2371	2.4	1.5	1.8	2.2	2.3	2.6	2.4	2.4	2.4	2.4	2.2	2.2			
	1219	2.0	2.2	2.0	2.0	2.2	2.4	2.4	2.2	2.2	2.2	2.4	3.2			
	4365	2.0	2.1	2.1	2.0	2.4	2.0	1.4	2.2	2.4	2.2	2.1	2.4			
	4366	2.4	2.5	2.3	2.2	2.6	2.2	1.3	2.4	2.6	2.8	2.4	2.6			
	4358	2.6	2.1	2.2	2.0	2.4	2.8	2.6	2.4	2.2	2.8	2.8	2.6			

Total Coliform	4367	120	210	120	120	150	120	150	93	150	93	120	150	50	500	5000
	4359	49	43	49	39	28	43	----	21	21	20	20	28			
	0014	93	120	75	93	120	150	150	120	120	75	75	120			
	1218	75	93	39	64	120	210	120	150	120	150	64	43			
	2370	120	210	120	93	210	210	210	240	210	210	150	210			
	2371	150	460	150	120	240	240	240	210	210	150	460	240			
	1219	120	240	240	150	240	240	150	210	240	150	43	120			
	4365	120	120	120	120	150	150	120	120	210	240	210	240			
	4366	150	150	460	150	240	240	240	210	240	210	460	240			
	4358	93	240	93	93	110	150	120	150	150	150	150	150			
Fecal Coliform	4367	7	10	7	15	7	4	7	4	28	15	14	11	---	500	---
	4359	3	3	4	3	3	3	----	3	3	3	4	<3			
	0014	4	9	4	4	4	4	3	3	9	9	<3	15			
	1218	3	4	3	3	7	7	3	3	7	15	39	7			
	2370	7	21	9	7	9	7	7	11	11	28	7	7			
	2371	9	28	15	9	15	9	11	7	7	21	9	21			
	1219	9	43	15	9	21	20	7	9	21	9	15	7			
	4365	9	9	4	4	4	3	3	4	7	4	11	7			
	4366	11	15	21	9	9	7	7	7	21	15	64	15			
	4358	3	21	4	4	4	4	3	3	7	7	28	11			
TDS	4367	172	192	196	172	314	85	135	120	140	163	234	267	500 - 2000		
	4359	84	72	108	780	85	84	----	430	430	82	70	85			
	0014	166	200	176	158	120	105	130	122	150	158	241	262			
	1218	160	192	164	152	140	96	132	128	130	184	238	235			
	2370	184	218	196	156	144	127	265	232	170	206	313	212			
	2371	196	240	212	180	140	109	130	230	160	190	229	182			
	1219	192	208	222	182	144	97	140	184	150	186	193	212			
	4365	17124	23240	25840	25432	29462	20838	13020	124	132	164	5363	5896			
	4366	19480	26680	26728	27364	29082	27404	19230	146	1940	246	5616	13455			
	4358	17240	19400	27860	31570	3024	21065	26325	172	148	170	293	6584			

Note: (1) All values are expressed in mg/L except pH & Total Coliform value. Total Coliform is expressed in MPN count / 100 ml.

Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations except at U/S & D/S of Narsapuram town. High TDS values at Narsapuram & GMC Balayogi bridge, Govalanka could be attributed to the intrusion of backwaters of Bay of Bengal.

2. River Krishna:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Krishna at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2022 is as follows:

S. No.	Code	Location point
01	1175	Sangameswaram, Kurnool Dist.
02	3083	Srisailam, Kurnool Dist.
03	4381	After confluence with river Musi at Vadapalli, Guntur Dist.
04	1786	Vedadri, Krishna Dist.
05	1787	Amaravathi, Guntur Dist.
06	0025	Prakasham barrage, Vijayawada, Krishna Dist.
07	4375	Pavitrasangamam at Ibrahimpatnam, Krishna Dist.
08	1782	Hamsaladeevi, Krishna Dist.

Month-wise data of water quality of river Krishna, 2022:

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	1175	7.9	7.7	7.3	7.9	7.6	7.4	7.8	7.3	7.1	7.6	7.8	7.8	6.0 - 8.5	6.0 – 9.0	
	3083	7.8	7.8	7.0	7.7	7.9	7.8	7.9	8.0	7.0	7.3	7.8	7.7			
	4381	7.85	8.23	8.14	8.24	7.62	7.70	7.60	7.84	7.6	7.76	7.82	7.94			
	1786	7.80	7.28	7.46	7.87	7.94	7.88	7.49	7.52	7.86	7.90	7.88	7.74			
	1787	7.83	8.01	7.39	8.31	7.86	7.09	7.96	8.06	7.86	7.92	7.73	7.96			
	0025	7.86	7.43	7.48	8.17	7.45	7.50	7.24	7.99	8.26	7.52	7.64	7.46			
	4375	8.17	7.77	7.86	7.99	8.01	7.96	7.78	8.28	8.16	7.52	7.63	7.82			
	1782	7.84	7.44	7.58	7.65	7.85	7.63	7.83	7.70	7.96	7.84	7.92	7.74			

DO	1175	6.0	6.1	6.0	5.7	5.2	5.8	6.1	6.2	6.2	6.2	6.7	5.7	6.0	5.0	4.0
	3083	6.5	6.3	6.0	6.0	5.4	5.9	5.8	6.4	6.2	6.2	5.6	5.8			
	4381	7.1	6.9	7.2	7.1	7.3	7.2	7.4	7.2	7.4	7.2	7.4	7.5			
	1786	7.1	6.9	6.8	6.9	7.2	6.9	7.1	7.3	7.2	7.3	7.1	7.3			
	1787	7.2	7.4	7.3	7.5	6.9	6.9	7.2	7.1	7.2	7.6	7.7	7.5			
	0025	7.3	7.1	7.2	7.4	7.2	7.1	7.4	7.2	7.1	7.4	7.5	7.4			
	4375	6.9	7.2	7.1	7.2	7.3	7.1	7.4	7.4	7.3	7.4	7.3	7.5			
	1782	6.5	6.8	6.7	6.4	6.3	6.1	6.7	6.6	6.9	6.7	6.5	6.6			
BOD	1175	<2	<2	2.5	2.0	2.5	1.8	1.5	1.5	1.3	1.3	2.0	1.5	2.0	3.0	3.0
	3083	<2	<2	<2	1.5	2.0	1.5	1.3	1.7	1.5	1.0	1.7	1.5			
	4381	2.4	2.8	2.7	2.6	2.7	2.8	2.6	2.8	2.9	2.8	2.7	2.8			
	1786	2.4	2.6	2.7	2.8	2.8	2.7	2.8	2.6	2.8	2.7	2.8	2.9			
	1787	2.6	2.4	2.5	2.6	2.8	2.7	2.8	2.9	2.8	2.7	2.8	2.7			
	0025	2.6	2.6	2.4	2.8	2.9	2.6	2.6	2.4	2.6	2.6	2.7	2.8			
	4375	2.4	2.6	2.5	2.6	2.8	2.6	2.6	2.6	2.8	2.6	2.8	2.7			
	1782	2.8	2.6	2.8	2.7	2.9	2.7	2.6	2.8	2.7	2.8	2.9	2.8			
Total Coliform	1175	792	870	914	659	830	866	722	866	659	550	630	472	50	500	5000
	3083	1120	1203	1300	602	550	617	816	921	727	689	575	602			
	4381	120	120	120	120	120	399	342.8	329	277	320	260	380			
	1786	120	150	150	150	120	560	439	403	385	320	440	430			
	1787	120	75	64	75	75	395	275	196	339	280	230	240			
	0025	75	64	75	120	120	423	367	317	274	230	440	460			
	4375	75	75	120	150	120	505	412	395	290	250	120	410			
	1782	150	120	150	120	120	368	328.2	293	277	210	64	75			

Fecal Coliform	1175	189	214	212	170	256	203	312	289	158	124	155	130	---	500	---
	3083	362	343	400	119	281	333	298	356	298	309	265	151			
	4381	3	3	3	3	3	11.9	10.3	11.5	13.3	14	14	15			
	1786	3	3	3	3	3	49.8	15.6	13.4	15.6	14	14	11			
	1787	3	3	3	3	3	30.7	14.2	12.5	13.5	12	14	13			
	0025	3	3	3	3	3	37.5	25.3	18.5	16.4	9	13	11			
	4375	3	3	3	3	3	18.9	15.6	13.7	13.5	10	9	9			
	1782	3	3	3	3	3	46.6	24.4	19.6	9.2	9	7	4			
TDS	1175	432	598	682	641	842	846	752	321	263	356	363	421	500 - 2000		
	3083	412	426	412	469	426	443	412	399	269	275	386	351			
	4381	484	502	498	498	540	510	440	490	504	526	540	570			
	1786	510	541	552	510	520	486	502	460	488	510	448	508			
	1787	470	518	510	470	576	448	410	442	410	368	402	418			
	0025	440	548	480	484	540	470	440	370	376	448	480	476			
	4375	468	510	524	506	512	470	420	298	318	356	390	432			
	1782	10400	9670	16980	18900	20100	17800	8460	9100	11900	12100	13400	16400			
Note: All values are expressed in mg/L except pH, Total Coliform value & Fecal Coliform. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations. High TDS values at Hamsaladeevi could be attributed due to the intrusion of backwaters of Bay of Bengal.																

3. River Tungabhadra:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Tungabhadra at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2022 is as follows:

S. No.	Code	Location point
01	1785	Manthralayam, Kurnool Dist.
02	1174	Bhavapuram, Kurnool Dist.
03	4388	U/S of Kurnool town B/C with domestic sewage & A/c of Rayalaseema alkalies industries at Gondiparla, Kurnool.
04	4389	D/S of Kurnool town A/C with domestic sewage at Gondiparla, Kurnool.

Month-wise data of water quality of river Tungabhadra, 2022

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	1785	7.8	7.9	7.2	7.8	7.8	7.2	7.9	7.3	7.4	7.5	7.6	7.9	6.0 – 8.5		6.0 – 9.0
	1174	7.8	7.9	7.5	7.8	7.8	6.9	7.4	7.2	6.9	7.5	7.5	7.7			
	4388	7.6	7.6	7.6	7.4	7.2	6.8	7.2	7.2	7.4	7.3	7.9	7.3			
	4389	7.2	7.2	7.0	7.2	7.0	7.0	6.9	6.7	7.2	7.7	7.8	7.4			
DO	1785	6.5	6.1	5.8	5.2	4.5	5.0	5.6	6.2	5.4	5.4	6.4	5.7	6.0	5.0	4.0
	1174	6.2	6.4	5.9	5.4	4.9	5.7	5.4	6.1	6.1	6.1	6.4	5.6			
	4388	6.1	5.8	5.5	5.1	5.1	5.6	4.8	6.0	6.1	6.1	5.8	5.6			
	4389	5.3	5.5	5.6	5.3	4.6	5.7	4.4	6.2	5.9	5.9	6.2	5.5			
BOD	1785	2.7	2.5	2.2	3.5	3.7	2.8	2.0	1.8	1.8	2.2	2.0	1.8	2.0	3.0	3.0
	1174	2.2	2.0	2.8	3.3	3.3	2.5	1.8	2.0	2.2	2.0	2.2	2.3			
	4388	3	2.7	2.2	3.5	3.3	2.3	2.0	1.8	1.7	2.2	1.7	2.0			
	4389	3.2	2.8	2.5	3.5	3.3	2.5	2.8	2.2	2.0	1.5	2.0	2.2			

Total Coliform	1785	1011	980	914	980	1553	1733	1553	689	727	792	866	870	50	500	5000
	1174	1203	1300	1203	1203	1414	1203	1414	1120	866	830	770	921			
	4388	1046	1203	1300	866	830	1553	1414	1046	1203	101	816	961			
	4389	1203	1046	1203	1046	1414	1120	1733	1414	1120	1046	1120	1203			
Fecal Coliform	1785	510	530	333	219	389	412	358	190	182	173	293	397	---	500	---
	1174	169	173	224	289	204	155	243	293	266	205	267	416			
	4388	416	412	343	258	272	352	320	204	220	298	217	472			
	4389	149	155	279	354	437	376	549	472	344	408	356	457			
TDS	1785	502	792	524	666	1046	884	1096	287	302	368	564	287	500 - 2000		
	1174	723	792	810	692	682	684	894	336	257	389	536	620			
	4388	968	842	689	742	743	699	990	402	267	635	660	659			
	4389	843	823	796	746	832	745	994	185	266	424	457	738			
Note: All values are expressed in mg/L except pH, Total Coliform value & Fecal coliform. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & fecal coliform values found to be within the standard limits stipulated for bathing at all the locations. However, the DO values found to be between 4.0 and 5.0 mg/lit. at certain instances at U/S & D/S of Kurnool town. Hence, they may be categorized as Class – C at these points.																

4. River Nagavali:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Nagavali at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2022 is as follows:

S. No.	Code	Location point
01	4351	River Nagavali at Kureru, Vizianagaram Dist.
02	1448	Thotapally, Vizianagaram Dist.
03	4346	River Nagavali U/S of Srikakulam town.
04	4347	River Nagavali D/S of Srikakulam town.

Month-wise data of water quality of river Nagavali, 2022

Parameters	Code	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
														Class A	Class B	Class C
pH	4351	7.48	7.15	8.10	8.17	8.32	7.99	7.88	8.36	8.06	8.17	8.35	7.8	6.0 – 8.5	6.0 – 9.0	
	1448	7.11	7.09	7.88	7.92	8.66	7.55	7.97	8.13	7.98	8.03	8.21	7.97			
	4346	8.31	7.24	8.18	8.26	7.18	8.37	7.27	8.40	7.24	7.70	8.51	8.45			
	4347	7.55	7.36	8.14	8.13	7.78	8.01	7.19	8.27	7.38	7.58	8.19	8.25			
DO	4351	7.1	8.3	5.5	6.5	6.2	5.6	6	6.2	6.0	6.0	6.5	8.0	6.0	5.0	4.0
	1448	7.7	7.4	7.0	6.2	7.2	7.4	6.2	6.3	6.2	6.5	6.4	7.2			
	4346	8.0	8.5	7.5	6.8	7.5	6.7	6.9	6.1	6.4	4.5	7	6.4			
	4347	7.5	7.0	7.0	6.3	7.0	6.1	5.5	6.0	8.0	6.2	7.5	7.3			
BOD	4351	1.9	1.3	2.7	2.3	2.4	2.6	2.2	2.0	1.2	2.3	1.4	2.2	2.0	3.0	3.0
	1448	1.7	1.8	2.0	1.7	2.1	2.8	2.2	1.9	1.3	2.4	1.2	2.7			
	4346	2.0	2.1	2.0	1.8	2.2	2.4	2.6	2.4	2.5	1.5	2.4	2.1			
	4347	2.5	2.5	2.5	2.2	2.5	1.8	2.8	2.5	2.8	1.9	2.2	2.6			
Total Coliform	4351	150	150	150	120	120	150	150	210	64	120	75	240	50	500	5000
	1448	120	150	120	93	150	150	120	150	240	240	28	120			
	4346	120	460	120	120	150	210	240	210	240	210	210	210			
	4347	150	1100	150	150	150	120	150	240	150	210	150	240			
Fecal Coliform	4351	15	9	15	15	7	11	7	9	14	4	<3	15	----	500	----
	1448	9	15	9	4	7	9	4	7	23	7	28	11			
	4346	7	15	9	9	7	9	7	4	7	11	11	7			
	4347	15	20	15	15	9	7	7	7	7	28	11	9			
TDS	4351	188	220	240	268	259	223	135	125	145	146	156	171	500-2000		
	1448	194	196	200	238	210	211	120	166	165	132	159	180			
	4346	168	224	212	276	272	208	175	175	188	216	214	198			
	4347	242	228	248	288	258	218	174	164	170	278	222	206			
Note: All values are expressed in mg/L except pH, Total Coliform value & Fecal Coliform. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.																
Remarks: BOD & Fecal coliform values found to within the standard limits stipulated for bathing at all the locations.																

5. River Kundu:

Andhra Pradesh Pollution Control Board is monitoring water quality of river Kundu at the following locations. Data pertaining to important parameters like, pH, Dissolved Oxygen, BOD, Total Coliform, Fecal Coliform and TDS for the year, 2022 is as follows:

S. No.	Code	Location point
1	2351	At Nandyal, Kurnool Dist.

Month-wise data of water quality of river Kundu, 2022

Parameters	Ja n	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	*Standard		
													Class A	Class B	Class C
pH	7.5	8.0	7.2	7.1	7.1	7.6	6.9	7.1	7.2	7.2	7.3	7.5	6.0 – 8.5		6.0 – 9.0
DO	6.3	6.5	6.0	5.1	4.0	4.8	4.4	5.7	6.1	6.1	6.3	5.5	6.0	5.0	4.0
BOD	3.4	2.7	2.8	3.7	3.2	2.7	2.5	2.0	2.0	1.5	2.2	2.2	2.0	3.0	3.0
Total Coliform	96 6	1203	104 6	173 3	198 6	130 0	173 3	198 6	155 3	141 4	104 6	112 0	50	500	5000
Fecal Coliform	30 6	412	491	412	722	530	403	575	457	395	322	525	---	500	---
TDS	52 1	762	853	742	648	682	689	384	328	343	391	452	500 - 2000		
Note: All values are expressed in mg/L except pH, Total Coliform & Fecal Coliform value. Total Coliform & Fecal Coliform is expressed in MPN count / 100 ml.															
Remarks: BOD & Fecal Coliform values found to be within the standard limits stipulated for bathing.															

CPCB Water Quality Criteria for Designated Best Use

Designated-best- use	Class of water	Criteria
Drinking Water Source without conventional treatment but after disinfection.	A	• Total Coli forms Organism MPN/100 ml shall be 50 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 6 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 2mg/l or less.
Outdoor bathing (Organized)	B	• Total Coli forms Organism MPN/100 ml shall be 500 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 5 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less.
Drinking Water Source after conventional treatment and disinfection.	C	• Total Coli forms Organism MPN/100 ml shall be 5000 or less. • pH between 6 to 9 • Dissolved oxygen 4 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
Propagation of Wild life and Fisheries.	D	• pH between 6.5 to 8.5 • Dissolved oxygen 4 mg/l or more. • Free Ammonia (as N) 1.2 mg/l or less • pH 9 between 6.0 to 8.5.
Irrigation, Industrial Cooling, Controlled Waste disposal.	E	• Electrical Conductivity at 25°C micro mhos/cm Max. 2250. • Sodium Absorption ratio Max. 26 • Boron Max.2 mg/l.
	Below -E	Not Meeting A, B, C, D & E Criteria.

Model River Stretch for Rejuvenation of River Tungabhadra (Priority-IV)

1. Monitoring mechanism proposed for implementation of action plans

The water quality assessment and evaluation of impacts is necessary to understand the river state at various stages of the project implementation and post implementation of the project. Therefore, the water quality assessment and evaluation of the project achievements is essential component for the long term benefit of the project. The monitoring and evaluation is necessary for taking corrective measures at appropriate time. The monitoring and evaluation schedule proposed is as detailed below:

1.1 Water Quality Monitoring Stations (WQMS):

The APPCB is regularly monitoring water quality of River Tungabhadra on monthly basis for the following parameters at the locations mentioned below, which are also NWMP locations:

S No.	Code *	Location	Parameters
01	1785	Manthralayam, Kurnool Dist.	pH Dissolved Oxygen (DO) Bio-Chemical Oxygen Demand (BOD) Total Coliform Fecal Coliform Total Dissolved Solids (TDS)
02	1174	Bhavapuram, Kurnool Dist.	
03	4388	U/s of Kurnool town B/C with domestic sewage & A/c of Rayalaseema alkalies industries at Gondiparla, Kurnool.	
04	4389	D/s of Kurnool town A/C with domestic sewage at Gondiparla, Kurnool.	

*The code relates to NWMP of CPCB.

All the parameters are presently monitored manually and uploaded in the River Rejuvenation Committee (RRC) link <https://rrc.ap.gov.in/Views/Monitoring.aspx>, of APPCB website. There is a scope in future to install continuous water quality monitoring system (CWQMS) for the required parameters.

2. Public Mass awareness etc.

To implement any river conservation project successfully, public awareness is of utmost importance. Unless the public are made aware of the irreversible damage and pollution caused by indiscriminate littering and dumping of waste and garbage in drains and water bodies which leads to Killing of the River. Hence, it should be ensured to conserve the river with the following action points

- To involve the local communities in all the stages of the project cycle, from conceptualization, preparation, finalization, implementation and finally operation and maintenance (O&M).
- Public Awareness & Public Participation should be the front-end activity of the project.
- The entire programme of River conservation should be conceived, formulated, implemented, monitored and evaluated in close consultation with the stake holding communities.

- Therefore, education and awareness programmes are key to the sustainability of the various components implemented as part of the river conservation/restoration project.

3. River Rejuvenation Plan

Action Points

Type	Action Points	Authority Responsible
Industrial Pollution	In Kurnool District, there are three (03) No's of industries, viz., M/s Adani Willmar Pvt. Ltd., Manthralayam, M/s TGVSRAC, Ltd., Gondiparla, M/s Sri Rayalaseema Hi-Strength Hypo Ltd., Gondiparla. These industries are not discharging their effluents into River Tungabhadra, as these are having Zero liquid discharge facility (ZLD).	SPCB
Interception and treatment of Raw Sewage	a) There are total 03 No. of (Kurnool – 03) Sewage Treatment Plants (STPs) with utilization of 2.4 MLD capacity. The untreated raw sewage capacity 41.6 MLD is directly discharged into the river. b) Whether the present STPs are sufficient in capacity to treat total sewage generation or not. c) Identify the gaps.	CDMA
Ground Water Assessment	a) Carry out assessment of ground water survey in the catchment area of the identified polluted stretch twice in a year to ensure quality. b) To promote roof top rain water harvesting by individual households.	Ground water dept

Flood Plain Zone	a) Conservation of the river through water shed management. b) Cleaning of the river bed and bank. c) Afforestation on both the banks to prevent soil erosion. d) Recreational activities to be promoted. e) Erection of path way of the river banks. f) Checking encroachment in the flood plain zone of the polluted river stretch g) Prohibition of disposal of municipal, plastic, biomedical and other wastes in the polluted stretch of the river bank. h) Demarcation of the flood plain zone.	Water Resources / CDMA / Municipal Corporation / Irrigation / Forest / Tourism / PWD / Local Administration
Monitoring of Action Plan	The plan for the polluted stretches of the river may be implemented in a time bound manner by activities such as: a) Modification of consent conditions for STPs in and around the polluted river stretches. b) Surveillance of sources of pollution in contrast to the norms. c) Assessment of water quality of the polluted stretches on monthly basis. The APPCB is regularly (monthly) monitoring the river water quality under NWMP. The analytical data generated is being uploaded in the RRC https://rrc.ap.gov.in/Views/Monitoring.aspx of APPCB website in addition to EWQDES (CPCB). d) The monitoring committee may convene meeting of Stakeholder organizations on Quarterly basis by the CDMA as Nodal Authority.	Pollution Control Board
Solid Waste	a) Prohibition of direct disposal of Municipal solid waste in the river banks. b) Frequent River Surface cleaning by removal of debris, plastics etc.	CDMA / Municipal Corporation/ Water Resource Department

Environmental Flow	a) Flow measurement of the river should be carried out by the concerned department and the record has to be maintained b) Fresh water flowing through escape channels / small barrages should be checked. c) The river can be of good potential for Irrigation purpose and the farmers have to adopt good irrigation practices.	Water Resource /Irrigation/ Agriculture Department
Public Awareness	a) To highlight the issues related with the direct discharge of domestic solid waste and open defecation awareness programs have to be implemented. b) Mass awareness to conserve water.	CDMA/ Municipal Corporation/ Village Panchayats/ NGOs

Model River Stretch for Rejuvenation of River Krishna (Priority-V)

1. Monitoring mechanism proposed for implementation of action plans

The water quality assessment and evaluation of impacts is necessary to understand the river state at various stages of the project implementation and post implementation of the project. Therefore, the water quality assessment and evaluation of the project achievements is essential component for the long term benefit of the project. The monitoring and evaluation is necessary for taking corrective measures at appropriate time. The monitoring and evaluation schedule proposed is as detailed below:

1.1 Water Quality Monitoring Stations (WQMS):

The APPCB is regularly monitoring water quality of River Krishna on monthly basis for the following parameters at the locations mentioned below, which are also NWMP locations:

S No.	Code *	Location	Parameters
01	1175	Sangameswaram, Kurnool Dist.	pH Dissolved Oxygen (DO) Bio-Chemical Oxygen Demand (BOD) Total Coliform Fecal Coliform Total Dissolved Solids (TDS)
02	3083	Srisailam, Kurnool Dist.	
03	4381	After confluence with river Musi at Vadapalli, Guntur Dist.	
04	1786	Vedadri, Krishna Dist.	
05	1787	Amaravathi, Guntur Dist.	
06	0025	Prakasham barrage, Vijayawada, Krishna Dist.	
07	4375	Pavitrasangamam at Ibrahimpatnam, Krishna Dist.	
08	1782	Hamsaladeevi, Krishna Dist.	

*The code relates to NWMP of CPCB.

All the parameters are presently monitored manually and uploaded in the River Rejuvenation Committee (RRC) link <https://rrc.ap.gov.in/Views/Monitoring.aspx>, of APPCB website. There is a scope in future to install continuous water quality monitoring system (CWQMS) for the required parameters.

2. Public Mass awareness etc.

To implement any river conservation project successfully, public awareness is of utmost importance. Unless the public are made aware of the irreversible damage and pollution caused by indiscriminate littering and dumping of waste and garbage in drains and water bodies which leads to Killing of the River. Hence, it should be ensured to conserve the river with the following action points

- To involve the local communities in all the stages of the project cycle, from conceptualization, preparation, finalization, implementation and finally operation and maintenance (O&M).
- Public Awareness & Public Participation should be the front-end activity of the project.
- The entire programme of River conservation should be conceived, formulated, implemented, monitored and evaluated in close consultation with the stake holding communities.
- Therefore, education and awareness programmes are key to the sustainability of the various components implemented as part of the river conservation/restoration project.

3. River Rejuvenation Plan:

Action Points

Type	Action Points	Authority Responsible
Industrial Pollution	In Krishna district, there is only one industry discharging the effluent into River Krishna, i.e., M/s. Dr. Narla Tata Rao Thermal Power Station. The effluent is discharged through Budameru Diversion Channel (drain), which in turn joins river Krishna in the upstream of Prakasam Barrage, Near Ibrahimpatnam village.	SPCB
Interception and treatment of Raw Sewage	a) There are total 09 (Vijayawada – 07 & Guntur – 02) Sewage Treatment Plants (STPs) currently operational. b) Identify any untreated sewage joining the river. c) Whether the present STPs are sufficient in capacity to treat total sewage generation or not. d) Identify the gaps.	CDMA
Ground Water Assessment	a) Carry out assessment of ground water survey in the catchment area of the identified polluted stretch twice in a year to ensure quality. b) To promote roof top rain water harvesting by individual households.	Ground water dept

Flood Plain Zone	a) Conservation of the river through water shed management. b) Cleaning of the river bed and bank. c) Afforestation on both the banks to prevent soil erosion. d) Recreational activities to be promoted. e) Erection of path way of the river banks. f) Checking encroachment in the flood plain zone of the polluted river stretch g) Prohibition of disposal of municipal, plastic, biomedical and other wastes in the polluted stretch of the river bank. h) Demarcation of the flood plain zone.	Water Resources / CDMA / Municipal Corporation / Irrigation/ Forest /Tourism /PWD/ Local Administration
Monitoring of Action Plan	The plan for the polluted stretches of the river may be implemented in a time bound manner by activities such as: a) Modification of consent conditions for STPs in and around the polluted river stretches. b) Surveillance of sources of pollution in contrast to the norms. c) Assessment of water quality of the polluted stretches on monthly basis. The APPCB is regularly (monthly) monitoring the river water quality under NWMP. The analytical data generated is being uploaded in the RRC https://rrc.ap.gov.in/Views/Monitoring.aspx of APPCB website in addition to EWQDES (CPCB). d) The monitoring committee may convene meeting of Stakeholder organizations on Quarterly basis by the CDMA as Nodal Authority.	Pollution Control Board
Solid Waste	a) Prohibition of direct disposal of Municipal Solid waste in the river banks. b) Frequent River Surface cleaning by removal of debris, plastics etc.	CDMA/ Municipal Corporation/ Water Resource Department

Environmental Flow	a) Flow measurement of the river should be carried out by the concerned department and the record has to be maintained b) Fresh water flowing through escape channels/small barrages should be checked. c) The river can be of good potential for Irrigation purpose and the farmers have to adopt good irrigation practices.	Water Resource /Irrigation/ Agriculture Department
Public Awareness	a) To highlight the issues related with the direct discharge of domestic solid waste and open defecation awareness programs have to be implemented. b) Mass awareness to conserve water.	CDMA/ Municipal Corporation/ Village Panchayats/ NGOs