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

Letter No.953724/UBS/2020 Dated:20-11-2020

From
The 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:- 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 October, 2020 - furnished – Regarding.

Ref:- Orders of the National Green Tribunal Principal Bench, New Delhi in OA No.673/2018, dt.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 October, 2020 for taking further necessary action.

Yours faithfully,

G. Sudha Rani
For SECRETARY TO GOVERNMENT

National Mission for Clean Ganga
Format for submission of Monthly Progress Report for the month of October, 2020 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 Population:

Urban Population & Rural Population separately: 1.48crore (Urban Only)

II. Estimated Sewage Generation (MLD) : 1463.20 MLD

III. **Details of Sewage Treatment Plant:**

- Existing no. of STPs and Treatment Capacity (in MLD) : 515.85 MLD (43No's)
- Capacity Utilization of existing STPs :321.81 MLD
- Present Gap in Treatment Capacity in MLD : 947.35 MLD
- Capacity Utilization of existing STPs :321.81 MLD
- Capacity of under construction STP's : 458.90 MLD
- No. of Operational STPs : 43nos
- No. of Complying STPs : 43nos
- No. of Non-complying STPs : Nil

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)	Capacity Being Utilized (in MLD)	Operational Status of STP	Compliance Status of STP
1	2	3	4	5	6	7	8
1	GVMC	Old town	May'2019	38.00	34.61	Operational	Comply
2		Appughar	26.09.2010	25.00	21.43	Operational	Comply

3		Mudasarlova	April'2008	13.00	8.50	Operational	Comply
4		Narava	Aug-01	54.00	20.11	Operational	Comply
5		Anakapalle	April'2018	15.00	6.87	Operational	Comply
6		Madinabagh		2.00	0.97	Operational	Comply
7		Yathapalem Colonies	April'2008	2.50	0.96	Operational	Comply
8		Gajuwaka	April'2008	0.50	0.22	Operational	Comply
9		Karnavanipalem	Dec' 2019	5.00		Operational	Comply
10		Mantripalem	April' 2008	1.00	0.29	Operational	Comply
11		Aganampudi	Dec' 2015	6.00		Operational	Comply
12		Rathi Cheruvu	Sep' 2019	2.00	0.62	Operational	Comply
13		Kommadi / Madhurawada	Aug' 2018	4.00	2.02	Operational	Comply
14		Bakkannapalem	Aug' 2011	1.00	0.34	Operational	Comply
15		Marikavalasa	Dec' 2012	2.00	1.09	Operational	Comply
16		Vambay Colony	Aug' 2011	3.00	1.31	Operational	Comply
17		YSR Nagar	Aug' 2011	2.00	1.24	Operational	Comply
18		Boyapalem	Aug' 2011	1.00	0.37	Operational	Comply
19	Rajamahendravaram	Hukumpeta	03.01.2009	30.00	30.00	Operational	Comply
20	Vijayawada	Ajith Singh Nagar-1	31.05.2011	40.00	39.52	Operational	Comply
21		Ajith Singh Nagar-2	31.05.2012	20.00	20.00	Operational	Comply

22		Ramalingeswar Nagar-1	30.06.2012	20.00	19.74	Operational	Comply
23		Ramalingeswar Nagar-2	20.10.2006	10.00	9.80	Operational	Comply
24		Autonagar Nagar-1	31.03.2005	10.00	9.70	Operational	Comply
25		Autonagar Nagar-2	31.12.2018	10.00	9.80	Operational	Comply
26		Jakkampudi	31.07.2017	20.00	13.50	Operational	Comply
27	Tirupathi	Thukivakam		50.00	33.00	Operational	Comply
28	Kadapa	Nanapally	02.08.2012	20.00	10.00	Partly Operational	Comply
29	Pulivendula	Rotarypuram	25.01.2009	6.50	2.50	Partly Operational	Comply
30	Tadipatri	Gannevaripalle	10.10.2010	3.50	6.50	Operational	Comply
31		Gannevaripalle	10.10.2010	8.00		Operational	Comply
32	Puttaparthy	1.Sai Nagar	20.7.2001	0.50	0.50	Operational	Comply
33		2. Gokulam	20.7.2001	0.50		Under Rehabilitation	Comply
34		3. Prasanthi Gram	20.7.2001	0.50		Under Rehabilitation	Comply
35	Narsaraopeta	CPT Road	02.02.2018	15.55	8.50	Operational	Comply
36	Nellore	Janardhan Reddy Colony		55.00	5.00	Under Construction	Comply
37		Allepuram		11.00		Under Construction	Comply
38		Drivers Colony		5.00		Under Construction	Comply

39	Kurnool	jammichettu	12.03.2019	0.80	0.80	Operational	Comply
40		Sankal Bagh	12.03.2019	0.80	0.80	Operational	Comply
41		Tungabhadra PumpHouse	10.03.2018	0.80	0.80	Operational	Comply
42	Tadepalli	Mahanadu-1	10.12.2018	0.20	0.20	Operational	Comply
43		Mahanadu-2	15.12.2018	0.20	0.20		Comply
	TOTAL			**515.85**	**321.81**		

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

S.No.	Location	Capacity of the plant in MLD	Physical Progress in %	Status of I&D or No.of House sewer connections	Completion Timeline
1	Srikakulam	10.00	45%	Nil	December2021
2	Vizianagaram	5.00	53%	Nil	March2021
3	GVMC	2.00	50%	1200	March2021
4	GVMC	46.00	20%	27841	December2021
5	Kakinada	5.00	24%	487	December2021
6	Rajamahendravaram	5.00	5%	Nil	December2021
7	Bhimavaram	5.00	22%	Nil	December2021
8	Tadepalligudem	5.00	0%	Nil	December2021
9	Eluru	5.00	29%	2025	December2021
10	Machilipatnam	5.00	45%	Nil	December2021
11	Gudivada	5.00	32%	Nil	December2021
12	Vijayawada	20.00	83%	11788	December2021
13	Guntur	123.00	50%	24000	Jun2022
14	Tenali	10.00	25%	Nil	December2021
15	Tenali	2.00	5%	Nil	December2021
16	Ongole	15.00	40%	Nil	December2021

17	Chilakaluripet	5.00	20%	Nil	December2021
18	Kavali	15.00	71%	Nil	December2021
19	Nellore	34.00	81%	15000	December2021
20	Tirupati	0.40	25%	Nil	March2021
21	Tirupati	25.00	25%	14243	December2021
22	Srikalahasti	7.00	8%	Nil	December2021
23	Madanapalle	5.00	12%	Nil	December2021
24	Kadapa	20.00	0%	Nil	December2021
25	Anantapuram	10.00	0%	Nil	December2021
26	Dharmavaram	15.00	0%	Nil	December2021
27	Guntakal	8.00	0%	Nil	December2021
28	Kurnool	2.00	20%	Nil	December2021
29	Kurnool	10.00	5%	Nil	December2021
30	Nandyal	10.00	5%	Nil	December2021
31	Yemmiganur	19.50	96%	3928	December2021
32	Adoni	5.00	10%	Nil	December2021
	Total	**458.90**		**100512**	

III C) Details of proposed STPs in the State:

S.No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
1	Kanigiri	5.00	Under Tendering	Two years after date of award of the work
2	Sullurpet	9.00		
3	Allagadda	5.00		
4	Nandikotkur	5.00		
5	Madakasira	5.00		
6	Pulivendula	14.00		
7	Rayachoti	22.40		
	Total	**65.40**		

III D) STATUS OF STPs UNDER RIVER STRETCHES:

S.No	Name of River Stretch	Name of the ULB	STP Capacity	Status of Ongoing Works	Status of DPRs
PRIORITY-IV RIVERS					
1	Tungabhadra	Kurnool	10 MLD	5%	DPR prepared for Rs.304.00 Crores proposed additional STPs of 78 MLD to satisfy the demand for the year 2035 and submitted to the Govt. for according administrative sanction
			2 MLD	20%	
2	Kundu	Nandyal	10 MLD	5%	Comprehensive DPR on UGD scheme is prepared for Rs.85.00 Cr with STPs capacity of 26 (21 + 5) MLD to cater the needs of 2035 year. DPR submitted to the Govt. for according Administrative Sanction

PRIORITY-V RIVERS					
1.	Nagavali	Srikakulam	10 MLD	45%	Comprehensive proposal for providing UGD scheme for 2035 needs is prepared for an amount of Rs.190.36 Cr with an additional STP capacity of 12 MLD.
2.	Godavari	Rajamahendravaram	5 MLD	5%	DPR on Comprehensive UGD scheme prepared with additional STP's of capacity 72.37 MLD for an amount of Rs.404.00 Cr. RMC has attended the remarks and resubmitted the proposals.
3.	Krishna	Vijayawada	20 MLD	83%	DPR is prepared for Rs.246.38 Cr to for providing Comprehensive UGD scheme to meet the 2035 demand including up-gradation of 2 STPs of 30.00

					MLD capacity.

IV Details of Industrial Pollution:

- No. of industries in the State: 9941No's
- No. of water polluting industries in the State: 1069 No's
- Quantity of effluent generated from the industries in MLD: 4494.33 MLD

The breaks up details are mentioned below:

- ✓ *Total Process waste water : 364.97 MLD*
- ✓ *Total cooling tower/Boiler blow down: 254.118 MLD*
- ✓ *Total Once through Cooling water: 3826.13 MLD*
- ✓ *Total Domestic discharge: 49.54 MLD*
- ✓ From the total industrial generation, major portion is through once through cooling water (85%) and the discharge temperature is maintained not more than 5^0C temperature.
- ✓ From the Cooling tower/Boiler blow down (5.6%).
- ✓ The remaining 9.4% is generated from Process waste water & Domestic purpose.

- Quantity of Hazardous Sludge generated from the Industries in TPD: 1,47,1388 TPA
- Number of industrial units having ETPs: 1069 No's
- Number of industrial units connected to CETP: 330 No's
- Number and total capacity of ETPs (details of existing/ under construction / proposed)
  - i. Existing: 1069 no's ETPs
  - ii. Under construction: -- iii. Proposed: --

- Compliance status of the ETPs: APPCB is regularly monitoring the compliance status of ETPs
- Number and total capacity of CETPs (details of existing/ under construction / proposed)
    i. Existing: 7 No's with total capacity of 31 MLD
    ii. Under construction: Nil
    iii. Proposed: Nil
- **Status of compliance and operation of the CETPs**

S.No.	Name and Address of the CETP &contact person	Design capacity	Current Operating capacity	Type and No. of member units
1.	Brandix India Apparel City Private Limited, APSEZ, Atchutapuram Pudimadaka Road, Visakhapatnam.	20 MLD	4 MLD	Texitile park- 14 units
2.	Ramky Pharma City (India) Ltd, JN Pharma City, Parawada Mandal, Visakhapatnam.	5.0 MLD	4.8 MLD	Pharmaceutical & Bulk drugs-92 units
3.	Kondapally Envirotech Pvt. Ltd., (KEPL), IDA, Kondapalli(V), Ibrahimpatnam (M), Krishna District.	0.2 MLD	0.15 MLD	Pharmaceutical & Bulk drugs-13 units
4.	Vijayawada Auto Cluster Development Company, Industrial Estate, Auto Nagar, Vijayawada.	0.2 MLD	0.2 MLD	Food beverages, Herbal pharma, Oil solvents & lubricants - 38 units
5.	Machilipatnam Imitation Jewellery Park Pvt. Ltd., Jewellery Park, Pothepalli, Machilipatnam.	0.07 MLD	0.002 MLD	Electro Plating – 48 Units
6.	Nagari Dyeing Owners Association, Chinthalapatteda (V), Nagari (M), Chittoor District.	4 MLD	0.8 MLD	Manual Dyeing units - 105 units
7.	Atchuthapuram Effluent Treatment Plant, Atchutapuram Visakhapatnam.	1.5 MLD	Under Trial Runs	Pharmaceutical & Bulk drugs-20 units

V. **Solid Waste Management:**

- Total number of Urban Local Bodies: **120** and their Population: **1.48** Crore
- Current Municipal Solid Waste Generation: **6850** TPD. for 120 ULBs
  (10 Newly Constituted ULBs – These ULBs have not yet developed urban Dynamics)
- 2 Waste to Energy Projects covering 13 ULBs are in progress with an installed capacity of 1500 TPD (30 MW),
- 29 wet waste projects covering 32 ULBs treating 1200 TPD with an installed capacity of 1500 TPD are existing.
- 23 wet waste projects covering 24 ULBs are in progress with an installed capacity of 400 TPD,
- 54 Wet waste projects (44 compost and 10 Biomethanation) covering 54 ULBs are proposed and RFP process is in progress and Feasibility study of 2 Waste to Energy projects is under progress
- 72 Material Recovery facilities covering 72 ULBs treating 800 TPD with an installed capacity of 1000 TPD Existing.
- 38 Material Recovery facilities covering 38 ULBs are in progress with an installed capacity of 450 TPD.
- 3 Construction and Demolition waste processing plants in GVMC, VMC and TMC treating 100 TPD with an installed capacity of 200 TPD are existing.
- The Source Segregation in the State is 81 % and capacity utilization of the treatment units is the same percentage, Ward Secretariats and volunteer system established and unique in the State are ensuring 99 % door to door collection.
- Total no. of wards: 3634. No. of wards having door to door collection service: 3634. No. of wards practicing segregation at source: 2944
- 114 Dumpsites with an area of 1000 acres are existing in the state. Out of which remediation of 4 dumpsites in 4 ULBs (GVMC, VMC, TMC and Tanuku) is under progress
- No Dumpsites of legacy waste are within 1km buffer of both side of the rivers in the State
- A total of 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 out

fall points are provided with meshes/ screens to prevent solid waste from falling into the rivers:

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW Facilities	InProgress MSW Facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline	
Addanki	20	3	1	1	90%		
Adoni	81	55	2		85%		
Allagadda	20	13	2		85%		
Amalapuram	26	4	1	1	90%		
Amudalavalasa	19	10	2		85%		
Anantapur	131	42	1		90%	1 WWTP	Nov-21
Atmakur K	22	7	1	1	85%		
Atmakur N	15	2	1		90%	1 WWTP	Nov-21
Badvel	35	6	Decentralized	1		1 WWTP	Nov-21
Bapatla	34	5	1	1	90%		
Bhimavaram	69	2	Decentralized	1		1 WWTP	Nov-21
Bobbili	29	15	2		85%		
Chilakaluripet	49	3	Decentralized	1		1 WWTP	Nov-21
Chimakurthy	15	2	1	1	90%		
Chirala	42	21	2		85%		
Chittoor	92	15	1		90%	1 WWTP	Nov-21
Dharmavaram	62	2	Decentralized	1		1 WWTP	Nov-21
Dhone	29	9	1		90%	1 WWTP	Nov-21
Eluru	106	31	1		90%	1 WWTP	Nov-21
Giddalur	19	9	2		85%		
Gollaprolu	12	1	Decentralized	1		1 WWTP	Nov-21
Gooty	24	4	1		90%	1 WWTP	Nov-21

Gudivada	58	19	1	1	90%		
Gudur K	11	1	Decentralized	1		1 WWTP	Nov-21
Gudur N	36	6	Decentralized	1		1 WWTP	Nov-21
Guntakal	62	20	1		90%	1 WWTP	Nov-21
Guntur	363	24	Decentralized	1		1 WWTP	Nov-21
GVMC	918	510	2		85%		
Hindupur	74	12	1	1	90%		
Ichchapuram	18	9	2		85%		
Jaggaiahpet	26	4	Decentralized	2			
Jammalamadugu	22	11	1	1	80%		
Jangareddy Gudem	26	4	1		90%	1 WWTP	Nov-21
Kadapa	167	55	1		90%	1 WWTP	Nov-21
Kadiri	43	14	1	1	90%		
Kakinada	159	39	1		90%	1 WWTP	Nov-21
Kalyandurgam	21	3	1	1	90%		
Kandukur	28	4	1	1	90%		
Kanigiri	22	11	2		85%		
Kavali	51	8	1		90%	1 WWTP	Nov-21
Kovvur	19	3	1		90%	1 WWTP	Nov-21
Kurnool	224	36	Decentralized	1		1 WWTP	Nov-21
Macherla	28	1	Decentralized	2			
Machilipatnam	89	14	Decentralized	2			
Madakasira	10	2	1	1	80%		
Madanpalle	67	24	1	1	80%		
Mandapeta	26	12	1		90%	1 WWTP	Nov-21
Mangalagiri	36	6	1		90%	1 WWTP	Nov-21
Markapur	35	12	1	1	80%		
Mummidivaram	12	2	1	1	90%		
Mydukur	22	4	Decentralized	1		1 WWTP	Nov-21

Nagari	30	2	Decentralized	1		1 WWTP	Nov-21
Naidupet	22	4	1		90%	1 WWTP	Nov-21
Nandigama	22	4	Decentralized	2			
Nandikotkur	23	7	1		90%	1 WWTP	Nov-21
Nandyal	98	31	1		90%	1 WWTP	Nov-21
Narsapuram	29	5	1		90%	1 WWTP	Nov-21
Narsaraopet	57	30	1		90%	Cluster - Pidugurala	
Narsipatnam	30	15	2		85%		
Nellimarla	12	2	1		90%	1 WWTP	Nov-21
Nellore	293	45	Decentralized	1		1 WWTP	Nov-21
Nidadavole	21	3	1		90%	1 WWTP	Nov-21
Nuzivid	29	10	1	1	80%		
Ongole	123	63	1	1	90%		
Palakollu	30	2	Decentralized	1		1 WWTP	Nov-21
Palakonda	15	5	1	1	90%		
Palamaneru	25	9	1	1	80%		
Palasa kasibugga	28	10	1	1	80%		
Pamidi	13	2	1		90%	1 WWTP	Nov-21
Parvathipuram	26	1	Decentralized	2			
Pedana	15	1	Decentralized	2			
Peddapuram	24	4	1		90%	1 WWTP	Nov-21
Piduguralla	31	16	2		85%		
Pithapuram	25	1	Decentralized	1		1 WWTP	Nov-21
Ponnur	29	5	1		90%	1 WWTP	Nov-21
Proddutur	79	27	1		90%	1 WWTP	Nov-21
Pulivendula	32	22	2		85%		
Punganur	27	14	2		85%		
Puttaparty	15	8	2		85%		

Puttur	26	2	Decentralized	1		1 WWTP	Nov-21
Rajahmundry	168	76	1		90%	1 WWTP	Nov-21
Rajam	21	7	1	1	80%		
Rajampeta	23	4	Decentralized	1		1 WWTP	Nov-21
Ramachandrapuram	21	3	1		90%	1 WWTP	Nov-21
Rayachoti	44	14	1		90%	1 WWTP	Nov-21
Rayadurgam	30	16	2		85%		
Repalle	25	1	Decentralized	2			
Salur	24	12	2		85%		
Samalkota	28	1	Decentralized	1		1 WWTP	Nov-21
Sattenpalle	28	14	1		90%	Cluster - Pidugurala	
Srikakulam	65	22	1		40%	1 WWTP	Nov-21
SriKalahasti	39	6	1		90%	1 WWTP	Nov-21
Sullurpet	22	11	2		85%		
Tadepalle	34	12	1		90%	1 WWTP	Nov-21
Tadepalligudem	51	2	Decentralized	1		1 WWTP	Nov-21
Tadipatri	53	36	2		90%		
Tanuku	44	7	1		90%	1 WWTP	Nov-21
Tenali	80	41	1		90%	1 WWTP	Nov-21
Thiruvuru	17	3	2		85%		
Tirupati	187	138	2		90%		
Tuni	26	7	1	1	90%		
Venkatagiri	25	2	Decentralized	1		1 WWTP	Nov-21
Vijayawada	507	374	2		85%		
Vinukonda	30	2	Decentralized	2			
Vizianagaram	119	40	1		90%	1 WWTP	
Vuyyuru	18	1	Decentralized	2			
Yeleswaram	16	3	1		90%	1 WWTP	Nov-21

Yellamanchali	23	8	1	1	80%		
Yemmiganur	46	2	Decentralized	1		Cluster-Adoni	
Yerraguntla	16	3	Decentralized	1		1 WWTP	Nov-21
Grand Total	**6440**	**2344**	**101**	**63**		**54**	

VI Bio-medical Waste Management:

- Total Bio-medical generation: 9258 kg/day
- No. of Hospitals and Health Care Facilities: 10,167 Nos.

Status of Treatment Facility/ CBMWTF	:	Presently, there are 12 Nos. of Common Bio-medical Waste Treatment Facilities (CBMWTFs) in covering total 13 Districts in Andhra Pradesh for treatment and disposal of bio-medical waste

VII Hazardous Waste Management:

- Total Hazardous Waste generation: 5,15,803 TPA
- No. of Industries generating Hazardous waste: 2683 Nos.
- Treatment Capacity of all TSDFs:
- **Avg. Quantity of Hazardous waste reaching the TSDFs and Treated:**

In Andhra Pradesh about 5,15,803 TPA (100%) of hazardous waste is generated. Out which

i) Utilizable waste is 3,42,312 TPA (66.4%) (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 is 23,078 TPA (4.5%) (suitable for recycling /recovery of material viz. oil reclamation units, lead and zinc recovery units),

iii) Incinerable waste is 3,025 TPA (0.6%) (not suitable for any recycling / reuse and having high calorific value i.e. > 2500 K cal/kg) and

iv) Land fillable waste is 1,47,388 TPA (28.5%) (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.

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

Two TSDF are existing in the State of Andhra Pradesh

- ✓ Ms Ramky Pharmacity India Pvt Ltd, Parwada, Visahkapatnam.
- ✓ Ms Coastal Waste Management Project Unit-2 , a division of Mumbai Waste Management Limited, S.P.S.R. Nellore District

VIII Plastic Waste Management:

Total plastic waste generation	46222 TPA (As per Annual Report for the F.Y. 2019-20).
Treatment / Measures adopted for reduction or management of plastic waste	• The recyclable plastic waste generated is being sent to recycling units and the non-recyclable plastic waste is being sent to cement plants and utilizing for road construction in same ULBs. 14 Nos of recyclers registered with APPCB. Total recycling capacity is 17116 TPA. • 28 ULBs tied up with nearby Cement Plants for co-incineration of non- recyclable plastic waste and 5123 MTs of Non recyclable plastic waste was sent to cement plants for the F.Y 2019-20. • The MA&UD and PR&RD Dept., are conducting strict vigilance and surprise visits on those who store or use or sell or dispose plastic with less than 50 microns thickness, for which 519 Task force teams were constituted for inspections and raids to control plastic sale and usage of less than 50 microns thickness carry bags / films in the ULBs of A.P. About 239 tons of plastic carry bags were seized and Rs. 169 lakhs towards fine was collected.

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

Fecal Sludge Treatment Plants (FSTP) are established in various ULBs of the state. These FSTPs are effective in treating the Septic tank waste. In urban areas most of the households are being provided with toilet and septic tanks and the waste from these septic tanks are being de-sludged through operators and same is being unloaded into the existing STPs or FSTPs for scientific treatment

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

A total of 32 No's of Outfall points of the major disposal drains have been identified which are contributing to river pollution and provided wire meshes at all outfall points.

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

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

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

- 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.asx*** every month. The monitoring of water quality data for the month of October 2020 is enclosed.
- As per the analysis of samples collected at 27 locations, the B.O.D value is less than 3.0 mg/lit.

(Details are enclosed in the annexure)

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:

Reuse of Treated Water: 321.81 MLD

(Details are enclosed in the annexure)

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

Water quality of rivers i.e. Godavari, Krishna, Tungabhadra, Nagavali, Kundu of Andhra Pradesh is monitored regularly on monthly basis under National Water Quality Monitoring project (NWMP) by Andhra Pradesh Pollution Control Board.

The abstract of report is as follows and details are furnished as below.

S.No	Name of the River	Priority	BOD acceptable limit (ppm)	Average BOD Levels (ppm)	Water Quality Status
1	Tungabhadra	IV	6 to 10	2.3	Satisfactory
2	Kundu	IV	6 to 10	2.1	Satisfactory
3	Godavari	V	3 to 6	1.7	Satisfactory
4	Krishna	V	3 to 6	1.5	Satisfactory
5	Nagavali	V	3 to 6	1.9	Satisfactory

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.

ENCLOSURES:

Water quality status of polluted river stretches in Andhra Pradesh

Water Quality Monitoring period from January to October 2020

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, Fecal Coliform and TDS for the year, 2020 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, 2020

Parameter	Code	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Standard		
												Class A	Class B	Class C
pH	4367	8.5	7.9	8.72	8.68	8.44	8.54	7.2	7.35	7.26	7.79	6.0 - 8.5		6.0 – 9.0
	4359	7.9	7.8	7.49	7.69	--	--	--	7.43	6.95	7.30			
	0014	8.2	7.6	7.84	7.81	7.62	8.17	7.45	7.62	7.62	7.52			
	1218	8.2	7.9	8.48	7.79	7.79	8.14	7.42	7.62	7.18	7.94			
	2370	8.3	7.3	7.44	7.52	7.72	7.74	7.43	7.48	7.27	7.75			
	2371	8.2	7.9	7.87	7.46	7.70	8.12	6.92	7.23	7.19	7.69			
	1219	7.6	7.7	7.81	8.05	7.66	7.59	7.14	7.38	7.20	7.66			
	4365	7.7	7.0	7.76	7.50	7.79	8.29	7.33	7.55	6.86	8.07			
	4366	7.5	7.8	8.05	8.68	7.62	8.32	7.56	7.37	7.14	8.54			
	4358	7.5	7.7	7.0	7.8	7.92	8.11	7.33	7.50	7.32	7.82			
DO	4367	6.4	6.9	7.7	6.5	6.8	7.5	6.8	6.7	7.2	5.3	6.0	5.0	4.0
	4359	6.2	6.9	8.0	6.8	--	--	--	6.2	7.0	6.2			
	0014	6.5	6.8	6.5	6.6	6.9	6.5	6.5	6.8	6.8	6.5			
	1218	6.3	6.4	6.8	6.8	7.5	7.7	6.4	6.5	7.3	6.3			
	2370	7.8	6.5	8.5	6.8	7.2	7.2	6.8	6.2	6.8	7.0			
	2371	7.5	5.9	6.5	6.4	7.0	6.6	6.5	6.0	6.3	6.5			
	1219	6.5	7.5	8.4	6.2	6.6	6.3	7.0	6.6	7.0	6.5			
	4365	6.8	8.4	6.2	5.6	6.1	6.4	6.7	6.4	6.8	6.0			
	4366	7.4	6.0	6.0	5.3	5.9	6.2	6.0	6.2	6.4	5.3			
	4358	6.0	6.6	4.8	5.8	5.0	4.8	5.5	6.5	6.0	6.5			
BOD	4367	1.4	2.0	1.8	1.9	2.2	1.5	1.0	2.2	2.2	2.1	2.0	3.0	3.0
	4359	2.0	1.3	1.5	1.3	--	--	--	1.4	1.8	1.9			
	0014	2.0	1.8	2.3	1.5	1.2	1.3	1.6	1.2	1.2	1.7			
	1218	1.3	1.8	1.4	1.2	1.1	1.2	1.8	1.4	2.0	1.8			
	2370	2.0	1.8	2.2	1.3	1.4	1.2	1.2	2.0	1.5	2.0			
	2371	2.5	2.3	1.8	2.0	1.8	2.0	1.6	2.6	2.2	2.2			
	1219	2.6	2.5	1.4	2.2	1.0	1.8	1.3	2.4	1.5	1.2			
	4365	2.2	2.2	2.0	2.2	1.6	1.6	1.0	2.0	1.8	1.5			
	4366	1.8	2.6	2.4	2.8	2.3	1.8	1.2	2.4	2.0	2.0			
	4358	0.9	1.7	2.8	2.6	2.8	2.6	1.1	2.2	1.5	2.0			

Fecal Coliform	4367	11	15	11	4	9	4	9	9	9	15	---	500	---
	4359	4	11	3	4	--	--	--	7	9	9			
	0014	7	9	7	4	<3	4	7	7	9	11			
	1218	11	11	4	4	4	3	11	9	15	15			
	2370	11	7	11	7	7	7	9	7	7	15			
	2371	15	9	15	11	11	11	15	21	15	21			
	1219	15	15	15	9	9	9	11	15	15	15			
	4365	15	7	11	9	11	15	15	15	15	11			
	4366	20	21	11	15	15	21	15	21	21	23			
	4358	11	11	9	7	7	9	9	7	7	11			
TDS	4367	212	508	232	320	408	192	172	212	128	240	500 - 2000		
	4359	86	98	74	74	--	--	--	136	116	68			
	0014	160	144	180	72	116	144	128	128	132	204			
	1218	184	168	180	78	120	152	112	118	160	222			
	2370	176	136	168	108	188	144	164	148	196	286			
	2371	188	186	148	136	212	162	220	164	224	300			
	1219	180	180	126	84	152	136	144	162	184	228			
	4365	13520	136	27140	32868	21312	13240	152	380	148	260			
	4366	19424	18104	35276	34840	29576	18460	340	980	196	2412			
	4358	17692	26584	4212	31472	25752	10120	3744	744	232	292			

Note:: 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, Fecal Coliform and TDS for the year, 2020 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, 2020:

Parameters	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	*Standard		
												Class A	Class B	Class C
pH	1175	7.4	7.3	7.4	6.9	6.6	7.50	7.80	7.50	7.3	7.3	6.0 - 8.5		6.0 – 9.0
	3083	7.3	7.5	7.7	7.1	6.7	7.10	7.60	7.50	7.5	7.4			
	4381	7.9	7.9	7.72	7.71	7.69	7.97	7.64	7.84	7.64	7.92			
	1786	7.8	7.8	7.82	7.29	7.81	7.97	7.94	7.96	7.84	7.87			
	1787	7.7	7.6	7.82	7.47	7.67	7.83	7.74	7.76	7.69	7.94			
	0025	7.8	7.2	7.80	7.71	7.74	7.92	7.82	8.43	7.51	7.74			
	4375	7.8	7.7	7.72	7.67	7.79	7.82	7.70	8.31	7.57	7.82			
	1782	7.8	8.0	7.96	7.93	7.41	7.68	7.42	7.67	7.45	7.64			

DO	1175	6.4	7.3	6.4	4.9	5.6	5.9	5.2	5.4	6.5	6.4	6.0	5.0	4.0
	3083	6.3	7.5	6.3	5.2	5.8	5.9	5.7	5.8	6.8	6.4			
	4381	7.5	7.9	7.4	7.2	6.8	7.3	7.3	7.1	7.2	7.4			
	1786	7.5	7.8	6.8	6.8	6.9	7.6	7.2	7.3	7.2	7.2			
	1787	7.4	7.6	7.3	7.1	6.9	7.3	7.1	7.2	7.1	7.4			
	0025	7.2	7.2	7.1	7.2	7.2	7.1	7.5	7.1	7.0	7.1			
	4375	7.2	7.7	7.2	7.1	7.2	7.1	7.4	7.2	7.1	7.2			
	1782	4.6	8.0	4.6	4.8	4.5	4.8	4.6	4.4	4.2	4.0			
BOD	1175	1.5	1.3	1.2	1.0	2.2	1.7	2.6	1.6	1.0	1.0	2.0	3.0	3.0
	3083	1.3	1.2	1.0	0.8	2.2	1.2	0.8	1.0	1.5	1.2			
	4381	1.6	1.8	1.8	0.8	2.4	2.0	1.2	1.4	1.8	2.0			
	1786	1.2	1.4	1.6	1.4	2.2	1.8	2.0	1.8	2.0	2.2			
	1787	1.0	1.2	1.0	0.8	1.2	1.4	1.2	1.0	0.8	1.0			
	0025	1.2	1.2	1.2	1.0	1.6	1.2	1.8	1.4	1.2	1.6			
	4375	1.0	1.2	1.0	0.8	1.6	1.4	1.2	1.0	0.8	1.0			
	1782	2.2	2.4	2.6	2.2	2.6	2.0	2.4	2.2	2.0	2.2			
Fecal Coliform	1175	100	100	100	100	100	100	100	100	100	100	---	500	---
	3083	<3	200	300	100	100	100	100	200	100	100			
	4381	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			
	1786	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			
	1787	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			
	0025	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			
	4375	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			
	1782	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3			

TDS	1175	316	402	386	482	520	587	744	486	274	309	500 - 2000
	3083	318	326	356	340	364	368	467	468	348	321	
	4381	440	410	460	376	732	446	420	580	490	535	
	1786	320	490	510	464	620	446	420	390	418	508	
	1787	342	365	420	474	620	398	360	402	350	442	
	0025	265	340	390	407	550	425	468	350	348	440	
	4375	258	270	284	250	468	560	230	270	190	210	
	1782	22800	12720	22100	23300	19300	20600	18300	14270	13900	14300	
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, Fecal Coliform and TDS for the year, 2020 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, 2020

Parameters	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	*Standard		
												Class A	Class B	Class C
pH	1785	7.9	7.8	7.9	7.3	7.2	7.7	6.9	7.0	7.6	7.4	6.0 – 8.5		6.0 – 9.0
	1174	7.7	7.4	7.8	7.4	7.3	7.6	7.8	7.5	7.9	7.7			
	4388	7.0	7.1	7.2	6.6	6.2	6.7	7.0	6.8	7.6	7.5			
	4389	7.3	7.1	7.6	7.0	7.2	7.8	7.6	7.5	7.6	7.5			
DO	1785	5.6	5.3	5.9	5.4	5.7	5.7	5.4	5.7	6.6	6.3	6.0	5.0	4.0
	1174	5.5	5.7	5.7	6.2	5.5	5.4	5.7	5.6	6.6	6.3			
	4388	5.4	5.6	5.7	5.1	5.4	5.5	5.2	5.1	6.4	6.2			
	4389	5.3	5.5	5.0	4.3	5.4	5.8	5.2	5.3	6.2	5.8			
BOD	1785	2.2	2.3	2.7	2.6	2.8	2.5	1.4	2.8	1.8	2.0	2.0	3.0	3.0
	1174	2.3	2.5	2.5	1.6	3.0	2.5	2.6	2.2	1.3	1.5			
	4388	2.0	1.9	2.5	3.0	3.0	2.7	1.0	2.2	1.7	2.3			
	4389	2.5	2.8	2.8	2.9	2.3	2.3	0.8	1.8	1.3	2.2			
Fecal Coliform	1785	100	400	300	200	200	100	100	300	100	200	---	500	---
	1174	200	300	200	100	200	200	100	200	100	200			
	4388	100	100	100	300	200	200	200	100	100	600			
	4389	200	300	200	300	100	100	100	100	200	800			
TDS	1785	1120	897	626	686	952	817	748	523	253	479	500 - 2000		
	1174	810	845	764	1084	1210	956	836	634	421	477			
	4388	944	1012	984	1786	2010	1769	1180	792	438	598			
	4389	756	745	603	1248	1328	1175	1086	587	438	424			

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 like D/S of Kurnool town. Hence, this location 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, Fecal Coliform and TDS for the year, 2020 is as follows:

S. No.	Code	Location point
01	4351	River Nagavali at Kuneru, 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, 2020

Parameters	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	*Standard		
												Class A	Class B	Class C
pH	4351	7.5	7.8	7.76	8.25	8.0	8.3	7.59	7.51	7.45	7.87	6.0 – 8.5		6.0 – 9.0
	1448	7.5	8.0	8.13	8.46	7.71	8.11	7.65	7.65	7.41	7.79			
	4346	7.2	7.8	Dried	8.38	7.86	8.25	7.68	7.50	7.69	7.66			
	4347	7.1	7.1	Dried	8.73	7.84	8.2	7.63	7.84	7.42	7.84			
DO	4351	8.0	6.9	6.7	6.5	6.0	6.5	7.6	8.0	6.5	5.6	6.0	5.0	4.0
	1448	6.8	5.9	6.5	6.7	5.9	5.9	5.8	6.2	7.3	5.0			
	4346	8.2	8.3	Dried	6.2	6.0	8.2	8.0	6.2	8.5	7.1			
	4347	5.5	7.9	Dried	6.0	5.8	8.0	7.8	5.3	6.5	6.3			

BOD	4351	2.8	1.0	1.4	1.4	1.5	1.0	1.4	2.5	1.8	2.1	2.0	3.0	3.0
	1448	2.7	2.7	2.5	2.2	1.4	1.4	1.7	1.7	1.8	2.2			
	4346	2.6	2.7	Dried	2.0	1.2	2.4	1.0	2.2	1.5	1.6			
	4347	4.5	2.9	Dried	2.8	2.3	2.8	2.0	2.4	1.7	2.3			
Fecal Coliform	4351	11	7	15	7	9	11	15	9	15	21	---	500	---
	1448	11	15	11	7	4	4	11	15	11	15			
	4346	9	21	Dried	15	7	7	11	7	9	11			
	4347	15	23	Dried	21	11	11	21	9	15	23			
TDS	4351	136	180	260	140	252	188	204	208	192	194	500 - 2000		
	1448	156	232	232	220	216	160	192	172	200	140			
	4346	332	312	Dried	224	240	208	196	240	264	180			
	4347	748	284	Dried	418	276	214	232	280	324	220			
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, Fecal Coliform and TDS for the year, 2020 is as follows:

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

Month-wise data of water quality of river Kundu, 2020

Parameters	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	*Standard		
											Class A	Class B	Class C
pH	7.2	7.6	7.0	6.3	5.9	6.8	6.8	7.1	7.0	6.9	6.0 – 8.5		6.0 – 9.0
DO	5.3	5.2	4.9	4.7	5.2	5.1	5.1	5.4	6.3	6.2	6.0	5.0	4.0
BOD	2.3	2.5	2.4	1.2	2.8	2.0	1.2	2.3	2.5	2.5	2.0	3.0	3.0
Fecal Coliform	200	400	100	200	300	300	200	200	200	300	---	500	---
TDS	461	656	512	624	728	834	752	664	384	296	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.