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CHIEF SECRETARY
GOVERNMENT OF TELANGANA

Lr.No.4582/For.III/A2/EFS&T/2019, Date:02-05-2022

To

The Registrar General,
Hon'ble National Green Tribunal,
Faridkot House,
Copernicus Marg,
New Delhi – 110001.

Sir,

Sub: Govt. of Telangana -- Hon'ble NGT, New Delhi – Original Application No. 606 of 2018 – Compliance of SWM, C&D, PWM, BMWM Rules, 2016 – Hon'ble NGT Order dated 29.04.2019 – 4th Quarterly report of State of Telangana for the Year 2021-22 – Submitted – Reg.

Ref: Hon'ble NGT Order dated 29.04.2019 in OA No. 606 of 2018.

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In compliance to the Hon'ble National Green Tribunal Order dated 29.04.2019 in Original Application No. 606 of 2018, the 4th Quarterly report for the Year 2021-22 (January, 2022 to March, 2022) of the State of Telangana is herewith submitted.

Yours faithfully,

CHIEF SECRETARY

Encl: Report with Annexures.

QUARTERLY STATUS REPORT FOR THE YEAR 2021-22 (JANUARY, 2022 TO MARCH, 2022) ON THE COMPLIANCE BY THE STATE OF TELANGANA WITH THE DIRECTIONS OF THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW DELHI.

IN

ORIGINAL APPLICATION NO. 606 / 2018

&

CONNECTED MATTERS

Submitted by

Chief Secretary, State of Telangana

02-05-2022

INDEX

1. Introduction:

The Hon'ble NGT vide order dated 16.01.2019 in O.A.No.606 of 2018 in the matter of Compliance of Municipal Solid Waste Management Rules, 2016 passed various directions to all the States.

Incompliance with the directions of the Hon'ble NGT order dt. 29.04.2019, the State is filing quarterly reports on the progress of implementation covering thematic areas as directed vide order dt.12.09.2020 and dt.30.11.2021.

The latest compliance status for the quarter of January, 2022 to March, 2022 is as follows: -

2. Status of compliance of Solid Waste Management Rules, 2016 including Legacy Waste:

2.1 Details of Solid Waste Management in State:

S.No		ITEM	COMPLIANCE
1		**Numbers of ULBs**	142
2		**Over all waste management status in State/UTs**	
a		Quantity of MSW generated (TPD)	10318
b		Quantity of MSW Collected (TPD)	10318
c		Quantity of MSW segregated & transported (TPD)	4024 TPD (39%). The waste generated is segregated at source during the present quarter.
d		Quantity of MSW processed (TPD)	7872 TPD
e		Quantity of MSW disposed in secured land fill site (TPD)	1115 TPD inert disposed after processing of MSW
f		Gap in Solid waste Management (TPD) [2(a)-2(d)-2(e)]	2446
g		Solid waste Management Plan	Submitted.
3		**Waste Collection**	
a		ULBs in which waste door-to-door collection is implemented (No)	142
b		ULBs in which segregation of waste is implemented (No)	142. However, 100 % source segregation is not achieved. Only 39% of waste generated is segregated at source in 142 ULBs.

S.No		ITEM	COMPLIANCE
c		ULBs in which Transportation of segregation of waste is implemented (No)	142
4		**Waste Processing**	
a		**Material Recovery facilities**	
	(i)	Total Capacity (TPD)	2365
	(ii)	Number	244
	(iii)	Number of ULBs Covered	142
b		**Recycling**	
	(i)	Total Capacity (TPD)	600.8
	(ii)	Number	3
	(iii)	Number of ULBs Covered	3
c		**Composting**	
	(i)	Total Capacity (TPD)	5120
	(ii)	Number	225
	(iii)	Number of ULBs Covered	142
d		**Bio-methanation**	
	(i)	Total Capacity (TPD)	21 (Siddipet Municipality proposed Bio-gas plant with 10 TPD capacity. Work is under progress)
	(ii)	Number	7
	(iii)	Number of ULBs Covered	5
e		**RDF**	
	(i)	Total Capacity (TPD)	2400
	(ii)	Number	1
	(iii)	Number of ULBs Covered	1
f		**Waste to Energy Plants**	
	(i)	Total Capacity (TPD)	78.4 MW. However, only one WtE plant of capacity 24 MW is under operation utilizing 1700 TPD of RDF.
	(ii)	Number	6
	(iii)	Number of ULBs Covered	6
5		**Waste Disposal**	
a		**Landfill**	
	(i)	Total Capacity (TPD)	1115
	(ii)	Number	1
	(iii)	Number of ULBs Covered	1
6		**Legacy Waste Management**	
a		Number of Dumpsites (No)	152
b		Quantity of Waste dumped at dumpsites (Tons)	Jawaharnagar (GHMC)- 12 million tons; Other 141 ULBs- 71,16,306 tons
c		Number of Dumpsites Cleared(No)	1 (Dommara Pochampally) cleared and one Scientific capping takenup for Jawaharnagar site after

S.No		ITEM	COMPLIANCE
			maximum recovery. Capping work completed. As per the Directions of Hon'ble NGT, GHMC has floated tenders for bio-mining of the capped site. In other ULBs 1,18,639 MTs of waste processed.
d		Number of Dumpsites in which biomining has commenced (No)	123 ULBs commenced bio-mining.
e		Time frame for clearing all Dumpsites	Biomining and Processing of legacy waste for 123 ULBs grouped into 09 clusters. 123 ULBs commenced bio-mining. 18 months for 123 ULBs. Work order has been given to 07 bidders on 25.02.2022 for commencement of work in ULBs. Work already commenced at GWMC, Karimnagar, Bhongir, Suryapet, Dundigal and Ameenpur ULBs and around 1,18,639 MTs of legacy waste has been processed.
7		**Other Information**	
a		Information regarding development of model Towns/cities/Villages	In compliance to the orders of the Hon'ble NGT, the State has identified the following: a) Three major cities selected for Model Cities: 1. Greater Hyderabad Municipal Corporation 2. Greater Warangal Municipal Corporation 3. Karimnagar Municipal Corporation b) Three major towns selected for Model Towns: 1. Siddipet Municipality 2. Sircilla Municipality 3. Boduppal Municipality c) 96 villages @ three villages each in 32 Districts (except Hyderabad District) have been identified. The model cities/towns/villages are implementing the SWM rules.
b		Creation of Environmental Cell	Yes

S.No		ITEM	COMPLIANCE
c		Standardization of rates for procurement of services/equipment(to do away with the tendering process)required for solid waste Management	Yes

Improvements Since Last Hearing

Sl.No	Item	Present Status
1	Door-to-Door Collection (%)	100%
2	Source segregation of waste (%)	39%
3	Waste processing (TPD)	7872
4	Dumpsites capped(No)	1 No. Scientific capping of Jawaharnagar dumpsite (GHMC) completed with a cost of Rs.144 Crores.
5	Dumpsites Bio-remediated(No)	Biomining and Processing of legacy waste for 123 ULBs grouped into 09 clusters. 123 ULBs commenced bio-mining. 18 months for 123 ULBs. Work order has been given to 07 bidders on 25.02.2022 for commencement of work in ULBs. Work already commenced at GWMC, Karimnagar, Bhongir, Suryapet, Dundigal and Ameenpur ULBs and around 1,18,639 MTs of legacy waste has been processed.

2.2 Current status, desirable level of compliance and proposals for attending the gaps:

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statues and desired levels	Proposals for attending the gaps with time lines
Identification of suitable sites for setting up solid waste processing facilities	142 ULBs have identified suitable sites for setting up of SW processing facilities. All the Gram Panchayats (12770) have identified lands.	To be completed by 31.10.2019	Completed	Completed
Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	• 100% by ULBs • 100 % Door to door collection achieved in all GPs.	100 % door to door collection by 31.10.2019	Achieved	Completed
Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source,	• 39% of source segregation is achieved. • 100 % source segregation achieved in all the GPs.	100% of source segregation	61% of source segregation in ULBs.	Waste Generators are properly educated to practice the segregation of waste by conducting various awareness program. The program is conducted with Street vendors, SLFs, SHGs for single use plastic ban, ODF, Home composting etc.
Setting up of solid waste processing facility and sanitary landfill	16 ULBs that are close to Hyderabad, send the waste to MSW processing	As per SWM Rules, 2016, processing facilities and landfill have to be	Secured landfills have to be provided by 139 ULBs. Regional level	All 142 ULBs are doing composting of the wet waste. DRCCs are available in all 142 ULBs for processing dry waste.

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statues and desired levels	Proposals for attending the gaps with time lines
facilities	facility at Jawaharnagar. 5 ULBs at Suryapet, Medchal, Jawaharnagar, Kompally and Dammaiguda have scientific facility for processing wet & dry waste. Total -291 DRCCs established in 141 ULBs (140 ULBs - 206 Nos and GHMC- 85 DRCCs). Waste processing facility of 7000 TPD capacity with scientific landfill is in operation at Survey No. 173, Jawahar Nagar Dumping Site, Kapra Mandal, Medchal Malkangiri district for GHMC area.	provided by - 14 ULBs which have more than 100000 population by 31.03.2018 and remaining 126 ULBs, which have less than 100000 population by 31.03.2019	Sanitary Landfill facility needs to be set-up in Telangana.	Biomining and Processing of legacy waste for 123 ULBs grouped into 09 clusters. Work order has been given to 07 bidders on 25.02.2022 for commencement of work in ULBs. Apart from above, Work already commenced at GWMC, Karimnagar, Bhongir, Suryapet, Dundigal and Ameenpur ULBs and around 1,18,639 MTs of legacy waste has been processed. 18 months for 123 ULBs grouped into 09 clusters. **Sanitary Landfill Facilities:** ULBs are being clustered (at regional/district level) for setting up Sanitary Landfill facility. Land identification and tender for setting up and operating SLF will be subsequently taken-up. **Waste to Energy Plants:** One Waste to energy plant of capacity 24 MW is under operation utilizing 1700 TPD of RDF from GHMC area and Obtained Environmental Clearance for expansion of capacity

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statues and desired levels	Proposals for attending the gaps with time lines
				to 48 MW for utilising 3000 TPD of RDF. Another 14.5 MW is under construction at Dundigal.
Bio-remediation or capping of old and abandoned dump sites.	There is no legacy waste in 16 ULBs – that are close to Hyderabad, as the waste in these ULBs is regularly processed. 71,16,306 MT of legacy dump is located in 123 ULBs. 12 Million Tons of Legacy waste in Jawaharnagar. Legacy dump treatment (Bio-mining) in 123 ULBs has commenced.	To be completed by 31.03.2021.	-	Capping works completed at Jawaharnagar dumpsite. As per the Directions of Hon'ble NGT, GHMC has floated tenders for bio-mining of the capped site. Legacy dump treatment (Bio-mining) in 123 ULBs has commenced. 1,18,639 MT's of legacy waste processed till date.
Ensure separate storage, collection and transportation of construction and demolition wastes.	Action Plan has been prepared by the ULBs for C&D waste management. Separate site for storing C&D waste is earmarked by all ULBs. In GHMC about 46,602 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 46,211 has been recycled in the quarter	As per SWM Rules Ensuring separate storage, collection and transportation of construction and demolition wastes by 08.04.2018.	In rest of the Municipalities the estimated quantity of C&D waste is less. It is submitted that out of 139 ULBs in the State, 127 ULBs have population less than 1,00,000 and on an average generate 2TPD – 3 TPD C&D waste.	For establishment of construction and Demolition processing plants CDMA had invited tenders for selection of agency/concessionaire on PPP mode – DBFOT basis covering 65 ULBs grouped in 6 Clusters, but no bidder participated. .

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statues and desired levels	Proposals for attending the gaps with time lines
	ending with March, 2022. Two C&D recycling plants with 500 TPD capacities each at Jeedimetla and Fathullaguda are under operation.			

2.3 Status of compliance with Rule 22 & 24 of the Solid Waste Management Rules, 2016, regarding time frame for implementation.

The Status of compliance with Rule 22 & 24 of the Solid Waste Management Rules, 2016 is as follows:

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
1	Identification of suitable sites for setting up solid waste processing facilities	1 year	All 142 ULBs have identified suitable sites for setting up of suitable processing facilities. All the Gram Panchayats have identified lands for setting up solid waste processing facility and sanitary landfill facilities individually or on cluster basis.
2	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or standalone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	1 year	ULBs are being clustered (at regional / district level) for setting up Sanitary Landfill facility. Tender for setting up and operating SLF will be subsequently taken-up. All the 96 identified model Gram Panchayats have identified lands for setting up solid waste processing facilities. All 12770 GPs (100 %) have completed construction of compost cum segregation shed.
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	2 years	All ULBs have identified suitable sites for setting up of processing facilities. ULBs are being clustered (at Regional / District Level) for setting up Sanitary Landfill facility. Tender for setting up and operating SLF will be subsequently taken-up. All the 96 identified model Gram Panchayats have identified lands for setting up solid waste processing facilities. 12770 GPs (100 %) have completed construction of compost cum segregation shed.
4	Enforcing waste generators to practice segregation of bio degradable, recyclable,	2 years	The % of segregation achieved from Jan'2022 to Mar'2022 is 39%. IEC activities are regularly conducted

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
	combustible, sanitary waste domestic hazardous and inert solid wastes at source,		to inform, educate anc motivate waste generators to practice the segregation of waste.
5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years	Completed.
6	Ensure separate storage, collection and transportation of construction and demolition wastes	2 years	For establishment of construction and Demolition processing plants CDMA had invited tenders for selection of agency/concessionaire on PPP mode – DBFOT basis covering 65 ULBs grouped in 6 Clusters, but no bidder participated. In GHMC, Two processing plants of capacity-500 TPD each are under operation. In GHMC about 46,602 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 46,211 has been recycled in the quarter ending with March, 2022. Tenders for two additional C&D waste recycling plants has been called on licensing model. After the realization of proposed project, the total recycling capacity will be augmented to 2000 TPD.
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	2 years	7 agencies have been shortlisted for processing of fresh waste. Establishment of processing Plant in Vikarabad is under progress. Other 4 ULBs GWMC, Narsampet, Parakala and Wardhannapet will be floating the tenders separately. Siddipet Municipality is in the process
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 populations.	3 years	

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
			of establishment Bio-gas plant with 10 TPD capacity.
9	Setting up common or standalone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules.	3 years	ULBs are being clustered (at Regional / district level) for setting up Sanitary Landfill facility. Currently, GHMC is disposing inerts generated by processing of waste to landfill located at Integrated Municipal Solid Waste Management Plant, Jawaharnagar. Sanitary landfill with designed capacity of approx. 19,43,922 MT is under operation which is already filled with 1,09,050 MT inerts are dumped in the quarter from Jan'2022 to March' 2022. .
10	Setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules.	3 years	ULBs are being clustered at Regional / district level) for setting up Sanitary Landfill facility. Land identification and tender for setting up and operating SLF will be subsequently taken-up.
11	Bio-remediation or capping of old and abandoned dump sites.	5 years	Capping of Jawaharnagar dumpsite completed with a cost of Rs.144 Crores. As per the directions of Hon'ble NGT, GHMC has floated tenders for bio-mining of the capped site. Legacy dump treatment (Bio-mining) in 123 ULBs having legacy waste has commenced. Total – 1,18,639 MT's of Legacy waste processed.
12	Legal Frame Work		SWM Policy for the State as per clause 11 (a) of the SWM Rules has been Notified on 24th September, 2018.
13	Annual Report		Annual Reports for the year 2020-21 submitted on 27.07.2021.

Rule	Duties / Responsibilities	Compliance status
23	Formation of State Level Advisory Body	• State Level Advisory Body has been constituted by the State Govt. vide G.O.Rt.No.447, MA, dated 26.07.2017 under the chairmanship of Principal Secretary to Government, MA&UD Department.

3. Status Report on Compliance to Plastic Waste Rules, 2016 (as amended in 2021).

➢ **3.1 Compliance on PWM rules, 2016:**

Rules provision	Plastic Waste Management Rules Provision	Status
6 (1)	Every local body shall be responsible for development and setting up of infrastructure for segregation, collection, transportation, processing and disposal of the plastic waste either on its own or by engaging agencies or producers	➢ 38 Dry Resource Collection Centres (DRCCs) established through two agencies namely ITC-WOW, Godrej , UNDP-HCCWBL in GHMC area. ➢ 142 ULBs are having 244 DRCCs (141 ULBs-206 + GHMC- 38 DRCCs). ➢ 12770 GPs (100 %) have completed construction of compost cum segregation shed. ➢ 600 TPD capacity plastic recycling unit is established at Integrated Solid Waste Management Project, Jawaharnagar.
6(2)a.	Ensuring segregation, collection, storage, transportation, processing and disposal of plastic waste.	➢ The plastic waste are transported to processing and disposal site at Jawaharnagar. The lighter density plastics are stored as Refused Derived Fuels (RDF) and used as fuel in the 24 MW Waste to Energy plant using incineration process and another WtE plant of 24 MW at Jawaharnagar & 14.5 MW at Dundigal is under construction to utilise RDF.
6(2)b.	Ensuring that no damage caused to the environment during this process.	➢ Ensuring no damage to environment by doing the disposal of plastic as per the activities mentioned above. ➢ Ensuring that no open burning of plastic waste take place by conducting various IEC activities and penalizing the violators.
6(2)c.	Ensuring channelization of recyclable plastic waste fraction to recyclers	➢ By disposing the plastic waste through DRCCs and also by processing plant at Jawaharnagar ensuring the channelization of recyclable plastic waste fraction
6(2)d.	Ensuring processing and disposal on non-recyclable fraction of plastic waste in accordance with guidelines issued the Central Pollution Control Board	➢ Plastic segregated at DRCCs is send to various recyclers for processing as per the CPCB guidelines ➢ The plastics which cannot be recycled are transported to co-processing. The lighter density plastics are stored as

		Refused Derived Fuels (RDF) and used as fuel in Waste to Energy plant and 13 Acres of area allocated for its storage. ➢ The 24 MW capacity was commissioned in December 2020 and currently under operation. Obtained Environmental Clearance & CFE for expansion of capacity to 48 MW for utilising 3000 TPD of RDF. The plant is under construction. ➢ Another, WtE plant of capacity 14.5 MW is proposed to be established at Dundigal. TSPCB issued CFE to the facility. ➢ The remaining inerts produced in the process are disposed in scientific landfills.
6(2)(e)	Creating awareness among all stakeholders about their responsibilities	➢ Regularly organizing workshops, campaign and rallies against the use of plastics and constantly creating awareness among waste pickers through the companies working in this field under Extended Producer Responsibility/CSR. Information Education and Behaviour Change Communication (IEBCC) activities are being conducted regularly.
6(2)(f)	Engaging civil societies or groups working with the waste pickers	➢ Supported around 6300 waste pickers by allotting 3150 waste collection autos (Swachh Auto Tippers).
6(2)(g)	Ensuring that open burning of the plastic waste does not take place	➢ Public awareness campaigns are regularly conducted by GHMC in all 30 circles involving Resident Welfare Associations, Schools, Senior Citizens, NGOs ➢ Keeping a strict monitoring on burning of waste (which includes plastics) and imposing penalties on defaulters. ➢ GHMC registered 0 instance for open burning of plastic waste for this Quarter. However, GHMC registered 280 cases for using plastic carry bags below 75 microns thickness during this quarter and levied a penalty of Rs. 3,71,700/-

6(3)	The local body for setting up of system for plastic waste management shall seek assistant of producers and such system shall be set up within one year from the date of final publication of these rules in the official gazette of India.	➢ Involved the producers such as ITC and Godrej in plastic waste management by establishing DRCCs. ➢ Engaged M/s. Amazon Transportation Services Pvt. Ltd. under Extended Producer Responsibility for the collection and recycling of packaging waste (cardboards and plastic packaging bags) from its customers.
6(4)	The local body to frame bye-laws incorporating the provisions of these rules.	➢ GHMC prepared the draft Solid Waste Management byelaws and submitted to Govt. for approval
16	State Level Advisory Committee	➢ State Level Advisory Committee constituted vide G.O. (Ms). No. 79 dated 31.12.2016 of EFS&T.
17(3)	Submission of Annual Report	➢ Annual report for the year 2020-21 submitted on 28.07.2021.

3.2 The Hon'ble NGT in O.A.No.247 of 2017 in the matter of Plastic Waste Management directed to furnish the status. The Action taken report for the Quarter Jan, 2022 to March, 2022 is as follows:

S.No.		Item	Quantity
1.	a	What is the quantity of plastic waste generated, (Annual Report form VI pt.2,6) (TPD)	1439 TPD during the present quarter.
2.	a	Number of registered plastic manufacturing units	251
	b	Capacity of registered plastic manufacturing units (TPD)	587 TPD
3.	a	Total no. of ULBs	142
	b	Percentage of ULBs which have set-up of plastic waste management system as per **Rule 6(2)**? (including collection, segregation, Channelization & processing of plastic waste)	142 ULBs have waste segregation units, that segregate plastic waste from MSW.
	c	Percentage of ULBs having facilities for Collection of Segregated waste	142 ULBs have facilities for collection of segregated waste.
	d	Percentage of ULBs having Material Recovery facility	142 ULBs have provided 244 MRF units.
4.	a	Total number of Gram Panchayat (GPs)	12,770
	b	Percentage of GPs which have setup of plastic waste management system as per **Rule7**?	All 12770 GPs (100 %) have completed construction of compost cum segregation shed.
	c	Percentage of GPs having facilities for Collection of Segregated waste	All 12770 GPs are having facilities like tricycles with partition for Collection of Segregated waste.
	d	Percentage of GPs having Material Recovery facility	12770 GPs (100 %) have completed construction of compost cum segregation shed.
5.	a	No. of registered Producers/brand owners/ importers as per **Rules 9 & 13** of PWM Rules?	316
	b	Percentage of Producers/brand owners/ importers which have engaged with ULBs for	8 Nos
	c	Percentage of ULBs which have set up system for plastic waste management with assistance of producers been set —up? **Rule (6(3))**?	4 Nos
6	a	Number of registered plastic waste recyclers	30
	b	Capacity of recyclers (TPA)	136.08 TPD
7	a	Status of Utilization of plastic waste (Annual	Plastic waste collected through DRCCs, WMA and

S.No.		Item	Quantity
		Report form VI pt.4)	processing plant are channelized for recyclers.
	b	Quantity of plastic Waste utilized in recycling (TPD)	224 TPD channelized for recycling during present quarter (Waste Management agencies-203 TPD+ DRCCs- 17 TPD + 365 tons recycled at Jawahar nagar.)
	c	Quantity of plastic waste utilized in recycling Road Construction	--
	d	Quantity of waste Co-processed in Plastic Waste in Cement kilns	11700 tons (130 TPD) during present quarter.
	e	Quantity of waste utilized in production of RDF	One integrated solid waste management facility is located in Telangana with processing capacity of 7000 TPD at Jawaharnagar (V). Presently, the facility generating 3800 TPD of RDF out of which 734 TPD of plastic is part of RDF.
	f	Quantity of plastic waste used in production of Waste to oil	46 TPD during present quarter
	g	Quantity of plastic waste used in other purpose (please specify)	Present Utilisation of Plastic waste in WtE plants as part of RDF – 340 TPD
8.	a	No. of Registered Compostable plastic unit	Six compostable plastic units located in the State
	b	Total Capacity of registered Compostable plastic unit	1800 TPA
9	a	No. of unregistered plastic manufacturing or recycling units **(Annual Report format pt.7)**	Nil
10	a	Whether local bodies have framed bye-laws **[Rule 6(4)]?**	Yes
11	a	Whether plastic carry bags & plastic sheet of thicknesss<75 micron banned or not [Rule 4(c)]?	Completely banned plastic carry bags & plastic sheet of thicknesss <75 micron in the state as per MoEF&CC notification.
12	a	Has complete ban on plastic carry bags been imposed **(Annual Report format pt.3)**	Plastic carry bags & plastic sheet of thicknesss <75 microns banned and implementing prohibition as per MoEF&CC notification from 12.08.2021.

S.No.		Item	Quantity
13	a	Status of action taken on non-compliance of PWM Rules **(Annual Report format pt.9)**	GHMC registered 0 instance for open burning of plastic waste for this Quarter. However, GHMC registered 280 cases for using plastic carry bags below 75 microns thickness during this quarter and levied a penalty of Rs.3,71,700/-.
14	a	Status of marking & labelling on plastic carrybags & multi layered packaging **(Rule 11)**	Marking & labelling on plastic carry bags & multi layered packaging being enforced.
15	a	Whether State Level Advisory Committee is constituted or not? **[Rule 16]** If yes, details of number of meetings conducted in a year and implementation of suggestions of committee in the last two years.	Yes. No meeting conducted during this quarter.
16	a	Status of phasing out of manufacture and use of multi-layered plastic which is non-recyclable or non-energy recoverable or with no alternate use of plastic in two years time **[Rule 9-3]**	Directions issued to manufacturers for phasing out of manufacture and use of multi-layered plastic which is non-recyclable or non-energy recoverable or with no alternate use of plastic
17		**NGT Directions (para 14 d) of 247/2017 order dated 06.12.2019**	
	a	Has institutional mechanism as per para 14 d been established (Y/N)	Yes.
	b	Confirmation that no, unregistered plastic manufacturing/recycling unit is operated in the State/UT (Y/N)	Yes
	c	Conformation that no plastic carry bags/films <75 microns thickness is manufactured, stocked, sold and used in cities/towns of State/UT (Y/N)	Yes
	d	Confirmation that thermocol/polystyrene cups, plates, etc are not used extensively and are not haphazardly littered (Y/N)	Yes
	e	Confirmation that has Special Environmental Squad been set up for enforcement to oversee and ensure that no litter of plastic waste takes place at historical, religious, public places.	Special Environmental Squad been set up for enforcement to oversee and ensure that no litter of plastic waste takes place at historical, religious, public places in each ULBs and penalties are being levied on defaulters.

S.No.		Item	Quantity
	f	Confirmation that no dumping of plastic waste on drains river bank and on burning of plastics in open take place in State/UT (Y/N)	Yes. Penalties has been imposed for violation of rules.

4. **Status of compliance of Construction & Demolition Waste Rules, 2016:**

- The Construction and Demolition (C&D) Waste Management Rules, 2016 were notified on 29th March, 2016 by the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- Two C&D recycling plants with 500 TPD capacity each at Jeedimetla and Fathullaguda are under operation in GHMC area.
- In GHMC about 46,602 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 46,211 has been recycled in the quarter ending with March, 2022.
- Tenders for two additional C&D waste recycling plants has been called on licensing model. After the realization of proposed project, the total recycling will be augmented to 2000 TPD.
- GHMC registered 106 instances of illegal debris dumping during this quarter and levied penalty of Rs. 2,72,500/-
- For establishment of construction and Demolition processing plants CDMA had invited tenders for selection of agency/concessionaire on PPP mode – DBFOT basis covering 65 ULBs grouped in 6 Clusters, but no bidder participated.
- Balance 77 ULBs, with smaller quantities of C&D waste shall process C&D waste independently.
- Annual Reports for the year 2020-2021 submitted on 28.07.2021.

5. 5. Status of compliance of Bio-Medical Waste Management Rules, 2016

5.1 Status of Health Care Facilities (HCFs) in Telangana:

The total number of Health Care Facilities (HCFs) are 7,273 and 7,035 HCFs are having Bio-medical Waste (BMW) Authorization. 7266 HCFs have tied up with Common Bio-medical Waste Treatment Facilities (CBWTFs). Out of which 3,792 are bedded hospitals and remaining 3,481 are non-bedded which includes Clinics, Dispensaries, Dental Hospitals, Pathological Labs, Veterinary and Ayush. The hospitals with in-patient facilities are having 1,19,135 beds.

5.2 Compliance of the Rules:

5.2.1 Submission of Annual Reports: (Rule 24)

Annual Report in Form – IVA for the calendar year (Jan 2021 to Dec 2021) was submitted to CPCB.

5.2.2 Status of State Level Advisory Committee: (Rule 11)

The Health Medical & Family welfare Department has Constituted State Advisory Committee vide G.O.Rt.No.329, dt. 15.04.2017 for implementation of BMW Rules in the State. State Advisory Committee meetings are regularly held under the Chairmanship of the Spl. Chief Secretary HM&FW department.

5.2.3 Status of District Level Monitoring Committee (DLC): (Rule 11)

The HM&FW department issued G.O.Ms.No.28, dt.16.01.2018 constituting District Level Monitoring Committee (DLC) with District Collector as the Chairman and DM&HO as the Member Convener and Concerned Regional Officer as the Member for effective implementation of the provisions of the Bio-Medical Waste Management Rules. The DLC meetings are conducted regularly.

5.3 Category wise Bio-Medical Waste:

The details of Daily average Bio Medical Waste generated as per the annual reports for the years 2017, 2018, 2019 & 2020 are as follows:

Category	2017 (in Kg/day)	2018 (in Kg/day)	2019 (in Kg/day)	2020 (in Kg/day)		
				COVID	General	Total
Red	3688.5	3023.2	5,085	285	4783	5068
Yellow	9899	11035	12,016	1994	13554	15548
Blue	2035.5	1378.2	2,729	11	2485	2496
White	96	807	642	75	623	698
Total:	**15,719**	**16,243**	**20,472**	**2,365**	**21,445**	**23,810**

5.4 Bio-Medical Waste Treatment Facilities (CBMWTFs) in Telangana:

In the Telangana, presently there are 11 Common Bio Medical Waste Treatment Facilities (CBMWTF) are in operation in the state, which are presently sufficient to serve the HCFs operating in the state. Every occupier of HCF is required to become member of respective CBMWTF for disposal of Bio-Medical Waste. Occupiers of non-complying institutions are liable for prosecution under the provisions of Environmental Protection Act and Rules.

a) All the 11 CBMWTFs had upgraded Secondary chamber of Incinerator to meet new emission standards for stack and retention time of 2 sec.

b) All the Common Bio Medical Waste Treatment Facilities (CBMWTFs) have installed online continuous stack emission monitoring system (OCEMS) as per the CPCB guidelines and the data is connected to the CPCB & TSPCB servers. The concentration of CO_2, CO, NO, NO_2, O_2 Primary and Secondary temperatures are being monitored and are connected to CPCB & TSPCB servers for continuous monitoring. Further, TSPCB is also carrying out regular monitoring of CBMWTFs to check the compliance. CBMWTFs have provided IP Cameras to record the operation of the Incinerator.

c) TSPCB has communicated design details of modular STPs suitable small, medium and large HCFs to the Stake holder departments.

d) CBMWTFs are collecting COVID Biomedical waste separately using "COVID19BWM" developed by CPCB in compliance to the Guidelines issued CPCB.

e) In light of COVID pandemic and increase in volumes of BMW Waste, three proponents were issued with in principle permission to setup new CBMWTFs for catering Hyderabad & surrounding Districts in addition to the existing 11 Facilities.

5.5 Authorization from the Board:

The total number of Health Care Facilities (HCFs) are 7,273 and 7,101 HCFs are having Bio-medical Waste (BMW) Authorization. 7266 HCFs have tied up with Common Bio-medical Waste Treatment Facilities (CBWTFs). Notices are issued to Health Care Facilities to obtain the authorisation.

5.6 Hon'ble NGT Orders in the matter of O.A.No.710 of 2017:

The status of implementation of the Hon'ble NGT order dated: 15.07.2019 on key performance indicators for assessing treatment and disposal of BMW and effectiveness in implementation of BMW Rules, 2016 is as follows:

Sl. No.	Key performance indicators	Status
1.	Inventory of all Health Care Facilities and Biomedical waste generation.	In co-ordination with DM&HOs and CBMWTFs inventory of HCFs was carried out. There are 7,273 number of HCFs operating in the State out of which 3,792 are bedded hospitals and remaining 3481 are non-bedded which includes Clinics, Dispensaries, Dental Hospitals, Pathological Labs, Veterinary and Ayush. The hospitals with in-patient facilities are having 1,19,135 beds.
2.	Authorisation to all Health care facilities including non-bedded HCFs.	TSPCB has implemented online software application developed by NIC, Delhi for grant of BMW Authorisation to HCFs including Non-Bedded HCFs. Powers are delegated to Regional Officer and Zonal Officer to grant authorization to HCFs having below 50 beds. 7273 Health care Facilities including non-bedded HCFs have covered under BMWM Rules.
3.	Facilitate setting-up adequate number of common Bio-Medical Waste Treatment Facilities (CBMWTFs) to cover entire state or all HCFs.	11 Common Bio Medical Waste Treatment Facilities (CBMWTFs) are operating for collection and safe disposal of Bio Medical Waste. More number of Hospitals are existing in the districts of Hyderabad, Rangareddy and Medchal-Malkajgiri. Four CBMWTFs are operating for these 3 districts for collection and safe disposal of Bio Medical Waste. Remaining 7 CBMWTFs are providing services to the HCFs located in remaining districts.
4.	Constitution of State Level Advisory Monitoring Committee and District Level Monitoring Committee.	State Advisory Committee was constituted vide Health Medical & Family welfare Department G.O.Rt.No.329, dt.15.04.2017. State Advisory Committee meetings are conducted as and when needed. District Level Monitoring Committee (DLMC) with District Collector as the Chairman and DM&HO as the Member Convener were constituted vide HM&FW department G.O.Ms. No.28, dt.16.01.2018. DLC meetings are conducted.
5.	Implementation status of Barcode system.	The Board has developed centralized "Online Bio-Medical Waste Manifest and Bar Code System" as per CPCB guidelines. Online tracking of BMW collection vehicles of CBMWTFs is also integrated in this software. All the 11 CBMWTFs are implementing Bar-coding system through the

Sl. No.	Key performance indicators	Status
		online application of the Board. HCFs have registered in the online Bar-coding Manifest application. 11 CBMWTFs are collecting BMW from their member HCFs using GPS fitted vehicles 66 Nos.
6.	Monitoring of Health Care Facilities other than hospitals/clinics such as veterinary Hospitals, Animal Houses, and AYUSH Hospitals etc.	Authorisations are granted to 10 Animal Houses, 3 Veterinary institutions. 6 AYUSH Hospitals have obtained authorization.

5.7 Follow-up on the Action Points of TSPCB pertaining to compliance of BMWM Rules and NGT orders in Telangana State:

Action Point	Particular	Progress report of the State
1	Complete inventory of HCFs generating biomedical waste.	Inventory is complete
2	SPCB should ensure authorization to all non-bedded HCFs like clinics, laboratories, research institutes as well as veterinary hospitals etc. identified in inventory of HCFs within 3 months.	Telangana SPCB has taken up action to ensure that every HCF is authorized under BMWM Rules, 2016. 7273 Health care Facilities including non-bedded HCFs have covered under BMWM Rules.
3(i)	Ensure adequate number of Common Facilities and to cover all HCFs in the state. [Also to ensure adequate number of Common Biomedical Waste Treatment Facilities]	At present 11 nos. of CBMWTFs operating in the state are adequate for treatment & disposal of biomedical waste. In light of COVID pandemic and increase in volumes of BMW Waste, three proponents were issued with in principle permission to setup new CBMWTFs for catering Hyderabad & surrounding Districts in addition to the existing 11 Facilities.
(ii)	Restriction of Deep Burial pits [should be permitted only if necessary and to ensure that they are constructed as per standards given under BMWM Rules, 2016].	Deep burial is not permitted in the State.
4	Constitution of State and District Advisory Committees	Complied & meetings were held.
5	Implement Barcode system in every HCF and CBMWTFs	11 CBMWTFs operating in the state have implemented Bar-coding system developed by the Board. All the HCFs have registered with the online system.
6	Monitoring of Healthcare Facilities other than hospitals/clinics-Veterinary Hospitals, Animal Houses, AYUSH Hospitals, blood blanks, Pathological labs etc.	These HCFs have tie-up with CBMWTFs and registered with online software for disposal of BM Waste. Board Officials are monitoring HCFs, during processing of authorization applications.
7	Ensure availability of adequate infrastructure with SPCBs/PCBs to monitor compliance.	The Board is equipped with adequate laboratory facilities to test efficacy of treatment equipment for disinfection, compliance to emission and discharge norms by CBMTWFs and HCFs, except for analysis of Dioxins and Furan (Equipment for monitoring is available).

Action Point	Particular	Progress report of the State
8(i)	Training and capacity Building of officials of Health Department and SPCBs	The Board conducted workshops at State and District level on "Bio-Medical Waste Management" to all the Stakeholders. Regular hands on training programs on compliance mechanism of BMW Rules are also conducted in all 33 Districts Head Quarters to create awareness in management of Biomedical Waste. Stress was made on applying for authorization by all HCFs including veterinary institutes, ayush, clinics & labs. Awareness was created through the means of posters, short films, All India Radio, etc.
8(ii)	To ensure training and capacity Building of Healthcare workers in HCFs	The Board has conducted 2910 training during the previous year. CBMWTFs are also providing trainings to the healthcare workers of member HCFs in co-ordination with the Field officers of the Board. Officers are designated in Regional offices & Zonal Offices for monitoring of HCFs and compliance of BMWTFs.
9	Installation of OCEMS by CBMWTFs as a tool for self-monitoring and compliance verification by SPCBs/PCCs.	All the 11 CBMWTFs have installed OCEMS and connected to CPCB & TSPCB server and Data transmission is being monitored.
10	Submission of Annual Reports to CPCB	Complied. Annual Reports are submitted within stipulated date of 31.07.2021.
11	To ensure compliance to standards by CBMWTFs	Monitoring of CBMWTFs is conducted regularly.
12	To monitor compliance of HCFs [for on-site segregation, pre-treatment of infectious waste-yellow, separate storage space for BMW and treatment of wastewater]	Officers are designated in Regional offices for monitoring of HCFs operating in the State. Special Teams are constituted for surprise inspections as and when needed for regular monitoring of HCFs to ensure compliance for a specific period.
13	District Magistrates to monitor compliance of BMW Management as per District Environmental Plan	District Level Monitoring Committees constituted for monitoring of compliance of BMW Rules are reviewing the implementation of District Environmental Plan.

6. Status of compliance of Hazardous Waste (Management) Rules:

- The Ministry of Environment & Forests (MoEF&CC), Government of India notified Hazardous Waste Management Rules in the year 1989 for management of hazardous waste in the country.

- These Rules were amended from time to time and the MoEF&CC, GoI, vide notification dated 04.04.2016, notified latest Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

- In the amended Rules focus is on the Reuse & Recycling of hazardous waste.

- The Telangana State is having one Integrated Common Treatment Storage & Disposal Facility (TSDF) for Hazardous Waste, namely M/s. Hyderabad Waste Management Project (HWMP) at Dundigal (V), Medchal-Malkajgiri District. The facility has

  - Incinerator of capacity 1.5 TPH
  - Engineered landfill facility
  - Pre-processing facility for preparing alternate fuel for cement industries.

- The Board has also permitted other five pre-processing facilities with a processing capacity of 2,25,000 TPA and presently four facilities are under operation.

- The Board has permitted 46 recyclers of hazardous waste with authorized capacity of 2,29,965 TPA.

- As per the Hazardous Waste annual report furnished to CPCB for the year 2020-21, the total number of hazardous waste generating industries in the State are 3179 and the following quantities of hazardous wastes is generated:

Recyclable Waste (TPA)	92,562
Incinerable Waste (TPA)	2324
Utilisable waste (TPA)	1,27,103
Landfillable Waste (TPA)	1,11,344
Total:	**3,33,334**

The Hon'ble NGT in the matter of OA No. 804 of 2017 filed by Rajiv Naryana & Anr. Vs. Union of India & Ors. vide order dt. 30.07.2018 constituted the Monitoring committee for Management. The Monitoring Committee submitted its report on Management of Hazardous Waste.

The Hon'ble NGT vide order dt 29.01.2021 disposed the matter directing the CPCB and SPCBs to comply with the recommendations of the Monitoring Committee. The Compliance status on the observations and recommendations of the State and TSPCB as per the format **is annexed at Annexure-I.**

7. Status of compliance of E-Waste (Management) Rules:

- The E-Waste Management Rules, 2016 came into force w.e.f. 1st October, 2016 in supersession of the E-Waste (Management and Handling) Rules, 2011. Subsequently, the MoEF&CC, GoI issued E-Waste (Management) Amendment Rules, 2018 vide Notification dt. 22.03.2018.

- There are 12 nos. of E-Waste Dismantling units and 3 nos. of E-Waste Recycling units In the State of Telangana. The TSPCB has issued Consents to these units. The details are as follows:

Dismantlers:

S. No.	Name & Address	CFO Validity	Permitted Capacity
1.	M/s. Enviro Collection Centre (Dismantling Unit), Plot No.1-185/2/A, Sy.No.298 Part, Phase-I, IDA Jeedimetla, Medchal-Malkajgiri District.	31.12.2025	2 TPD
2.	M/s. Ramky E-Waste Recycling Facility, Hardware Park, Kancha, Raviryal (V), Maheswaram (M), Rangareddy District.	30.09.2025	7,840 TPA
3.	M/s. Earthbox Ventures (P) Ltd., (E-Waste Dismantling Unit), Sy.Nos.29, 30 & 85, Uddemarri (V), Shamirpet (M), Medchal-Malkajgiri District	30.04.2022	10 TPD
4.	M/s. NAP Recycling, Sy.No.3, Kethireddypally (V), Balanagar (M), Mahaboobnagar District.	31.05.2022	7.2 TPD
5.	M/s. Bellus E Waste, Sy.No.4-120, Ramachandrapuram (GP), Kondurg (M), Rangareddy District.	31.12.2023	10 TPD
6.	M/s. Shreem Mythri Enterprises, Plot No.50, Phase-III, IDA Cherlapally, Kapra (M), Medchal-Malkajgiri District	22.03.2023	600 TPA
7.	M/s. TES AMM India Pvt. Ltd., Plot No.79, Sy.No.847, IDA Medchal, Medchal (M), Medchal-Malkajgiri District	31.03.2023	5 TPD
8.	M/s. Earthbox Ventures Private Limited, Plot No.S-2/12, Sy.No. 114/1, E-City, Raviryala (V), Maheshwaram (M), Rangareddy District	31.01.2026	6.5 TPD
9.	M/s. Green Wave E-waste Recycling, Sy. No. 1880E, 1880EE, Nandigama (V&M), Rangareddy District	31.12.2024	23.3 TPD

10.	M/s. Kamal Electronics Refurbishing of E-waste Solutions, Sy No: 227/LU, 227/E1, 227/E2, 227/E/2/1,Atmakur (V), Sadasivpet (M), Sangareddy District.	30.11.2025	15.0 TPD
11.	M/s. Chilkuri Enterprises, Sy.No.14, Keesara (M),Medchal-Malkajgiri District	31.12.2025	1.5 TPD
12.	M/s. Reboot Resources Private Limited, Sy.No.113 Part, Patelguda (V), Ibrahimpatnam (M), Rangareddy District	31.01.2026	26.30 TPD

Recyclers:

Sl. No.	Name & Address	CFO Validity	Permitted Capacity
1.	M/s. Earth Sense Recycle Pvt., Ltd., Plot No.37 APIIC Industrial Park, Mankal (V), Maheswaram (M), Rangareddy District.	31.12.2024	22,775 TPA (62.4 TPD)
2.	M/s. Z Enviro Industries Pvt., Ltd., Sy.No.106 & 107, Pulimamidi (V), Kandukur (M), Rangareddy District.	30.06.2025	20,000 TPA (10,000 TPA dismantling & refurbishing) + (10,000 TPA for recycling)
3.	M/s. Silicon Planet Recycling Pvt. Ltd., Sy.No.811/A, Ankireddypally (V) & Grampanchayat, Keesara (M), Medchal-Malkajgiri District.	06.03.2022	Dismantling & Recycling -1000 TPA (2.73 TPD

Extended Producer Responsibility:

- Every producer of Electrical and Electronic Equipments (EEEs) listed in Schedule-I have to obtain EPR (Extended Producer Responsibility) Authorisation from the Central Pollution Control Board (CPCB).

- The producers shall have arrangements with authorised dismantlers/recyclers either individually or collectively or through a Producer Responsibility Organisation (PRO) or E-Waste Exchange system as per EPR Plan which is approved/ authorised by CPCB.

- The CPCB has issued EPR Authorizations to 29 nos. of producers in the State.

➢ As per Rule 17 of E-Waste (Management) Rules, 2016 under Schedule–IV, TSPCB carried out Inventorisation in the State of Telangana through M/s EPTRI in the year 2016.

➢ As per the Inventorization report, the projection for E-Waste generation in HMDA for five years (in Metric Tons) is as follows:

2017-18	2018-19	2019-20	2020-21	2021-22
33,425.3	37,456.6	40,230.5	44,945.2	50,335.6

- As per the Annual Report 2020-21, the total E-Waste processed by the authorised dismantlers and recyclers is 38346.163 T Metric Tons.

- Bulk Consumers: During the year 2020-21, e-waste data pertaining to 1209 Nos. of Bulk Consumers was obtained. These Bulk consumers have generated E-Waste of 11763.16 MT which was sent to authorized Dismantling / Recycling units for safe disposal.

- Awareness among the consumers of EEEs is required to regulate the e-waste collection.

7.1 Compliance of Hon'ble NGT Order in OA No. 512 of 2018:

The Hon'ble NGT disposed the case vide order dt. 15.01.2021 directing to take further steps for scientific enforcement of EWMR and to focus on the following major areas:

- Enforcement of EWM Rules,
- Implementation of authorization regime,
- Implementation of EPR regime,
- Bridging the gap between collection target and collection,
- Enhancing the installed dismantled capacity to match the e-waste generation,
- Implementation of environmental compensation regime,
- Constant Vigilance and monitoring,
- Creation of awareness amongst masses and collectors / handlers / dismantlers / recyclers.

The compliance status on the action plan submitted by CPCB to the Hon'ble NGT in OA No. 512 of 2018 is as follows:

S. No	Challenges/ Activities	Stakeholder responsible for implementa-tion	Action	Action Taken
a.	Inventorization of e-waste generation	SPCBs/PCCs	SPCBs / PCCs to complete this activity within one year.	Inventerization of E-Waste in the State of Telangana was carried out through M/s.EPTRI, Hyderabad in the year 2016.
b.	Identification of Producers who have not obtained, EPR Authorisation	CPCB, Custom department, Ministry of commerce and Ministry of electronics telecommunication	This is a continuous activity for which support of SPCBs /PCCs / Custom dept / Ministry of commerce, Ministry of electronics and telecommunication is required.	The TSPCB has been coordinating with Commercial Tax Dept., for identification of Producers in the State. The details of companies were obtained and letters were addressed to the companies informing about EPR Authorization to be obtained as per the E-Waste Management Rules, 2016.
c.	Verification of quantity of e-waste collected by producers	CPCB/SPCBs/ PCCs	This is a continuous activity. All the EPR Authorised Producers will be verified per year.	The CPCB has issued EPR Authorizations to 29 Producer organizations in the State of Telangana. The compliance status being reported to CPCB for further action.
d.	Verification of systems provided by producers for	CPCB/SPCBs/ PCCs	This is a continuous activity. All the EPR Authorised	There are 29 EPR Authorizations issued by CPCB in the State of Telangana. The

S. No	Challenges/ Activities	Stakeholder responsible for implementa-tion	Action	Action Taken
	collection and provided by producers channelisation of e-waste		Producers will be verified per year.	compliance status of collection points is being verified and submitted to CPCB regularly for further action.
e.	Verification of facilities of dismantlers and recyclers for their infrastructure anc records	SPCBs/PCCs/ CP	This is a continuous activity. All the EPR Authorised Producers will be verified per year.	The TSPCB has issued Consents to 12 Dismantling & 3 Recycling units. These units are being inspected and reports submitted to CPCB on regular basis.
f.	Checking of informal trading, dismantling, and recycling of waste	SPCBs/PCCs/ District Administration	SPCBs/PCCs in coordination with District Administration has to carry out quarterly drive for checking of this activity.	NGT orders communicated to all the District Collectors and the Board is coordinating with District Administration for checking of informal trading, Dismantling & Recycling of E-Waste. Surprise inspections being conducted to verify illegal dismantling, and recycling of e-waste.
g.	Facilitate collection and disposal of e-waste	SPCBs/PCCs/ District Administration/ CPCB	State Government to formulate mechanism for collection and for incentivising setting up of recycling facilities.	The Government of Telangana has introduced E-Waste Management Policy, 2017 by giving incentives for setting up of Dismantlers / Recycling facilities.
h.	Governance frame work for monitoring compliance	SPCBs/PCCs/ District Administration/ CPCB	Monitoring to be ensured at city/district and state levels for which nodal officers (state environmental secretary, District Collector, CMD/ Commissioners) to be designated. Time Frame - Three (3) months.	The TSPCB has designated Nodal Officers at District levels and State level to ensure monitoring of compliance.
i.	Capacity building at	SPCBs/PCCs/ District	Special workshops to	E-Waste dismantlers & recyclers are directed to

S. No	Challenges/ Activities	Stakeholder responsible for implementa-tion	Action	Action Taken
	district/State/CPCB level	Administration/ CPCB	educate functionaries in government / NGOs be run over one year.	conduct awareness programmes. The District Level officers are being sensitized about the E-waste Rules during the review meetings conducted by the District Collectors on NGT issues.
j.	IEC plan be firmed up and executed	SPCBs/PCCs/ District Administration/ CPCB	State Government to firm up IEC plan for educating public at large about the system of collection, incentive structure and facilities for recycling. Time Frame — Three (3) months. The IEC Plan to be executed over one year.	The TSPCB is coordinating with stake holder departments and District Administration for creating awareness among the public.
k.	Strengthen system of enforcement	SPCBs/PCCs/ District Administration/ CPCB	Quarterly review of violations and enforcement actions at city/district/state level and quarterly reports to be filed with CPCB.	The E-waste facilities are being inspected on regular basis to verify compliance. The Board has been submitting Quarterly reports to CPCB. The CPCB is regularly reviewing the action taken on quarterly basis.

8. Status of compliance with directions of the NGT passed in O.A.No.673 of 2018, dated 20.09.2018 in the matter of news item published in "The Hindu" authored by Sri Jacob Koshy, titled "more river stretches are now critically polluted".

8.1 CPCB has identified the following river stretches of Telangana State based on the BOD levels and priority criteria for restoration of river quality.

S.No.	River name	Stretch Identified	BOD range / Max. value in mg/L	Priority
1.	Musi	Hyderabad to Nalgonda (Osmansagar to Wadapally)	4.0 – 60.0	I
2.	Manjeera	Gowdicharla to Nakkavagu	5.0 – 26	II
3.	Nakkavagu	Gandilachapet to Seva al Thanda (Bachugudem to Confluence point of Nakkavagu and Manjeera)	26	II
4.	Karakavagu	Along Palvancha	18	III
5.	Maneru	Warangal to Somanpalli (Karimnagar LMD to Somanpalli)	6 – 20	III
6.	Godavari	Basar to Khammam (Basar to Bhadrachalam)	4.0 – 9.0	IV
7.	Kinnerasani	Along Palvancha	10	IV
8.	Krishna	Thangadi to Wadapally	5.0 – 6.0	V

8.2 Compliance of the Hon'ble NGT order dt.14.02.2020:

The Hon'ble NGT directed the following:

- Interim measures for phyto-remediation / bio-remediation etc., for 100% sewage to reduce pollution load on recipient water bodies by 31.03.2020.

- Untreated / raw sewage discharged into water bodies needs to be stopped. Commencement of STPs shall be taken up by 31.03.2020 and commissioned by 31.03.2021.

➢ The Compliance of the action plan and the Hon'ble NGT directions as on 31.12.2021 are as follows:

Action Points	Compliance status
Interim measures for phyto-remediation / bio-remediation etc., for 100% sewage to reduce pollution load on recipient water bodies.	**In-Situ Remediation:** The NEERI has prepared DPRs for In-situ remediation for 5 drains and for one drain at Kokapet was awarded to NEERI. The NEERI has yet to commence the work and delay is reported to be due to Covid -19 surge. **i) Feacal Sludge Septage Management(FSSM) as interim measure:** **Existing facilities:** • **Co Treatment Facilities:** 7 nos with 70KLD facility in the a. Priority –I stretch (1. Amberpet, 2. Nallacheruvu, 3. Peddacheruvu, 4. Miralam, 5. Khajaguda 6. Nanakramguda and & 7.Nagole). So far treated 45.3 million litres of faecal sludge in scientific manner. HMWSSB has empanelled 87 Septic Tank Cleaning Vehicle Operators for transportation of septage and safe disposal at co-treatment facilities at existing STPs. These operators are provided training for safe handling of septage and issued safety equipment. • **FSTPs: 11 no.** One number with 40KLD capacity at Nalla Cheruvu in Priority-I stretch 16 FSTPs have been established on Priority stretch III-V with 570KLD capacity. The details are Siddipet-20KLD, Bhongir-15KLD, Nalgonda-75KLD, Kamareddy-30MLD, Shadnagar-25KLD, Nirmal-30KLD, Boduppal-15KLD, Korutla-25KLD, Adilabad-35KLD, Jagityal-35KLD, Jangaon – 20 KLD, Medchal – 10 KLD, Khammam – 95 KLD, Peerzadiguda – 15 KLD, Jagityal – 35 KLD, Nizamabad – 90 KLD

Action Points	Compliance status
	Under Construction: 14 no.s as detailed below a. Co-Treatment Facilities: 1 no with 10KLD facility in the Priority –I stretch at khajikunta b. Feacal Sludge Treatment facilities: 14 no.s as detailed below Ieeja – 10KLD, Meerpet – 35 KLD, Badangpet – 20KLD, Gajwel – 15 KLD, Gadwal – 20 KLD, Narayanapet – 10 KLD, Mahbubnagar – 50 KLD, Yellandu- 10 KLD, Suryapet – 35 KLD, Ramagundam – 60 KLD, Vemulavada – 10 KLD, Metpally – 20 KLD, Bhainsa – 15 KLD, Bodhan - 20 KLD **Proposed FSTP:** Tenders has been invited for construction of FSTP in another 68 newly formed ULBs, with 495 KLD capacity for Rs.140.00 Crs. Bids have been received and the same are under evaluation. Rain guard / wet land construction on Kukatpally nala which joins Hussainsagar lake pilot project is taken-up by HMDA for a length of 300 RMT to reduce the BOD load of the water passing through it. ➢ The Public Health Dept., carried out detailed study of the drains in the above river stretches. The following conditions are not conducive for proposing in-situ remediation on the drains • Flow <5 MLD • Flat terrain is not available ➢ Due to above reasons and funding constraints which were become more severe due to COVID conditions, in-situ remediation may not be conducive.
Commencement of STPs shall be taken up by 31.03.2020 and commissioned by 31.03.2021	**Details of existing STP in the State:** Details are placed at annexure-II **Details of under construction STPs in the State: 48 STPs (1458.9MLD)** • **Polluted River Stretches:** Works commenced for construction of the STPs in HAM model for 17 STPs (15 (349.5MLD) under Priority –I and 2 STPs (27MLD) under Priority-II) with a capacity of 376.5MLD. • 14 STPs with a capacity of 883 MLD an estimate of Rs.2585.34 crores in Priority-I for which administrative sanction is issued and tender process is being initiated

Action Points	Compliance status
	under HAM mode. • **Other than Polluted River Stretches:** 17 STPs with a capacity of 210.4 MLD are under different stages. **Details of proposed STPs in the State:** Total 82 STPs with a capacity of 655.50MLD • **DPRs Ready**- 52 STPs with a capacity of 555.67 MLD (includes Priority-II to Priority-V) ■ PHED-42 STPs with a capacity of 215.17MLD, ■ HMWSSB-10 STPs with a capacity of 340 MLD • **DPRs under preparation** - 30 STPs with a capacity of 99.85MLD

The Hon'ble NGT vide order dt. 29.06.2020 directed the following :

- The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon'ble Supreme Court and this Tribunal without any deviation from timelines.
- Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches.

The Action plan for treating the sewage entering the water bodies is under implementation. The Monthly progress report furnished to NMCG in the format is **annexed as Annexure-II.**

9. Non-attainment cities in O.A.No.681 of 2018.

- **Hon'ble NGT orders in O.A.No.681/2018, dated 08.10.2018:** The Hon'ble NGT issued order in O.A.No.681/2018, dated 08.10.2018 about time bound preparation and implementation of the Action Plan for lowering the ambient air pollution in the non-attainment cities. CPCB has identified 132 non-attainment cities out of which, Telangana has 4 non-attainment cities/areas (Hyderabad, Patancheruvu, Nalgonda and Sangareddy). The action plan has to be prepared by a 6 member committee called Air Quality Monitoring Committee (AQMC) under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory and may be further supervised by the Chief Secretaries concerned.

Gist of the Orders	Remarks
Time bound preparation and implementation of the Action Plan for lowering the ambient air pollution in the non-attainment cities	Action Plan prepared and submitted within timelines on 17-12-2018 and the revised action plan on 11-03-2019, 26.06.2020. Micro action plan submitted to CPCB in December 2021.
Constitution of the 6 member committee called Air Quality Monitoring Committee (AQMC) under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory and may be further supervised by the Chief Secretaries concerned	The EFS&T Department, Government of Telangana issued G.O.Rt.No.182, dated: 20.11.2018 constituting Air Quality Monitoring Committee (AQMC). **AQMC is reviewing the progress of implementation.**
CPCBs, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism	TSPCB is having a online complaint redressal system and toll free number (10741).

Gist of the Orders	Remarks
Strengthening of the AAQM network MOEF&CC will provide the requisite funds for the purpose.	Proposals prepared and in the process of strengthening. A proposal as per the population criteria communicated by CPCB was submitted to CPCB on 08-02-2019. The total number of AAQ stations required for Telangana State are 73 out of which 54 AAQ stations will be new (22 CAAQMS & 32 Manual) including non-attainment cities. Non-attainment cities (4 nos.): • Hyderabad & Patancheru - 8 more CAAQMS are required and 8 CAAQMS installation is completed. • Nalgonda - 1 CAAQMS – yet to receive funds from CPCB and 1 Manual AAQMS. (Nalgonda additional monitoring station is commenced)
AAQMS shall be connected to Central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals at least on weekly basis and ambient air quality on continuous basis on e-portal.	CAAQMS of TSPCB are connected to CPCB server, the data and Air Quality Index is being uploaded into the website of TSPCB on weekly basis. TSAIR app also provides the online data

a. **Constitution of District Level Air Quality Monitoring Committee**: EFS&T has issued the G.O.Rt.No.33, dated 14.03.2019 constituting the District Level Air Quality Monitoring Committee for implementation of the action plan in HMDA and Nalgonda.

b. **State Steering Committee**: Government has issued GO Rt.No.84, dated 07-06-2019 constituting the Steering Committee headed by the Chief Secretary for overall guidance for the National Clean Air Program(NCAP) program to review implementation of the action plan on quarterly basis.

- **Hon'ble NGT orders on 15.03.2019:**

i. Based on the parameters applied, if there are other cities not included in the 102 non-attainment cities, the CPCB is directed to include the same in the list of non-attainment cities.

ii. The Chief Secretary of the states may finalize Action Plans within three months for reducing the Noise Pollution Levels and submit the same to the CPCB.

TSPCB in consultation with the stakeholder departments prepared an action plan to reduce the noise pollution in Hyderabad City. The Action Plan is approved by the Chief Secretary, during the first state steering committee meeting held on 09.07.2019. The action plan on noise is communicated to the CPCB for approval on 12.07.2019.

- The Hon'ble NGT vide order dated 06.08.2019 mentioned additional Non-Attainment cities in the Country and directed that an action plan shall be prepared as per the guidelines given in the order dated 08.10.2018 within three months. Sangareddy Town of Telangana state is also included in the list. In compliance to the Hon'ble NGT orders, an Action Plan for Sangareddy is submitted to CPCB and letter received from CPCB regarding the approval of the action plan on 26.06.2020.

- The Hon'ble NGT vide order dt.20-11-2019 directed as follows:

Gist of the Orders	Remarks
Let assessed number of stations be installed within one year and quarterly progress reports furnished to CPCB by all the SPCBs/PCCs.. Indefault of compliance, SPCB/PCCs will be liable to pay compensation @ Rs. 5 Lakh per month starting from 01.01.2021. Failure may also be reflected in the ACRs of the Member Secretaries of SPCBs/PCCs.	8 CAAQMS installation is completed. Nalgonda town additional monitoring stations have been commenced.
Let SA and CC be completed within three months by the SPCBs/PCCs utilizing available data, based on which MoEF&CC may take further follow up action in terms of direction para II of order dated 06.08.2019 quoted above. SPCBs/PCCs may furnish action taken report to CPCB so that CPCB can file an appropriate report before this Tribunal. For any default, compensation will be liable to be paid @ of Rs. 5 lakh per month after 01.04.2020. Failure may also be reflected in the ACRs of the Member	Work awarded to IIT Kanpur for an amount of Rs.100.3 Lakhs. for SAS, EI & CC. Emission inventory report submitted in January,2022 and sampling is under progress. A joint Source Apportionment study by CPCB along with TSPCB is finalised for Nalgonda

Secretaries of SPCBs/PCCs. MoEF&CC may file compliance report before the next date.	town. SAS study for Nalgonda and Sangareddy- tenders were received from IIT, Kanpur, Bombay and Teri, Delhi. L1 Institute has been finalised by technical committee and tender awarded to IIT, Bombay. Work is under progress.
The review of master plans may now be carried out in the light of the studies within six months from the date of such studies in above terms. Mechanism for shifting industrial units from residential areas may be evolved immediately. Let both these aspects be complied by the all the States/UTs and reports furnished to the CPCB. The Chief Secretaries concerned may monitor compliance. In default, the concerned States/UTs will be liable to pay compensation @ Rs. 5 lakhs per month after the stipulated timeline already mentioned.	Three new Industrial Estates developed to facilitate the shifting of the sector specific industries like steel, oil and textile industries.
PGRPs may be developed for the remaining NACs and report furnished by the SPCBs/PCCs to CPCB within two months. In default, SPCBs/PCCs concerned will be liable to pay compensation @ Rs. 2 lakhs per month from 01.02.2020. CPCB may file a compliance report. Failure may also be reflected in the ACRs of the Member Secretaries of SPCBs/PCCs.	PGRP developed. A toll free number is established, TSAIR app is commenced, complaints through web portal and also on social media like twitter are being maintained. Complaints are regularly addressing to respective stakeholders to take necessary actions.
Compliance may also be ensured for the remaining cities and report furnished to CPCB by the States/UTs by 31.01.2020. In default, compensation will be liable to be paid @ Rs. 10 lakhs per month from 01.02.2020. The compensation may be recovered by the States/UTs from	Action plan for the additional city is submitted and approval is received for the action plan through their letter dated:26-06-

the erring officers and appropriate entries may also be made in the ACRs of the Heads of the Departments concerned.	2020. Quarterly progress report is being submitting regularly to CPCB.
Let the approved action plans be executed accordingly in terms of the timeline provided therein and compliance report furnished by Chief Secretaries of the concerned States/UTs to CPCB on quarterly basis starting from 01.04.2020. CPCB may file compliance report before this Tribunal. Failure on this regard may be visited with adverse consequences.	Under implementation and compliance report is being submitted

The status of the implementation of the Micro Action Plan for reducing the air pollution in the non-attainment cities of Hyderabad and Patancheru, Nalgonda and Sangareddy is placed as **Annexure –III**.

10. Status report on compliance of Hon'ble NGT order in O.A.No.1038 of 2018 on the news item published "The Asian Age" titled "CPCB to rank industrial units on pollution levels".

- The Hon'ble NGT vide order dated 13.12.2018 in O.A.No.1038 of 2018 has observed that Central Pollution Control Board during the year 2009-10 has carried out comprehensive environmental assessment of 88 industrial clusters across the country and rated them on the concept of Comprehensive Environment Pollution Index (hereinafter referred to as CEPI). Out of 88 Industrial clusters, 43 industrial clusters in 16 States having CEPI score of 70 and above were identified as Critically Polluted Areas (CPAs). Further 32 industrial clusters with CEPI scores between 60 & 70 were categorized as severely polluted areas (hereinafter referred to as SPAs). It was suggested that areas having CEPI score between 60 to 70 i.e., severely polluted industrial cluster shall be kept under surveillance and pollution control measures should be effectively implemented. Whereas the Critically Polluted Industrial Areas need further detailed investigations in terms of extent of damage and formulation of appropriate remedial action plan. Three industrial clusters were monitored in the Telangana State and the CEPI scores were assessed as below:

S.No.	Name of the industrial cluster	CEPI Score
1	Patancheru-Bollaram	75.42 (Critically Polluted Area)
2	Kattedan	60.17
3	Kukatpally	66.46

- The Hon'ble NGT vide order dated 13.12.2018 directed that a Committee shall be constituted by the concerned State which shall prepare and finalize the time bound action plan with regard to identified polluted industrial clusters in accordance with the revised norms laid down by the CPCB to restore environmental qualities within norms.

- In compliance to the Hon'ble NGT orders, the EFS&T Department, Government of Telangana vide G.O.Rt.No.2, dated 10.01.2019 constituted the Committee for preparation of Action Plan for restoration of environmental qualities in respect of identified three Polluted Industrial Clusters (PIA) viz. (Patancheru-Bollaram, Kukatpally and Kattedan) taking into account the critical parameters pertaining to these areas and submitted final Action Plans to the CPCB on 11.03.2019.

➢ Accordingly, the Board is monitoring the industries in the said areas and initiated action against non-complying units. The compliance of action points for the quarter Jan, 2022 to March, 2022 are as follows:

Action Points	Action taken till date
Monitoring of industries for compliance of emission standards and up-gradation of Air Pollution Control equipments.	All Industries have upgraded the ccntrol equipments and are regularly monitored for compliance of emission standards. The 17 category industries have installed online emission monitoring equipment and connected to TSPCB and CPCB server.
Ensure installation of multi stage scrubbers with online pH meters to control process emissions / vent condensers to solvent storage tanks.	All Industries using scrubbers and upgraded single stage scrubbers to multi stage scrubbers with online pH meters.
Prepare plan for improvement of infrastructure of roads.	IDA Bollaram: 1. The status of improving infrastructure facilities in IDA Bollaram was reviewed and directed to concretize to reduce air pollution. 2. No solid waste dump happened in the area. IDA Patancheru: All roads in the Patancheru Industrial Park are BT/CC roads and are in good condition. IDA Kukatpally: All roads in the IDA are BT/CC roads and are in good condition. IDA Kattedan: All roads in the IDA are BT/CC roads and are in good condition. The Board has procured 2 mechanical sweeping machines under NCAP and handed over to TSIIC for deployment in IDA Patancheru and Jeedimelta.
Maintain pot holes free roads for free-flow of traffic	Repair and maintenance of pot holes are being regularly carried out.
Regular check and control of burning of municipal solid wastes.	The Government has issued GO Ms.No.27 prohibiting open burning of municipal waste. No incident of open burning noticed during this quarter.
Regular operation of ZLD systems / ETPs or ensuring sending effluents to CETP regularly.	There are 6 industries (4- Bollaram & 2-Patancheru) having ZLD systems. M/s Dr Reddy Laboratories is having common ZLD system for 3 units and 45 units (33 –Bollaram & 12 -

Action Points	Action taken till date
	Patancheru) are members of CETP. The members of CETP are transporting the effluents to CETP using tankers fitted with GPS and online vehicle tracking and manifest system. The CETP is regularly monitored and the treated effluents are within the standards. The CETP installed OCEMS and connected to TSPCB server. The ZLD systems have installed camera and flow meter and connected to TSPCB and CPCB server. Regular monitoring of above industries are carried out.
Regular monitoring of CETP and ensuring compliance of standards.	The CETP is monitored on daily basis for ensuring compliance of standards. The CETP installed OCEMS and the same is connected to TSPCB and CPCB server. The CETP is meeting the standards.
Regular monitoring of the Industrial area to identify the unauthorized dumpings.	TSPCB has constituted night patrolling teams to monitor IDAs regularly to identify any unauthorized dumpings and no incident of illegal dumpings happened during this quarter. 11 industries in Patancheru-Bollaram were reviewed for non-compliance. 2 industries were issued closure directions and 9 industries issued with directions during this quarter.
Concretizing of storm water drains in the industrial area and connect to STP.	Bollaram Municipality is maintaining existing storm water drains regularly and proposal for concrete storm water drains is under consideration. TSIIC-IALA Patancheru, Kattedan and Kukatpally are maintaining storm ware drains regularly.

11. Status on Rejuvenation of water bodies, Ground water extraction/contamination and re-charge (Original Application No. 325 of 2015 in the matter of Lt.Col.Sarvadaman Singh Oberoi Vs Union of India & Ors).

- An Original Application has been filed before the Hon'ble NGT, New Delhi regarding identification, protection and restoration of water bodies in the State of Haryana. The Hon'ble NGT while considering the above application stated that the scope of the Application (OA) needs to be extended to the entire Country in the interest of protection of Environment and directed for Preparation of action plans within three months and the report to be furnished by the State Govt to the CPCB and the CPCB may examine all plans received from State Governments and furnish its comments to the Tribunal within two months thereafter.

  i. The CPCB may prepare and place on its website guidelines in the matter of restoration of water bodies in the light of above order within one month.

  ii. The matter may also be monitored by Central Monitoring Committee constituted in terms of order dated 08.04.2019 in O.A No. 673/2018 – Polluted River Stretches, as this matter is connected to the steps required for remedying the polluted river stretches as already explained.

- The Hon'ble NGT has initiated proceedings in the matter of OA No. 496 of 2016 as per the news item published in "Hindustan Times" dated 19.06.2015 titled "Dirty flows your drinking water" authored by Ritam Haldar" with regard to

  Having regard to significance of RWH for conservation of water, joint Committee of CPCB and Ministry of Jal Shakti may secure status of implementation and action plans from all States and UTs and furnish combined status report in OA No. 325/2015 on or before 30.11.2019. The Chief Secretaries of all States / UTs may oversee compliance in their respective areas.

- The Hon'ble NGT directed that the Joint Committee of CPCB and Ministry of Jal Shakti may secure status of implementation and Action Plans from all States and to furnish combined status report in O.A.No.325 of 2015 on or before 30.11.2019 and the Chief Secretaries may oversee the compliance in their areas.

- Revised complete action plan with all the details was submitted before 31st July, 2020 to CPCB and also a presentation was made before the CPCB Expert committee. I&CAD addressed collectors for implementation of the orders. The compiled report

on the actions informing that 6697 out of 10434 villages are covered under Mission Kakatiya is submitted to CPCB.

- Format for submission of information on proposed action plans for "restoration of polluted water bodies (lakes and ponds)" in compliance to Hon'ble NGT orders dated 25.02.2020 in O.A. No. 325/2015 is annexed at **Annexure-IV.**

12. Status of work in compliance of the directions passed in O.A.No.173/2018, Sudarshan Das Vs. State of West Bengal & Others order dated 04.09.2018.

- The Government of Telangana has introduced New Sand Mining Policy in the year 2014 and framed Telangana State Sand Mining Rules, 2015, vide G.O.Ms.No.03, dated 08.01.2015, to have sustainable sand mining in the State of Telangana and authorised Telangana State Mineral Development Corporation Ltd (TSMDC), for excavation, regulation and supply of sand in the State of Telangana on allocation of feasible areas. TSMDC is following all the guidelines of sustainable sand mining in the State of Telangana.

- TSMDC has deployed staff in the stockyard with Sand Reach Officer, Sand Reach Assistant and Security Guards to monitor Sand Mining and Transportation activities.

- Sand available areas identified in the Districts. I, II, III, IV & V order streams and also the reservoirs that require de-siltation.

- District Level Sand Committees conducted detailed survey and identified the areas to be de-silted and quantity of the sand to be extracted. After identification, necessary Environmental Clearance obtained wherever required.

- Identified sand bearing areas and prepared Mining Plan and got approved. Obtained necessary Environmental Clearance for operation of sand reaches.

- Identified reservoirs for de-siltation i.e. Mid Maniar, Lower Maniar, Annaram barrage, Medigadda barrage and Musi reservoir.

- Established a robust mechanism to monitor the sand operations and its transportation to the customers. Sand Mining activities are monitored by TSMDC, through a website Sand Sales Monitoring and Management System. Transparency and Accountability is maintained by Online Booking of Sand, Electronic Transit Pass Generation, Authentication of Vehicles along with Gross weight through RTA and Authentication of Customers through Aadhar database. As an additional Security measures Security Paper is used for generating Transit Posses through Computer Printing and Tab Printing where Power supply is not available.

- TSMDC empanelled nearly 28 weigh-bridges at strategic points nearer to the Sand Stockyards in Telangana State to ensure proper weighment of Transport Vehicles. The powers of Enforcement are vested with Mines Department, Revenue, Police and RTA to curtail illegal sand mining and transportation.

- "Sand A Mobile" application is provided to the enforcement authorities to verify genuinity of transportation vehicles en-route.

- Unique QR code is adopted in transportation of sand.
- Sand operations carried out strictly between 6:00 AM to 6:00 PM.
- Air pollution in the en-route villages controlled by sprinkling the water on the roads. It is ensured that all the trucks are covered properly with the tarpaulin cloth to avoid dust pollution.
- Strictly adhered to the protection of the structures by leaving the buffer zone upstream and downstream of the structures. For road safety, deployed trained people in all the junctions in the Villages were sand Lorries are passing through.
- 27 sand bearing area closed after expiry of Environmental Clearances.
- Closed Circuit cameras were installed in 69 sand reaches.
- District Survey Report (DSR) are prepared for following 9 districts where sand is available for extraction i.e., Jayashankar Bhupalpally, Mulugu, Bhadradri Kothugudem, Karimnagar, Peddapalli, Suryapet, Rajanna Sircilla, Gadwal and Mancherial.
- TSMDC also prepared scientific study report on impact of de-siltation of sand for Medigadda and Annaram Barrages of Jayashankar Bhupalpally District and Mid Maniar Barrage of Rajanna Sircilla District. The reports were submitted before Hon'ble NGT on 14.02.2020.
- GPS tagging is under progress for sand transportation lorries for general bookings. Till now 9107 lorries installed GPS.
- The compliance of Hon'ble NGT orders and latest status is annexed as **Annexure-V**
- The compliance of Hon'ble NGT orders is as follows: -

Hon'ble NGT directions	**Compliance.**
Demarcation of the sand reaches	While identifying the sand reaches they were demarcated by fixing geo-coordinates.
Compliance to the guidelines issued in Environmental Assessment (EIA) 2006 and Sustainable Sand Mining Management Guidelines 2016.	The guidelines issued in EIA 2006 and Sustainable Sand Mining Management Guidelines 2016 are strictly adhered to and while mining the sand. Obtained Environmental Clearance/CFE/CFO for 72 sand bearing areas and another 5 sites obtained EC & awaiting CFE/CFO. 26 sites yet to obtain EC/CFE/CFO.

13. Status report on the compliance of the Hon'ble NGT order in O.A.No.148 of 2016 filed by Mahesh Chandra Saxena Vs South Delhi Municipal Corporation & Ors on Utilization of treated wastewater from STPs.

- The Hon'ble NGT vide order dated 27.11.2018 in Original Application (OA) No. 148 of 2016 filed by Sri. Mahesh Chandra Saxena Vs South Delhi Municipal Corporation (SDMC) & Ors directed as follows:

  i. All the States to prepare and furnish Action Plan within 3 months for utilization of treated water.
  ii. The State Government shall furnish the Action Plan to CPCB within three (3) months.
  iii. The CPCB may review such action plans and issue appropriate directions in the matter.
  iv. The CPCB shall furnish a report of compliance to the Hon'ble Tribunal by 30.04.2019 by e-mail.

- The State Government submitted the action plan for utilisation treated water from STPs to CPCB on 04.09.2019.

- The Hon'ble NGT vide order dated 11.09.2019 directed as follows:

  " 11. In view above, we direct that the States / UTs which have not yet furnished their action plans may do so on or before 30.11.2019, failing which defaulting States / UTs will be liable to pay compensation @ of Rs.1 Lakh per month till Action Plans are filed. The States / UTs which have furnished the Action Plans may remove the deficiencies noticed above by 30.11.2019, failing which they will be liable to pay compensation @ of Rs. 1 Lakh per month. The compensation may be deposited with the CPCB, which may be used for restoration of the Environment".

- The CPCB vide letter dated 07.10.2019 informed that the Action Plan on Utilization of treated waste water for the State of Telangana was examined and suggested to revise the action plan by incorporating the missing data viz., (i) Explore potential water demand of identified bulk users of water and (ii) To explore possibility of setting up of treatment facility in industrial clusters to meet their raw water requirement instead of drawing ground water.

- The revised action plan incorporating the gaps observed was submitted to CPCB on 22.01.2020.

- The Hon'ble NGT vide order dt.26.09.2020 disposed of with a direction that it will be appropriate that this aspect is also now monitored by the CMC headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG. Ministry of Urban Development may also nominate an officer of not below the rank of Joint Secretary in the said Committee and the subject will be henceforth considered in OA 593/2017 and OA 673/2018.

- The quarterly Status of Sewage Management in the State of Telangana in the format of CPCB is annexed **at Annexure- VI.**

14. Status of setting up and proper functioning of ETPs/ CETPs/ STPs in the State of Telangana (OA/593/2017).

- The Hon'ble NGT vide order dated 04.07.2017 in OA No. 593 of 2017 directed the SPCBs to file a statement on the status of functioning of STPs/ETPs/CETPs.

- As per the orders of Hon'ble NGT, the CPCB has developed an online portal in its website so as to upload the status of ETPs / CETPs / STPs every month by the State PCBs. Accordingly, the Board is uploading compliance status of industries (ETPs) / CETPs / STPs every month in the CPCB website, so as to file the report before the Hon'ble NGT.

- **Status of ETPs / CETPs / STPs in the State at the end of 4th quarter of 2021-22 (January, 2002 to March, 2022) is as follows:**

  - **Status of ETPs:** The Telangana State Pollution Control Board has identified 2168 number of water polluting industries existing in the State. Out of 2168 industries, 2161 industries having functional ETPs and 7 industries are not having ETPs and issued with closure directions. The status of ETPs and action taken report s as follows:

1	No. of industries which require ETP	2168
2	No. Industries having functional ETP	2161
3	No. of industries complying	2109
4	No. of industries non-complying	52
5	Closure directions issued	29
	Show cause notice/directions issued	23
6	No. of industries operating without ETP	7
7	Closure directions issued	7

  - **Status of CETPs:** There are 7 CETPs existing and 1 CETP is proposed in the State of Telangana and the status is as follows:

1	No. of CETPs	7
2	No. of CETPs complying	4
3	No. of CETPs non-complying	3*
4	Closure directions issued	3*

5	Details of under construction/proposed CETPs	1

*One CETP M/s ILF&S Ltd, Fabcity is not in operation due to business reasons

- **Status of STPs:** There are 440 STPs (Municipal-32 nos. & Other-408 nos.) existing and 438 STPs are complying with discharge standards. 432 STPs (Municipal-130 nos. & Other-312 nos.) are proposed in the State of Telangana and the status of STPs is as follows:

A	**Municipal STPs**	
1	No. of STPs	32
2	No. of STPs complying	30*
3	No. of STPs non- complying	0
4	Show cause notice/directions issued	0
5	Details of under construction/proposed STPs	130
B	**Other than municipal STPs**	
1	No. of STPs	408
2	No. of STPs complying	408
3	No. of STPs non- complying	0
4	Show cause notice/directions issued	0
5	Details of under construction/proposed STPs	312

*2 STPs under maintenance

CHIEF SECRETARY,

GOVERNMENT OF TELANGANA

Chief Secretary
Govt. of Telangana
Hyderabad 500 063.

ANNEXURE -- I

Format for providing information w.r.t. directions of the Tribunal dated 29.01.2021 in the matter of 804/2017 pertaining to State of Telangana for the quarter January, 2022 to March, 2022.

S. No.	Recommendations / Directions	Status
1.	Whether the State/UT Govt/Admin has taken action to monitor the implementation of recommendations given by CPCB in its action taken report December, 2020? A. If yes, kindly provide details (viz., committees constituted, meetings conducted, Office memorandum issued etc.) B. If no, please provide the action plan with timeline.	a. The State is implementing the recommendations of the monitoring committee and submitting the status reports through TSPCB. The issue of compliance of Hazardous waste particularly with respect to monitoring committee recommendations is reviewed by Chief Secretary along with the issues in O.A. No 606 of 2018 and submitting the compliance to the Hon'ble NGT in the quarterly reports being filed.
2.	**Implementation of Rule 5(1)** a) Name of the Department / Government Agency authorized for implementation of Rule 5(1). b) No. of areas earmarked / industrial space allotted for recycling, pre-processing and other utilization of hazardous waste in the existing and upcoming industrial park, estate and industrial cluster.	a) The Telangana State Industrial Infrastructure Corporation is the concerned authority for allocation of industrial space in the existing and upcoming industrial park, estate and industrial clusters. b) Industrial Space for pre-processing facility at IDA, Rakamcherla was allotted by TSIIC and the facility is functioning. There is one existing HWM facility i.e., TSDF and incinerator along with AFRF at Dundigal and two more facilities are proposed as detailed below: 1. TSPCB has entrusted establishment of TSDF for Hazardous waste to M/s Ramky Enviro Engineers Ltd at Dundigal(V), Quatbulapur (M) in an area of 200 acres. This is an already existing facility. Further, they are in the process of expansion of this project with Waste to Energy Plant and E-waste recycling plant. 2. Hyderabad Pharma city at Yacharam, Kandukur & Kadthal(M). RR District. This is new industrial park. It is proposed to develop integrated Solid waste treatment facility with an area of 100 acres with 50 acres in Phase-I and balance 50 acres in Phase-

S. No.	Recommendations / Directions	Status
		II. The facilities proposed are secured landfill for hazardous waste & sanitary, Integrated recycling facility, engineered landfills for MSW, incinerator and waste to energy plant. 3. Zaheerabad National Investment Manufacturing Zone (NIMZ) at Sangareddy District. This is a new Industrial park. An area of 32 acres has been allotted for solid waste management facilities in multiple spaces in different phases. The hazardous waste generated will be sent to TSDF at Dundigal.
3.	**Implementation of Rule 5(2)**	
	a) Name of the Department / Government Agency authorized for implementation of Rule 5(2).	a) Director of Factories (Labour Employment, Training and Factory Department)
	b) Total No. of Workers involved in recycling, pre-processing and other utilization activities of Hazardous & other waste.	b) 1795 No. of workers involved in recycling, pre-processing and other utilization activities of Hazardous and Other waste.
	c) No. of workers registered and recognized which are involved in recycling, pre-processing and other utilization activities.	c) Presently, there is no system of registration of workers involved in recycling units.
	d) No. of groups formed of workers to facilitate setting up of recycling, pre-processing and other utilization activities.	d) Groups of workers were not formed to facilitate setting up of facilities.
	e) No. of skill developments activities undertaken for the workers involved in recycling, pre-processing and other utilization activities.	e) 1367 No. of workers involved in skill development activities. A webinar was conducted on 29.06.2021 on awareness program for workers on health and safety engaged in Hazardous related operations.
	f) No. of annual health monitoring check-ups/camps carried out for the workers involved in recycling, pre-processing and other utilization activities.	f) 85 No of health monitoring check-ups/camps carried out. Conducting of Health camps are regular activities and will be carried out regularly.
	g) No. of workers (involved in recycling, pre-processing and other utilization activities) monitored in the above annual health monitoring check-ups/camps.	g) 1510 No. of workers are monitored in the above health camps and medical examination and health camps are organized on regular basis.

S. No.	Recommendations / Directions	Status
4.	**Implementation of Rule 5(4)** a) Whether integrated plan for effective implementation of Rule 5 of HOWM Rules, 2016 has been prepared by State Government. b) Annual report for the implementation of the Rule 5 of HOWM Rules, 2016 has been submitted to MoEF&CC. i. If yes, date of submission of annual report: ii. If no, provide timeline for submission of annual report.	a) Integrated plan is yet be prepared. However, the concerned departments are implementing the Rule 5 of the HOWM Rules, 2016 by registering and recognizing the workers involved in recycling, pre-processing and other utilization activities, skill development of the workers, regular monitoring and health checkups. b) No. However, TSPCB is submitting the annual returns to CPCB. The CPCB may prepare a standard format for providing annual report.
	Status on recommendations pertaining to State Pollution Control Boards / Pollution Control Committee	
5.	Board shall ensure timely submission of annual returns by all occupiers and in case of non-compliances (i.e., in respect of non-submission/ after lapse of timeline) action may be taken in accordance with the provision laid down under the HOWM Rule, 2016.	Complied. The Board is issuing notices to the industries in case of non-compliances (i.e., in respect of non-submission/ after lapse of timeline)
6.	Board shall verify and validate the inventory data before accepting the same and adopt the CPCBs guidelines while preparation of HW inventory report.	The guidelines issued by CPCB for preparation of HW inventory report are strictly followed and the Board is verifying and validating the inventory data being furnished by the industries in accordance with the guidelines.
7.	Board shall prepare annual inventory report on hazardous and other waste generation and its management, as per CPCB's guidelines and ensure submission of same within stipulated timeframe as laid down under HOWM Rules, 2016.	The Board is preparing annual inventory report on hazardous and other waste generation and its management, as per CPCB's guidelines and submitting same within stipulated timeframe.
8.	Board shall ensure verification and reconciliation of closing of manifest document for all the cases in Hazardous waste handling/ generating units. In how many units verification of reconciliation and closing of manifest documents have been carried out?	218 units verification of reconciliation and closing of manifest documents have been carried during Jan,2022 to March, 2022.
9.	Board shall expedite/initiate action on development of sectorial process based reasonable HW generation range/environmental benchmarking / guidelines for HW recycling/utilization and approach for waste management hierarchy. Please provide details on the sector identified an progress made on development of the said documents within 01 month to CPCB.	Not developed. The major categories of industries generating hazardous waste in the State are Bulk drug industries. As the processes and stages are different for same product, the hazardous waste generation range may not be arrived for particular product. The CPCB may takeup for other sectors for development to have uniformity and circulate to the SPCBs for implementation

<table>
<tr><th>S. No.</th><th>Recommendations / Directions</th><th>Status</th></tr>
<tr><td>10.</td><td>Board shall ensure regular updation of website with respect to all enforcement actions along with details of industries and action taken thereof. Provide the link of the same.</td><td>Regular updation of website with respect to all enforcement actions along with details of industries and action taken thereof are being takenup.
https://tspcb.cgg.gov.in/Closure%20Orders/Closure.aspx
https://tspcb.cgg.gov.in/Directions%20issued/Directions.aspx.</td></tr>
<tr><td>11.</td><td>Board shall immediately upgrade the laboratory facility where all HW parameters as required under the HOWM Rules can be analysed. Provide the information regarding the laboratory facility available with the Board as per Appendix-I</td><td>Details enclosed as Appendix-I</td></tr>
<tr><td>12.</td><td>i. Board shall invoke the powers conferred under clause 23 (1) and (2) of the Rules, related to all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes, and non-compliance respectively.
ii. Board shall prosecute habitual an serious defaulters under provisions of the Environment (Protection) Act, 1986. Other alternative regulatory actions including refusal and revocation of Authorisation can also be explored following the due process. Provide details as per table given below":</td><td>
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">No. of Defaulting units</th><th rowspan="2">No. of Habitual Defaulters</th><th colspan="5">No. of units against which action has been taken</th></tr>
<tr><th>Rule 23 (1) Enforced</th><th>Rule 23 (2) Enforced</th><th>Rule 23 (2) Enforced</th><th>Prosecution under E(P) A, 1986</th><th>FIR Logged</th></tr>
<tr><td>1</td><td>9*</td><td>--</td><td>Nil</td><td>Nil</td><td>Nil</td><td>--</td><td>--</td></tr>
</table>
*The Board issued closure orders to the 9 units for causing air and water pollution under Water and Air Act and not exclusively for violation of Hazardous waste Rules during Jan,2022 to Mar, 2022</td></tr>
<tr><td>13.</td><td>Board shall initiate action for conducting environmental audit of common/captive TSDFs, as per CPCBs guidance document for conducting audit. The said guidance document is under finalization and shall be communicated to SPCBs/PCCs after finalization.</td><td>The Board issued work order to third party i.e., M/s EPTRI, Hyderabad for carrying out environmental audit of common TSDF, as per CPCB guidance document and EPTRI has submitted draft audit report.</td></tr>
<tr><td>14.</td><td>Board needs to take cognizance of hazardous waste accounted and managed while enforcing the other relevant rules (w.r.t. domestic hazardous waste and hazardcus waste generated from e-waste rules like fluorescent lamp other mercury containing lamp) and also, ir preparation of HW inventory and other interventions. Provide status in this regard.</td><td>The Board is submitting the details w.r.t domestic hazardous waste in preparation of HW inventory and other interventions.</td></tr>
<tr><td>15.</td><td>Whether any safety protocols followed by hazardous waste generating & handing units and operator of TSDFs?
If yes, provide details of the same.
In case safety protocol not followed by such units, board may initiate action for development and implementation of same by all hazardous and handling units.</td><td>Yes. All the hazardous waste generating units especially chemical and Pharma units have developed safety SOPs which are being followed. Safety protocol followed by Integrated common TSDF is enclosed.</td></tr>
<tr><td>16.</td><td>Details on the audit of hazardous waste generating & handling units be provided.
i. Number of units operating in State
• Generating units
• Recyclers
• Utilizers
• Co-processors
ii. Name of the auditing agency</td><td>Number of hazardous waste generating units operating in State : 3179
• Generating units: 3072
• Recyclers: 56
• Utilizers: 36
• Co-processors: 10
• Pre-processors: 5
No auditing carried out during</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Recommendations / Directions</th><th>Status</th></tr>
<tr><td></td><td>iii. Frequency of audit.
iv. Numbers of units audited during 2020-21
v. Status on compliances and action taken
(provide list and status as per table given below)
<table>
<tr><th>S. No.</th><th>Name & Address of unit</th><th>Type of facility</th><th>Auditing agency</th><th>Date of audit</th><th>Status on compliance</th><th>Action taken</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td><td>2020-21. Auditing and cross verification of the data is being done by the Board officials during the consent verification and furnishing the report in the combined verification report. CPCB is carrying out audit through third party.
CPCB carried out third party audit of the inventory furnished by HW industries in association with EPTRI and NIT, Warangal.</td></tr>
<tr><td>17.</td><td>Whether any on-site and off-site emergency plant to avert accidents and fire and other environmental damage is being followed by hazardous waste generators/handling units?
If yes, provide details of the same.
In case safety protocol not followed by such units, board may initiate action for development and implementation of same by all hazardous and handling units.</td><td>78 Major Accident Hazard industries are located in Telangana. All the industries have prepared on-site and off-site emergency plans to avert accidents. The Inspector of factories department is regularly carrying out mock drills for Off-site emergency plans.
All the hazardous waste generating units especially chemical and Pharma units have developed safety SOPs which are being followed.</td></tr>
<tr><td></td><td>Action Point 15: Clearance of Waste Oil/Sludge from Ships:</td><td>NA</td></tr>
<tr><td>18.</td><td>SPCC/PCC shall submit point wise information as below:
1. Total no. of ICDs/CFSs available in the State/UT.
2. Please provide the following details for each of the ICDs/CFSs in the State/UT.
a) Whether ICDs/CFSs has been authorized after scientific evaluation:
i. If yes, please provide categories of waste for which unit is authorized.
ii. If no, action taken to ensure authorization of unit.
b) Whether the ICDs/CFSs has submitted Annual report to SPCB/PCC:
i. If yes, whether the same has been incorporated in the annual inventory report of State/UT.
ii. If no, action taken against the ICD/CFS.</td><td>NA</td></tr>
<tr><td></td><td>Action Point 18: Collaboration between regulating authorities:</td><td></td></tr>
<tr><td>19.</td><td>a) No. of Interaction programmes conducted by SPCB/PC w.r.t import and export related issues.
b) No. of Interaction programmes wherein SPCB/PC participated w.r.t import and export related issues.</td><td>a) Nil
b) Nil</td></tr>
<tr><td></td><td>Action Point 26: Display of Information Outside the Factory Gate:</td><td></td></tr>
<tr><td>19.</td><td>a) No. of Hazardous waste handling an generating units in State/UT:
b) No. of Units installed Display Board as per direction of Hon'ble Apex Court:
c) No. of Units verified (during 2020-2021):</td><td>a) 3179
b) 2433 installed display Boards.
c) 2433
d) Nil</td></tr>
</table>

S. No.	Recommendations / Directions	Status
	d) No. of units found violating directions of Hon'ble Apex Court w.r.t Display Board: e) No. of units against which Show Cause Notices Issued for violation of directions of Hon'ble Apex Court: f) No. of units against which Directions Issued for violation of directions of Hon'ble Apex Court: g) No. of units against which other actions have been taken for violation of directions of Hon'ble Apex Court	e) Nil f) Nil g) Nil Notices issued to the non-complying industries for installation of display boards outside the premises. Regular follow-up is taken up with Regional Officers for compliance on installation of display Boards by all HW generating units
	Action Point 27: Institutional Reforms:	
21	a) Whether, adequate manpower is available with Board: • If no, provide the steps taken to ensure availability of adequate manpower and timeline for the same: b) Steps taken to ensure regular training of the manpower of SPCB/PCC. c) R&D work carried out by the SPCB/PCC: • If yes, provide list of topics of R&D work carried out (attach project report of the same): • If no, provide steps taken to take up R&D work either on its own or with collaboration with other SPCBs/PCCs and technical institutions:	a) No. However, 12 persons on internship were recruited. b) Conducted a webinar in association with Federation of Telangana Chambers of Commerce and Industry on 22.03.2022 on Solvent Management - Compliance Requirements. c) No R&D activities carried out. Presently, there is no proposals to takeup any R&D activities.

Appendix-I

FORMAT FOR PROVIDING LABORATORY FACILITIES AVAILABLE WITH SPCB/PCC

A. General Information

S.No.	Particulars		Details
1	Name of SPCB	:	Telangana State Pollution Control Board
2	Name and designation of the official (head of the laboratory)	:	Dr. M.S. Satyanarayana Rao, Joint Chief Environmental Scientist
3	Contact number	:	9177301452
4	Year of establishment of laboratory facility	:	2014
5	Number of instruments / equipment available at HO (Please enclosed list of instrument / equipment)	:	Instruments / equipment list enclosed (Annex-A)
6	Whether laboratory is accredited? (Y/N)	:	Yes
7	Provide the accreditation details and name of parameters accredited	:	NABL Accreditation Certificate No.TC-7123 valid up to 12.04.2022 in the field of chemical with 103 parameters (Annex-M)
8	Whether laboratory participated in any analytical quality control (AQC)? (Y/N)	:	Yes
9	Provide year-wise details of AQC analysis Year / No. of parameters / Z-score 2015 / Conductivity, T.Hardness, Cl^-, F^-, SO_4^{-2}, Ca^{-2}, Mg^{+2}, B, Cr^{+6} and TSS / Annex-X 2016 / Benthic macro invertebrates / Annex-Y 2017 / pH, EC, Zn, Fe, Cu, Mn, B / Annex-Z	:	1. Z-score of AQC sample supplied by CPCB is enclosed (Annex-X) 2. Z-score of AQC sample supplied by CPCB is enclosed (Annex-Y) 3. Z-score of AQC sample supplied by M/s.EPTRI, Hyderabad is enclosed (Annex-Z).
10	Whether laboratory participated in any proficiency test (PT)? (Y/N)	:	Yes
11	Provide year-wise details of PT analysis Year / No. of parameters / Z-score 2020 (20E01P2P1) / BOD, COD, DO, O&G, pH, TDS, TSS / Annex-B 2020 (20A01P2P1) / PM10 & PM2.5 / Annex-C 2020 (20A03P2P1) / Arsenic, Lead & Nickel / Annex-D	:	1. Z-score of PT No.20E01P2P1 supplied by M/s.Green Economy Initiatives Private Ltd., Mohali is enclosed (Annex-B). 2. Z-score of PT No.20A01P2P1 supplied by M/s.Green Economy Initiatives Private Ltd., Mohali is enclosed (Annex-C). 3. Z-score of PT No.20A03P2P1 supplied by M/s.Green Economy Initiatives Private Ltd., Mohali is enclosed (Annex-D).
12	Whether any audit (internal / external) has been conducted? (Y/N) If yes,	:	Yes
13	Details of such audit	:	Enclosed (Annex-E)

B. Analysis Facility

S.No.	Parameters	Laboratory facility at HO (Yes / No)	Test method followed	Any other arrangement for analysis
1	Heavy metals	AAS / ICP	3111 B, APHA 23rd Edition 2017 (AAS) / 3120 B, APHA 23rd Edition 2017 (ICP)	--
2	Pesticides and organics	GC-MS/MS	APHA 23 edition 6630 / 6440 / 6410B	--
3	Ammonical Nitrogen	Kjeldahl Apparatus	4500-NH_3 C, APHA 23rd Edition 2017	--
4	Bacteriological parameters (Faecal coliform, Total coliform & Faecal	Laminar Flow System / Bacteriological Incubator	9221-E, 9-77 to 9-78, 9221-A,B,C, 9-68 to 9-75 9230-AB, 9-117 to 9-119 of APHA 23rd Edition	--

	Streptococci)		2017	
5	Biochemical Oxygen Demand (BOD)	BOD Incubator	IS 3025 (Part 44), 1993	
6	Chemical Oxygen Demand (COD)	COD Digestion System	5220 B, APHA 23rd Edition 2017	--
7	Ambient air parameters i.e., RSPM, SO_2, NOx	Respirable Dust Sampler / PM_{10} Sampler, Make: Envirotech	IS:5182 methods	--
8	Emission parameters i.e., SPM, SO_2, NOx	Stack Monitoring Kit, Make: Vayubodhan	IS: 11255 methods	--

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Annexure-II

National Mission for Clean Ganga

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

For the State of Telangana for the months of January, 2022 to March, 2022

Overall status of the State:

I. Total Population: Urban Population & Rural Population separately: 3.9 crores

II. Estimated Sewage Generation (MLD) : 2750

III. **Details of Sewage Treatment Plants(STPs):**

- Existing no. of STPs and Treatment Capacity (in MLD) : 32 No.s & 899.55 MLD (1 STP with 11MLD commissioned)
- Capacity Utilization of existing STPs : 765.58 MLD
- MLD of sewage being treated through Alternate technology : Nil
- Gap in Treatment Capacity in MLD : 1850.45
- No. of Operational STPs : 30 No.s
- No. of Complying STPs : 30 No.s
- No. of Non-complying STPs : Nil

Details of each existing STP in the State: Details are placed at **Annex-I**

Details of under construction STPs 48 STPs (1458.9MLD) in the State and complete details are placed as Annex-II and the gist of which is as follows:

- **Polluted River Stretches:** Works commenced for construction of the STPs in HAM model for 17 STPs (15 (349.5MLD) under Priority –I and 2 STPs (27MLD) under Priority-II) with a capacity of 376.5MLD
- **Tendering process in Priority I & II-** 14 STPs with a capacity of 883 MLD an estimate of Rs.2585.34 crores in Priority-I for which administrative sanction is issued and tender process is being initiated under HAM mode.
- **Other than Polluted River Stretches:** 17 STPs with a capacity of 199.4 MLD are under different stages.

Details of proposed STPs in the State: Total 82 STPs with a capacity of 655.50MLD details are placed at **Annex-III**

- **DPRs Ready**- 52 STPs with a capacity of 555.67 MLD (includes Priority-II to Priority-V)
  - PHED-42 STPs with a capacity of 215.17MLD,
  - HMWSSB-10 STPs with a capacity of 340 MLD
- **DPRs under preparation** - 30 STPs with a capacity of 99.85MLD

IV. Details of Industrial Pollution:

a. State details

- **No. of industries in the State:** 10655 Nos. (Including Red, Orange, Green & white)
- **No. of water polluting industries in the State: 2193 No.s**
- **Quantity of effluent generated from the industries in MLD:** 603 MLD
- **Number of industrial units having ETPs:** 1519 (including 172 ZLD)
- **Number of industrial units connected to CETP:** 674 Industries with 7.0 MLD
- **Number and total capacity of ETPs (details of existing/ under construction / proposed):** 1519 (including 172 ZLD) with capacity 602.35ML**D.**
- **Quantity of Hazardous Sludge generated from the Industries in TPD based on annual report:** 3,33,334 TPA
- **Compliance status of the ETPs:** 29 industries are not complying. Closure directions issued to 11units and directions issued to 18 units.
- **Number and total capacity of CETPs (details of existing / under construction / proposed):**
  - **Details of existing** CETPs: Total 7 nos. details placed as **Annex-IV**
    - 4 No.s under operation with capacity 7.0 MLD and complying standards
    - 2 issued with closure directions for non-compliance
    - 1 not in operation due to business reasons
  - **Under Construction**: 1 No with capacity 480 KLD and is likely to be completed by June, 2022. There is excess capacity and the proposed CETP is for future use.

b) Details of the industries in PRS

- **No. of water polluting industries in the State: 773 Nos**
- **Quantity of effluent generated from the industries in MLD:** 356.48 MLD
- **Quantity of Hazardous Sludge generated from the Industries in TPD based on annual report:** 1,12,451TPA
- **Number of industrial units having ETPs:** 358 (including 84 ZLD)
- **Number of industrial units connected to CETP:** 415 Industries with 7.0 MLD
- **Number and total capacity of ETPs (details of existing/ under construction / proposed):** 358 (including 84 ZLD) with capacity 351.12 ML**D.**

V. Solid Waste Management:

a. **Total number of ULBs and their population:** 142 (including GHMC) & population of 2.06 crores.

b. **Current Municipal Solid Waste Generation in ULBs:** 10,409 TPD (GHMC- 6098 TPD and remaining 4311 TPD by the 141 ULBs)).

c. **Municipal Solid Waste Management in the rural bodies of PRS is placed as Annex-V**

d. **Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg- Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), bio-methanation, MRF etc:**

Details of the facilities existing in the ULBs.

e. The **Greater Hyderabad Municipal Corporation (GHMC)** has an Integrated MSW facility with a capacity of 7000 TPD capacity in operation at Sy.No.173, Jawahar Nagar, Medchal-Malkajgiri. The capacities of different facilities are as follows:

Facility	Number of Facilities	Capacity	Present Processing
Material Recovery	**1**	**7000TPD**	**6794TPD**
Plastic Recycling	**1**	**50TPD**	**50TPD**
Composting	**4**	**4000 TPD**	**3805 TPD**
Bio methanation	**1**	**5 TPD**	**5 TPD**
RDF	**2**	**3000 TPD**	**2989 TPD**
Waste To Energy Plant	**1**	**19.8 MW**	**RDF of 1400 TPD**
Secured Land fill Capacity and utilisation details	**1**	**1309870 MT**	**1289870 MT**

f. The details of facilities of the 141 ULBs is placed at **Annex-V the summary of which is as follows:**

Total Solid Waste Generation in the State is 10, 409 TPD (GHMC-6098 TPD and other than GHMC 4311 TPD)

- GHMC area Integrated MSW capacity of 7000TPD exists.
- In the remaining ULBs, the composting and DRCC are available in all the 141 ULBs and 1870 TPD of the waste is processed. The gap in the treatment is 2441 TPD and the actions proposed are detailed below.
- A total of 856TPD is generated from 32 ULBs located within PRS(GHMC is in Musi stretch)and the waste processed is 343.05TPD. The details of which are placed as Annex-VI

Door to Door Collection	Source Segregation	Composting / Vermin-composting	Dry Resource Collection Centres	Biogas
100 %	39%	141 ULBs	141ULBs	2 Bio methanation plants (13.5TPD) covering 2 ULB's (GWMC (3.5) & SIDDIPET (10))

g. Waste – to – Energy Plants: (Number/names of towns/capacity)

Sl. No.	Plant Location	Plant Capacity	Status of Operation
1	19.8 MW Capacity at Jawaharnagar (Expansion to 48MW is under consideration)	19.8MW	WtE was commissioned in August 2020 and in operation to its full capacity Obtained EC for the expansion
2	11 MW Waste to Energy Capacity by M/s RDF Power Projects, Bibi Nagar	11.0MW	Construction of plant was completed in 2018 but the promoter IL&FS fell into financial crisis. Recently the IL&FS was taken over by M/s Ever Enviro Resource Management Pvt. Ltd. and planning to revamp the plant.
3	12 MW Waste to Energy Capacity Yacharam, Ibrahimpatnam	12.0MW	Land was acquired by the concessionaire M/s SVGPPL. Presently, It is under financial closure to commence the plant construction.
4	14.5 MW Capacity at Dundigal	14.5MW	Construction of plant is under progress and expected to commission it's operations by the end of 2022.

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

i. Initiated on-site composting across the state of Telangana for Bulk Waste generators and Individual Households.

ii. C&DMA vide Cir.Roc.No.178853/2021-H2, Dt.12.10.2021 have issued instructions along with action plan and timelines for 100% Source Segregation of waste in Phase wise manner i.e., 1st Phase- Source segregation in Commercial, Institutional and other bulk waste generators (22nd Oct to 30th Nov, 2021), 2nd Phase- Source Segregation in Organized Residential Colonies, RWAs and apartments (1st Nov to 30th Nov, 2021) and 3rd Phase- Source Segregation in Slums, unplanned colonies and other areas (18th Nov to 30th Dec, 2021)

iii. Enhancing capacities of DRCC to meet 100% Dry Waste handling within 6 months.

iv. Government have constituted a tender committee vide G.O.Rt No.150 MA&UD Dept. dt.11.3.2020 for processing of RFP on Biomining and Processing of legacy waste for 123 ULBs grouped into 09 clusters. The Financial bid opening was conducted virtually on 31st July 2021, after detailed discussions, the bidders have voluntarily given a rebate rate @ of Rs.550/- per MT as agreed to GoI norms for funding u/ SBM 2.O.

v. The following clusters are awarded to the bidders as per their preferences:

- C1 (Medchal-Makajigiri, YadadriBhuvanagiri and Janagaon) 16 ULBs, awarded to M/s Sagar Motors Ltd., also agreed for Rs. 550/- per MT (agreed rate of GoI u/ SBM 2.0 funding) for following earlier clusters allotted (earlier rate Rs.630/-)
- C2 (Nalgonda, Suryapet) 11 ULBs, awarded to M/s Harshita Infra engineering Pvt Ltd in JV M/s Siri Constructions and M/s. GSR Constructions.

- C3 (Ranga Reddy) 08 ULBs, awarded to M/s Cube Bio Energy Pvt Ltd. in JV with M/s. Suman Realti and Industrial Services and M/s. Sudhakara Infratech Pvt Ltd.
- C4 (Khammam, Bhadradri Kothagudem and Mahbubabad) 12 ULBs, awarded to M/s Cube Bio have also given a rebate rate of Rs.550/- per MT for the earlier clusters 4 & 7 as agreed by GoI for funding u/SBM 2.0. (earlier rate Rs. 630/-)
- C5 (Mahabubnagar, Nagarkurnool, Wanaparthy) 18 ULBs, awarded to M/S SDS technologies in JV M/S Neptune Automation and M/S Virogreen India Pvt Ltd.
- C6 (Karimnagar, Jagitial, Rajanna Sircilla, Hanumakonda and Warangal) 14 ULB's, awarded to M/s Annapurna Constructions JV with M/s Hind Agro and chemicals.
- C7 (Kamareddy, Nizamabad and Nirmal) 10 ULBs, awarded to M/s Cube Bio have also given a rebate rate of Rs.550/- per MT for the earlier clusters 4 & 7 as agreed by GoI for funding u/SBM 2.0. (earlier rate Rs. 630/-)
- C8 (Adilabad, Mancherial, Peddapalli, KomaramBheem & Jayashankar Bhupalpally) 14 ULBs, awarded to M/s Sagar Motors Ltd., also agreed for Rs. 550/- per MT (agreed rate of GoI u/ SBM 2.0 funding) for following earlier clusters allotted (earlier rate Rs.630/-)
- C9 (Siddipet, Medak, Sangareddy, Vikarabad) 20 ULBs, awarded to M/s Shrusthi Contech Pvt Ltd in JV M/S Eco India Project Pvt Ltd and P.H Jadhav.

vi. Work order has been given to above 07 bidders on 25.02.2022 for commencement of work in ULBs. Work already commenced at GWMC, Karimnagar, Bhongir, Suryapet, Dundigal and Ameenpur ULBs and around 1,18,639 MTs of legacy waste has been processed.

Vii. As per SBM-2.O norms a State Level High Power Committee resolution has been submitted to GoI for funding towards biomining of legacy waste in 123 ULBs with an estimated cost of Rs.178.60 Crs, out of which Central share is Rs.69.08 Crs. Government of India have released an amount of Rs.27.63 Crs as 1st installment towards biomining of legacy waste.

- **Legacy dumpsites**: No. and area (in acres) of uncontrolled garbage dumpsites.

  i. No. of Dumpsites: 151

  i. Total Area in Acres: 965.31

  Initiated Bio-remediation in the 5 ULBs and quantity of legacy waste processed is 99,177 MTs

- **No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers:** 34 dumpsites with 212.5 acres. Works have commenced in 17 dumpsites and in the remaining dumpsites tenders are in process on cluster basis. The details are placed at **Annex-IX**

h. **Construction and Demolition Waste: No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction):**

  - **Existing**: Two C&D recycling plant with 500 TPD capacity each
    - Jeedimetla in GHMC area is commissioned in the month of April, 2020.
    - Fathullaguda in GHMC area is commissioned in the month of April, 2021

- **Proposed**: Greater Warangal, Karimnagar, Nizamabad and Khammam corporations have identified land for setting up of the C&D waste. Remaining ULBs are collecting the C&D waste separately

VI. Bio-medical Waste Management:

- No. of Hospitals and Health Care Facilities: **7273 Nos**
- Total Bio-medical generation in the state: **23,810 Kg/day**
- Treatment capacity in the state: 77500KG/day (incineration capacity -44000kg/day, auto claving-33500kg/day)
- Status of Treatment Facility/ CBMWTF: **11 CBMWTFs and complying with standards.**

VII. Hazardous Waste Management:

- Total Hazardous Waste generation:

Details of the Waste	In Tons Per Annum
Recyclable Waste (TPA)	92562
Incinerable Waste (TPA)	2324
Utilisable waste (TPA)*	127103 (co-processing)
Landfillable Waste (TPA)	111344
Total in Tons Per Annum(TPA) :	3,33,334

- No. of ndustries generating Hazardous waste: **3179**
- Treatment Capacity of all TSDFs : **1 No of integrated commonTSDF with capacity 25 million tons for 25 years and Common incinerator of capacity 1.5 TPH.**
- Avg. Quantity of Hazardous waste reaching the TSDFs and Treated: **1,15,000 TPA**
- Details of on-going or proposed TSDF: **Nil**

VIII. Plastic Waste Management:

Item	Quantity
Quantity of plastic waste generated,	1082 TPD
Quantity of plastic Waste utilized in recycling	125.84 TPD
Quantity of waste Co-processed in Cement kilns	130.00 TPD
Quantity of plastic waste used in production of Waste to oil	40.20 TPD
Quantity of waste utilized in production of Refuse Derived Fuel (RDF) (part of RDF at Jawaharnagar)	451.00 TPD
Total plastic waste Managed	**747.54 TPD**
Gap	**334.46 TPD**
No. of Registered plastic manufacturing units (TPD)	251 (587 TPD)
No. of ULBs having facilities for Collection of Segregated waste	142 (291 DRCC)
GPs having facilities for Collection of Segregated waste	12770
No. of registered Producers/brand owners/ importers	316
Number of registered plastic waste recyclers with capacity	30 (136.08 TPD)

- To address the gaps, the ULBs are increasing the DRCCs, 100% segregation of waste at source and EPR implementation by Producers, Importers, Brand Owners (PIBOs)
- Awareness Programs for phasing out the single use plastic are being conducted as per the new PWM rules
- Spl Task Force committee is constituted under the Chairmanship of the Chief Secretary
- 142 ULBs banned plastic carry bags of thickness less than 75 microns. Initiated Spot-fines to regulate plastic waste
- C&DMA vide Cir.Roc.No.133211/2021-H2, Dt.11.10.2021 have issued instructions along with Action Plan for Ban and Elimination of Single Use Plastic less than 75 microns of thickness from 14th Oct, 2021 to 30th June 2022 and also for plastic less than 120 microns of thickness from 1st July, 2022 to 31st Dec, 2022.
- As per the action plan MCs shall take up the following activities within the prescribed time frame mentioned in the action plan:
    - Issue of Notification by MCs for imposing ban on sale and use of plastic carry bags and Single Use Plastic of less than 75 Microns of thickness.
    - Constitution of City level Task Force comprising of Municipal Commissioner, Health Officer, Sanitary Supervisor, Sanitary Inspector, Representatives from NGOs (2 Nos), 1 No. Police Constable
    - Setting up of a plastic waste management cell at ULB level comprising of Health Officer, Sanitary Supervisor, Sanitary Inspector and Environmental Engineer.
    - To setup provisions for Online public grievance/complaints portal, phone number to receive and redress complaints from public.
    - Readiness with different IEC material indicating the ban on sale and use of Plastic and fine provisions on violators.
    - Display of boards banning the sale and use of plastic carry bags less than 75 micros and SUP, at the establishments who sale and use such items and taking their commitment on implementation of ban.
    - Conduct of raids by City Level Task force at least twice in a week to implement the Ban and impose fines on the violators. Deposit the banned items in the Plastic Waste Management Cell for safe disposal.
    - Setting up/ear marking of plastic collection and storage rooms/sheds. (existing DRCC/ any sheds at the ULB to be utilized and details of such storage should be entered in the record books)
    - Conduct of special raids on implementation of ban at all Govt. offices, educational institutions and other big establishments.
    - Conduct of regular awareness, in person and through IEC Encouraging the use of biodegradable items in place of plastic waste at various establishments. SHGs to be trained to supply such items.
    - Conduct of regular awareness on alternative to plastics to establishments and practicing with items which are found alternative to plastics.

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

In-Situ Remediation:

The NEERI has prepared DPRs for In-situ remediation for 5 drains and for one drain at Kokapet was awarded to NEERI. The NEERI has yet to commence the work and delay is reported to be due to Covid -19 surge.

i) Feacal Sludge Septage Management(FSSM) as interim measure:

Existing facilities:

a. **Co Treatment Facilities:** 7 nos with 70KLD facility in the a. Priority –I stretch (1. Amberpet, 2. Nallacheruvu, 3. Peddacheruvu, 4. Miralam, 5. Khajaguda 6. Nanakramguda and & 7.Nagole)

HMWSSB has empanelled 87 Septic Tank Cleaning Vehicle Operators for transporation of septage and safe disposal at co-treatment facilities at existing STPs. These operators are provided training for safe handling of septage and issued safety equipment.

b. **FSTPs:** 11 no.

One number with 40KLD capacity at Nalla Cheruvu in Priority-I stretch

16 FSTPs have been established on Priority stretch III-V with 570KLD capacity. The details are Siddipet-20KLD, Bhongir-15KLD, Nalgonda-75KLD, Kamareddy-30MLD, Shadnagar-25KLD, Nirmal-30KLD, Boduppal-15KLD, Korutla-25KLD, Adilabad- 35KLD, Jagityal-35KLD, Jangaon – 20 KLD, Medchal – 10 KLD, Khammam – 95 KLD, Peerzadiguda – 15 KLD, Jagityal – 35 KLD, Nizamabad – 90 KLD

Under Construction: 14 no.s as detailed below

a. **Co-Treatment Facilities:** 1 no with 10KLD facility in the Priority –I stretch at khajikunta

b. **Feacal Sludge Treatment facilities**: 14 no.s as detailed below

- Ieeja – 10KLD, Meerpet – 35 KLD, Badangpet – 20KLD, Gajwel – 15 KLD, Gadwal – 20 KLD, Narayanapet – 10 KLD, Mahbubnagar – 50 KLD, Yellandu- 10 KLD, Suryapet – 35 KLD, Ramagundam – 60 KLD, Vemulavada – 10 KLD, Metpally – 20 KLD, Bhainsa – 15 KLD, Bodhan - 20 KLD

Proposed FSTP:

Tenders has been invited for construction of FSTP in another 68 newly formed ULBs, with 495 KLD capacity for Rs.140.00 Crs. Bids have been received and the same are under evaluation.

ii) Rain guard / wet land construction on Kukatpally nala which joins Hussainsagar lake pilot project is taken-up by HMDA for a length of 300 RMT to reduce the BOD load of the water passing through it.

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

In-Situ remediation is proposed only in priority I&II and in priority III to V stretches it is not feasible as Flat terrain is not available, Steep slope gradient leading to high velocity and Flow of greater than 5 MLD

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

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

a. One meeting is conducted on 31st March, 2021 and the subsequent review of the progress is being monitored on file due to COVID situation.

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

Water quality of the Rivers are placed at **Annex-VII**.

Ground water quality carried out in PRS are placed as **Annex-IX.**

XIV. Ground water regulation: - The WALTA Act has been adopted by the State of Telangana through G.O.Ms.No.18, Panchayat Raj and Rural Development (RD-II) Department, Government of Telangana dated 31.01.2015.

- Ground Water Department has identified (1358) Villages as Over exploited, considering Ground Water Estimation Resources assessment for the base year 2012-13. The same number of villages are notified by Authority i.e. Telangana State WALTA authority through G.O.Ms.No.114. Panchayat Raj and Rural Development (RD-I) Department dated 25.10.2018
- As per TSWALTA ACT no extraction of Groundwater is permitted in Over Exploited villages for agriculture and Industrial except for drinking purpose

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

XVI. Rain Water Harvesting: -

The Government of Telangana is implementing the policy of construction of the RWH structure where construction is more than 200 Sq.mtrs.

- The details of the RWH structures in Urban Local Bodies are enclosed as Annex-XI
- The details of the RWH structures at Rural places is enclosed as Annex-XII

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

Government of Telangana constituted a committee to collect the data of past history of flooding and mitigation measures taken and for identification of new areas of flood mitigation. The relevant SI sheets of 1 in 50,000 scale for all the river stretches have been collected. The HFL Contours corresponding to the maximum flood in the river have been marked on the above SI sheets as per site enquiry and past history.

Further the Musi River Development Corporation Limited(MRDCL) has conducted Drone survey to generate Digital Elevation Mode (DEM) with 1mtr interval with Hydro flattened barrier & Digital Surface Mode (DSM), High-Definition Video from captured images, Topographic survey drawing including contours at 0.5mtrs interval, Digital Ortho Photos of 5cms GSD, 3- Dimensional Photo Realistic Model etc., from Osman Sagar, Himayat Sagar to Gowrelli at ORR East.

Demarcation of River Musi Boundary and buffer zone was established by conducting Differential Global Positioning System (DGPS) for a length of 55 Kms in coordination with Revenue and Irrigation Dept.,

The following activities are being taken up for cleaning the Musi by MRDCL.

a. Cleaning and clearing of Juliflora, Shrubs etc. and removal of silt for free flow of River without stagnation is completed in the stretch of 55 km
b. Formation of walkway and Landscaping on Musi edges under Ecological restoration of River Musi nearing completion at Nagole bridge, Chaderghat Bridge and at Muslimjung Bridge to MGBS
c. 6 No's of Hydraulic excavators are being engaged throughout the year for cleaning the river.
d. Supply, Installation and Maintenance of Floating Trash Barrier for Removal and Disposal of collected trash" from the Musi River has been installed across the Musi at (10) locations along the Musi River.

XVIII. Maintaining minimum e-flow of river: - All the rivers in Telangana are Rain fed non-perennial rivers and hence maintenance of e-flow is practically not possible

XIX. Plantation activities along the rivers: - The Govt. of Telangana is executing the plantation program called Haritha Haram under which every year massive plantation is being taken up in the entire state.

XX. Development of biodiversity park: - One Bio-diversity park in the Musi Catchment area in Hyderabad is developed and is open to public from the year 2015 onwards.

XXI. Reuse of Treated Water: Govt. of Telangana has released a policy for reuse of the treated water

- Treated Waste Water is being used for the purposes of gardening by Shilparamam (Tourism Dept.), Botanical Garden (Forest Dept.), GHMC, HMDA, Horticulture Dept, R&B Dept. for gardening and watering the plantations in medians of the roads etc. The treated waste water is also being used for agriculture purpose along the Musi River.
- NCC Company Pvt. Ltd., is also using treated waste water for road works.

- So far 66 MLD treated waste water has been reused.
- HMWSSB has engaged a consultant for demand assessment and identification of the potential users for reuse of treated waste water from the existing & proposed STPs and preparation of detailed project report is in progress.
- HMWSSB has organized workshops with various stake holders for creating awareness on utilizing the treated waste water from existing STPs and identification of potential users.

- **Online Continuous Effluent Monitoring Systems (OCEMS):**

  HMWSSB has completed installation of the OCEMS at all the existing 20 STPs and integration with TSPCB website is under progress. The mobile app of the same is uploaded in all the MoM officers of HMWSSB for continuous monitoring of effluent parameters.

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards: - River Krishna is adopted as the model river and the same is communicated to the NMCG.

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

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

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring: -
Action against the industries are being taken for violations if any.

Annex-I

Details of existing STP

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
1	Amberpet	339	319.65	Working	Meeting
2	Nagole	172	172	Working	Meeting
3	Nallacheruvu	30	30	Working	Meeting
4	Attapur 1	51	47.10	Working	Meeting
5	Attapur 2	23	23	Working	Meeting
6	Pedda Cheruvu, Nacharam	10	9.84	Working	Meeting
7	Miralam Tank 1	10	9.86	Working	Meeting
8	Miralam Tank 2	5	4.80	Working	Meeting
9	Durgam Cheruvu, SLP	5	5.00	Working	Meeting
10	Patel Cheruvu, Nacharam	2.5	2.50	Working	Meeting
11	Saroor Nagar	2.5	2.50	Working	Meeting
12	Langer House	1.2	1.20	Working	Meeting
13	NMK Lake	4	3.23	Working	Meeting
14	Safilguda, Malkajgiri	0.6	0.60	Working	Meeting
15	Khajakunta, Metro, KKP	12	12.00	Working	Meeting
16	Khajaguda, Gachibowli	7	7.00	Working	Meeting
17	Nanakramguda,	4.5	4.50	Working	Meeting
18	Nagarjuna Circle	0.5	0.50	Working	Meeting
19	Lingam Kunta, BHEL	30	17.48	Working	Meeting
20	Gopanapally, SLP	4.5	3.57	Working	Meeting
21	Necklace Road	20	20	Working	Meeting
22	Pattigadda	30	30	Working	Meeting
23	Rangadhamini Lake, KKP	5	5	Working	Meeting
24	Krishnakanth Park,	0.5	-	Not working	-
25	Amber Cheruvu, Pragatinagar	2.5	-	Not working	-
26	Bommakal Road, Karimnagar	38	3	Working	Meeting
27	Chakali Gadda, Vikarabad	13	7.50	Working	Meeting
28	Dubba Nizamabad	31.5	7	Working	Meeting
29	Yellammagutta Nizamabad	15	3	Working	Meeting
30	Thallagadda Miryalguda	11.5	1	Working	Meeting
31	Chinthala Cheruvu Siddipet	7.25	6.25	Working	Meeting
32	Narsapur Cheruvu Siddipet	11.00	6.50	Working	Meeting
	Total	899.55	765.58		

Annexure II

Details of under construction STPs in the State (GHMC)

No.	Location	Capacity in MLD	Physical Progress in %	Status of I&D	Completion Timeline
Package-III					
1	Ambar Cheruvu (Pragathi Nagar)	37.0	Work started. Detailed Drawings & designs are approved for some of STPs and for other STP's under approval. Site leveling, marking and excavation is in progress. For 3 STPs PCC completed and laying of raft for SBR basins is in progress.	I&D Structures work commenced	2 years 2023
2	Chinna Maisamma	14.5			
3	Nalla Cheruvu (Kukatpally)	15.0			
4	Khajakunta	22.0			
5	Yellammakunta Lake (Jaya Nagar)	13.5			
6	Fathe Nagar	100.0			
7	Vennelagadda	5.0			
8	Fox Sagar Lake	14.0			
9	Shivalaya Nagar Cheruvu	14.0			
10	Pariki Cheruvu (Kandri Gutta)	28.0			
11	Durgam Cheruvu	7.0			
12	Khajaguda	21.0			
13	Miyapur Patel Cheruvu	7.0			
14	Gangaram Cheruvu	20.0			
15	Kamuni Cheruvu	20.0			
16	Mullakathuva Cheruvu	33.50			
17	Gayatri Nagar (Chintal)	5.00			
	Total	371.50			
Package-I					
18	New Alwal Lake	15.50	Work started. Detailed Drawings are being approved for some of STPs, designs are under preparations. Site leveling, marking and excavation is in progress		
19	R K Puram Lake	5.50			
20	Banda Cheruvu	15.00			
21	Kapra Lake	20.00			
22	Rama Cheruvu	30.00			
23	Pedda Cheruvu	17.50			
24	Nalla Cheruvu	86.50			
25	Amberpet	212.50			
	Total	**402.50**			
Package-II					
26	Miralam Site 1	30.00	Work started. Detailed Drawings are being approved for some of STPs, designs are under preparations. Site leveling, marking		
27	Miralam Site	11.50			
28	Bapughat STP at Attapur Site	48.00			
29	Kokapat Lake	15.00			

30	Ibrahim Cheruvu	56.00	and excavation is in progress		
31	Nagole	320.00			
	Total	**480.50**			

Details of under Construction STP's in the State (Urban other GHMC) and not pertaining to PRS:

S. No	City/Town	Location of STP	Capacity of STP in MLD	Physical Progress in %	Completion Timeline
1	Miryalguda	Ramnagar Bandam	5.45	97%	31-03-2022
2	Nalgonda	Sheshammagudem	17.16	77%	31-03-2022
		Arjalabavi	2.55	11%	31-05-2022
3	Nagar Kurnool	Bus Depot Backside	3.20	60%	31-03-2022
		Bus Depot Backside	2.30	81%	31-03-2022
4	Khammam	Dhamsalapuram	20.00	12%	30-06-2022
5	Suryapet	Pullareddy cheruvu	10.00	81%	31-03-2022
		Nallacheruvu	10.00	5%	Works stopped by locals
6	Gajwel	Rajareddy Pally	1.5	83%	31-03-2022
		Pidichedu Road	3.5	83%	31-03-2022
		Pragnapur (By Pass Road)	1.25	70%	30-04-2022
		Pandavula Chervu	0.5	84%	31-03-2022
7	Devarakonda	Bellamoni Kunta (Nainoni Kunta)	1.50	8%	31-05-2022
		Peta Cheruvu	1.50	0%	30-07-2022
8	GWMC	Reddypuram	100	0% (to be Started)Site alienation not completed	
		Pragathinagar	15	12%	30-06-2022
		Ursugutta	5	21%	30-06-2022
		Total	**199.41**		

Annexure-III

Details of STPs proposed in the State (Urban other GHMC)

S. No.	ULB Name	No. of STPs	STP - 1	STP - 2	STP -3	STP-4	Total MLD	Status of Project	Likely date of completion**
			MLD	MLD	MLD	MLD			
1	Bellampally	2	8.50	4.5			13.00	A/S awaited	Proposed to take up under Hybrid annuity Model as per Govt. Memo Dt:25.05.2021 of MA & UD (TP&E.2). Accordingly, this office vide Letter Dt:01-11-2021 has requested Govt to accord AS for appointment of consultant M/s. Green Design and Engineering Services Pvt., Ltd
2	Mandamarri	3	7.00	6	1		14.00		
3	Ramagundam	3	32.00	9	4		45.00		
4	Jagtial	4	14.10	4.9	0.6	0.56	20.16		
5	Metpally	2	4.30	5.3			9.60		
6	Bhainsa	2	7.50	2			9.50		
7	Korutla	1	12.71				12.71		
8	Manuguru	2	5.00	1.2			6.20		
9	Armoor	3	4.10	6.5	0.8		11.40		
10	Dharmapuri	2	2.00	1.70			3.70	DPR under prep.	
11	Chennur	2	3.00	2.50			5.50		
12	Kyathanpally	2	4.00	3.20			7.20		
13	Luxettipet	2	3.00	2.00			5.00		
14	Mancherial	4	7.50	3.00	3.00	3.00	16.50		
15	Naspur	3	8.00	5.00	5.00		18.00		
16	Khanapur	2	3.00	1.80			4.80		
17	Nirmal	3	8.50	6.00	5.50		20.00		
18	Manthani	2	2.00	1.75			3.75		
19	Gadwal	2	12.90	3.36			16.26	A/S awaited	
20	Kollapur	3	0.57	4.33	1.24		6.14		
21	Ieeja	2	4.81	2.11			6.92		
22	Alampur	2	1.60	1.5			3.10	DPR under prep.	
23	Makthal	2	2.60	2.6			5.20		
24	Palwancha	4	2.00	2.8	9.3	2.00	16.10	A/S awaited	
25	Huzurabad	2	4.75	1.7			6.45		
26	Jammikunta	2	4.90	1.4			6.30		
27	Parkal	2	4.00	2.6			6.60		
28	Bhupalpally	3	6.00	2.2	0.63		8.83		
29	Kothapalli	2	1.50	1.10			2.60	DPR under prep.	
30	Sultanabad	2	3.00	1.50			4.50		
		72					**315.02**		

Annexure-IV

Common Effluent Treatment Plants (CETPs):

There are 7 CETPs in Telangana State, out of which 4 are under operation. The details are as follows:

S. No.	Name of the Facility	Type of processing plant	Capacity	Status
1	M/s.Jeedimetla Effluent Treatment Plant, Jeedimetla, Hyderabad.	LTDS- Chemical followed by biological treatment HTDS-MEE	LTDS-1500 KLD HTDS-200 KLD	In operation Meeting the discharge standards.
2	M/s.Patancheru Effluent Treatment Plant, Patancheru, Hyderabad.	LTDS effluent is treated by Chemical methods followed by Membrane bio-reactor	LTDS-3000 KLD	In operation Meeting the discharge standards.
3	M/s.Indian Drugs and Pharmaceuticals Ltd, Balanagar, Hyderabad.	Waste water of industries from Food Processing, Formulation Units, Oil Extraction Units etc. located in Hyderabad and Mahaboobnagar Districts and sewage generated from IDPL Hostel and township.	150 KLD	In operation Meeting the discharge standards.
4	M/s.MANA Treatment Plant Ltd., / M/s Indwa Technologies Pvt. Ltd., Mallapuram (V), Uppal (M), Medchal District.	The CETP receiving the Low TDS industrial and domestic effluents from 48 member industries from IDA Mallapur, 37 member industries from IDA Nacharam and 48 member industries from other areas.	2000 KLD	In operation Meeting the discharge standards.
5	M/s.IL&FS Environmental Infrastructure & Services Ltd., Plot. No.14, Fab City, Maheshwaram (M), Rangareddy District.	Common Effluent Treatment Plant (Zero liquid discharge system) to treat HTDS effluents – 300 KLD and LTDS effluents – 200 KLD from member industries.	HTDS-300 KLD LTDS-200 KLD	Not in operation
6	*M/s.Kunoor Leather Park Ltd.,(CETP), Kunoor Village, Bhongiri Mandal, Yadadri-Bhongiri District.*	Common Effluent Treatment Plant to treat the pre-treated industrial effluent generated from tannery units.	485 KLD	Not in operation
7.	*M/s.Enumamula Common Effluent Treatment Plant, Enumamula, Warangal Urban District.*	Common Effluent Treatment Plant to treat the pre-treated industrial effluent generated from tannery units.	300 KLD	Not in operation

Annexure-VI placed in the last due to page orientation in landscape

Annexure-V

Details of Solid Waste Management facilities of 141 ULBs of Telangana

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
1	Adilabad	66	DRCC, WTC	16.5	Work under progress for MSW processing, Completion Timeline: 9 Months
2	Palwancha	38	DRCC, WTC	7.6	
3	Kothagudem	36	DRCC, WTC	10.8	
4	Manuguru	14	DRCC, WTC	7.14	
5	Yellandu	22	DRCC, WTC	1.76	
6	Korutla	38	DRCC, WTC	6.08	Tenders Called for MSW processing, Completion Timeline:1 year
7	Dharmapuri	9	DRCC, WTC	0.72	
8	Jagitial	50	DRCC, WTC	17.5	
9	Metpally	29	DRCC, WTC	15.95	
10	Raikal	10	DRCC, WTC	0.4	
11	Jangaon	14	DRCC, WTC	1.26	Work under progress for MSW processing, Completion Timeline:9 Months
12	Bhupalpally	13	DRCC, WTC	1.17	
13	Alampur	6	DRCC, WTC	0.54	Tenders Called for MSW processing, Completion Timeline:1 year
14	Gadwal	18	DRCC, WTC	1.8	
15	Ieeja	12	DRCC, WTC	8.64	
16	Waddepalle	8	DRCC, WTC	0.4	
17	Banswada	16	DRCC, WTC	12.32	Work under progress for MSW processing, Completion Timeline:9 Months
18	Kamareddy	44	DRCC, WTC	27.72	
19	Yellareddy	13	DRCC, WTC	7.15	
20	Karimnagar	95	DRCC, WTC	54.15	Tenders Called for MSW processing, Completion Timeline:1 year
21	Choppandandi	10	DRCC, WTC	1	
22	Huzurabad	18	DRCC, WTC	9.36	
23	Jammikunta	28	DRCC, WTC	8.96	
24	Kothapally	9	DRCC, WTC	1.8	
25	Khammam	190	DRCC,	34.2	Work under progress for

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
			WTC		MSW processing, Completion Timeline:9 Months
26	Sattupalli	21	DRCC, WTC	1.47	
27	Madhira	26	DRCC, WTC	7.54	
28	Wyra	9	DRCC, WTC	0.9	
29	Kagaznagar	25	DRCC, WTC	1.75	
30	Mahabubnagar	106	DRCC, WTC	74.2	Tenders Called for MSW processing, Completion Timeline:1 year
31	Bhoothpur	5	DRCC, WTC	0.35	
32	Jadcherla	25	DRCC, WTC	3.75	
33	Dornakal	8	DRCC, WTC	1.6	Work under progress for MSW processing, Completion Timeline:9 Months
34	Mahabubabad	18	DRCC, WTC	6.3	
35	Maripeda	9	DRCC, WTC	0.72	
36	Thorrur	10	DRCC, WTC	0.7	
37	Mancherial	21	DRCC, WTC	5.04	
38	Bellampally	25	DRCC, WTC	2.25	
39	Chennur	12	DRCC, WTC	0.84	
40	Kyathanpally	9	DRCC, WTC	0.45	
41	Luxettipet	12	DRCC, WTC	0.96	
42	Mandamarri	21	DRCC, WTC	1.89	
43	Naspur	33	DRCC, WTC	2.64	
44	Medak	29	DRCC, WTC	26.68	Tenders Called for MSW processing, Completion Timeline:1 year
45	Narsapur	11	DRCC, WTC	6.82	
46	Ramayampet	9	DRCC, WTC	6.3	
47	Thoopran	12	DRCC, WTC	6.72	
48	Bocuppal	51	DRCC, WTC	51	Work under progress for MSW processing, Completion Timeline:9 Months
49	Dundigal	48	DRCC, WTC	41.28	
50	Kompally	28	DRCC, WTC	28	MSW processing facility commenced
51	Medchal	22	DRCC, WTC	22	

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
52	Peerzadiguda	46	DRCC, WTC	32.2	Work under progress for MSW processing, Completion Timeline:9 Months
53	Dhammaiguda	47	DRCC, WTC	15.04	MSW processing facility commenced
54	Ghatkesar	22	DRCC, WTC	11	Work under progress for MSW processing, Completion Timeline:9 Months
55	Gundlapochampally	19	DRCC, WTC	12.35	
56	Jawaharnagar	121	DRCC, WTC	38.72	MSW processing facility commenced
57	Nagaram	25	DRCC, WTC	3.75	Work under progress for MSW processing, Completion Timeline:9 Months
58	Nizampet	171	DRCC, WTC	17.1	
59	pocharam	40	DRCC, WTC	29.2	
60	Thumkunta	19	DRCC, WTC	8.93	
61	Atchampet	11	DRCC, WTC	7.59	Tenders Called for MSW processing, Completion Timeline:1 year
62	Kalwakurthy	7	DRCC, WTC	0.35	
63	Kollapur	8	DRCC, WTC	2.8	
64	Nagarkurnool	13	DRCC, WTC	13	
65	Miryalguda	50	DRCC, WTC	26	
66	Nalgonda	64	DRCC, WTC	16	
67	Chandur	8	DRCC, WTC	1.76	
68	Chityal	14	DRCC, WTC	14	
69	Devarkonda	16	DRCC, WTC	3.2	
70	Haliya	14	DRCC, WTC	1.4	
71	Nandikonda	7	DRCC, WTC	4.2	
72	Kosgi	13	DRCC, WTC	6.37	
73	Makthal	11	DRCC, WTC	0.77	
74	Narayanpet	12	DRCC, WTC	0	
75	Nirmal	66	DRCC, WTC	25.08	Work under progress for MSW processing, Completion Timeline:9
76	Bhainsa	24	DRCC, WTC	2.4	

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
77	Khanapur	6	DRCC, WTC	0.3	Months
78	Armoor	30	DRCC, WTC	12	
79	Nizamabad	188	DRCC, WTC	86.48	
80	Bheemgal	12	DRCC, WTC	0.84	
81	Bodhan	40	DRCC, WTC	12.8	
82	Ramagundam	115	DRCC, WTC	51.75	
83	Peddapalli	21	DRCC, WTC	17.64	
84	Manthani	14	DRCC, WTC	7.84	
85	Sulthanabad	9	DRCC, WTC	0.36	
86	Sircilla	46	DRCC, WTC	46	Tenders Called for MSW processing, Completion Timeline:1 year
87	Vemulawada	23	DRCC, WTC	12.65	
88	Jalpally	33	DRCC, WTC	19.8	
89	Narsingi	36	DRCC, WTC	32.76	
90	Shadnagar	32	DRCC, WTC	30.4	
91	Turkayamjal	10	DRCC, WTC	0.5	
92	Adibatla	9	DRCC, WTC	9	
93	Amangal	10	DRCC, WTC	1.7	
94	Badangpet	30	DRCC, WTC	24	
95	BandlagudaJagir	35	DRCC, WTC	19.25	
96	Ibrahimpatnam	9	DRCC, WTC	9	
97	Manikonda	35	DRCC, WTC	9.8	
98	Meerpet	60	DRCC, WTC	15	
99	PeddaAmberpet	27	DRCC, WTC	27	
100	Shamshabad	25	DRCC, WTC	5	
101	Shankarpally	15	DRCC, WTC	6	
102	Thukkuguda	9	DRCC, WTC	1.35	
103	Ameenpur	29	DRCC,	13.05	

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
			WTC		
104	Andolejogipet	11	DRCC, WTC	9.35	
105	Bollaram	25	DRCC, WTC	0	
106	Narayankhed	11	DRCC, WTC	0.55	
107	Sadasivpet	21	DRCC, WTC	18.9	
108	Sangareddy	49	DRCC, WTC	14.7	
109	Tellapur	8	DRCC, WTC	6.4	
110	Zaheerabad	55	DRCC, WTC	0	
111	Gajwel	11	DRCC, WTC	11	
112	Siddipet	47	DRCC, WTC	45.12	
113	Cherial	14	DRCC, WTC	7.7	
114	Dubbaka	9	DRCC, WTC	0.45	
115	Husnabad	12	DRCC, WTC	3.12	
116	Kodada	32	DRCC, WTC	29.12	
117	Suryapet	65	DRCC, WTC	35.75	
118	Huzurnagar	21	DRCC, WTC	2.94	
119	Neredcherla	6	DRCC, WTC	0.42	
120	Tirumalagiri	8	DRCC, WTC	5.2	
121	Vikarabad	30	DRCC, WTC	13.5	NA
122	Kodangal	5	DRCC, WTC	2.45	Tenders Called for MSW processing, Completion Timeline:1 year
123	Parigi	10	DRCC, WTC	2	
124	Tandur	40	DRCC, WTC	22	
125	Wanaparthy	32	DRCC, WTC	10.88	
126	Amarchinta	6	DRCC, WTC	0.48	
127	Atmakur	12	DRCC, WTC	1.08	
128	Kothakota	14	DRCC, WTC	0.84	
129	Pebbair	14	DRCC, WTC	2.8	

S.No.	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
130	Narsampet	20	DRCC, WTC	3.6	Tender yet to be called
131	Parakala	13	DRCC, WTC	4.16	
132	Wardhannapet	8	DRCC, WTC	1.6	
133	Warangal	404	DRCC, WTC	242.4	
134	Bhongir	33	DRCC, WTC	31.68	Work under progress for MSW processing, Completion Timeline:9 Months
135	Alair	8	DRCC, WTC	0.4	
136	Choutuppal	22	DRCC, WTC	1.54	
137	Mothkur	14	DRCC, WTC	1.12	
138	Pochampally	14	DRCC, WTC	1.26	
139	Yadagirigutta	12	DRCC, WTC	0.96	
140	Kothur	6	DRCC, WTC	3.3	Tender yet to be called
		4311		1870.26	

Annex-VI

Details of the ULBs in PRS and the Solid Waste Management

River Stretch	Name of ULB	Total quantity of waste generated in ULB (in Tonnes/Day)	Total quantity of waste Processed (in Tonnes/Day)
Musi	Miryalaguda	50	35
Manjeera-nakkavagu	-		0
Maneru (P-III) (Karimnagar LMD to Somanpalli)	Huzurabad	18	10.9
	Jammikunta	28	5
	Parakala	13	0.9
	Bhupalpally	13	4
	Sulthanabad	9	1
	Kothapalli	9	6.5
	Karimnagar	95	50
Karakavagu (P-III)	Palwancha	38	13.7
Kinnerasani (P-IV)			
Godavari (P-IV)(Basar to	Mancherial	21	19

River Stretch	Name of ULB	Total quantity of waste generated in ULB (in Tonnes/Day)	Total quantity of waste Processed (in Tonnes/Day)
Bhadrachalam)	Ramagundam	115	25.7
	Dharmapuri	9	5.5
	Jagityal	50	22
	Korutla	38	17.6
	Metpalli	29	10
	Manuguru	14	2.1
	Bellampally	25	3
	Chennur	12	7.5
	Kyathanpally	9	2.85
	Luxettipet	12	1.4
	Manadamarri	21	24
	Naspur	33	6
	Khanapur	6	1.1
	Nirmal	66	3.2
	Armur	30	8.4
	Manthani	14	17
	Bhainsa	24	2.3
Krishna (P-V) (Thangadi to Wadapally)	Gadwal	18	4
	Alampur	6	1.1
	Ieeja	12	0.9
	Kollapur	8	20.4
	Makthal	11	11
	Total	**856**	**343.05**

Annex-VII

Details of Legacy dumpsites in the Polluted River Stretches witin 1 KM Buffer

River Stretch	Name of ULB	Area	No.
Musi	Miryalguda	6	1
Manjeera-nakkavagu	-		
Maneru (P-III) (Karimnagar LMD to Somarpalli)	Huzurabad	4	1
	Jammikunta	2.16	1
	Parakala	3	1
	Bhupalpally	3	1
	Sulthanabad	0.2	1
	Kothapally	5.2	1
	Karimnagar	7.5	0
Karakavagu (P-III)	Palwancha	3	1
Kinnerasani (P-IV)			
Godavari (P-IV) (Basar to Bhadrachalam)	Mancherial	21.07	1
	Ramagundam	10	1
	Dharmapuri	3	1
	Jagitial	14	2
	Korutla	5.05	1
	Metpally	10	1
	Manuguru	6	1
	Bellampally	10	1
	Chennur	10	1
	Kyathanpally	7	1
	Luxettipet	1.2	1
	Mandamarri	5	1
	Naspur	10	1
	Khanapur	5.51	2
	Nirmal	13.22	1
	Armoor	11	1
	Manthani	1	1
	Bhainsa	15.2	2
Krishna (P-V) (Thangadi to Wadapally)	Gadwal	5.19	1
	Alampur	2	1
	Ieeja	4	1
	Kollapur	5	1
	Makthal	4	1
	Total	**212.5**	**34**

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

Details of the legacy dumpsites where Bio-mining works taken up as per CPCB Guidelines.

S. No	Name of city	Dumpsite Location	Quantity of waste at dumpsite (T)
1.	Armoor	Near Issapally Village, Armoor	452235
2.	Bellampally	Kannala Basthi	51100
3.	Bhainsa	Kunchiwali Pahad	31299
4.	Bhupalpally	Kasimpally	25182.08
5.	Chennur	Near Buddharam Road	12034.05

S. No	Name of city	Dumpsite Location	Quantity of waste at dumpsite (T)
6.	Khanapur	Gangaipet At Maskapur Gp	58254
7.	Kyathanpally	Mandamarri	24528
8.	Luxettipet	Godhavari River Near Gangamma Thalli Temple	19162.5
9.	Mancherial	Vempally Village (Land Allotted But Not Handed Over)	89936
10.	Mandamarri	Chethlapur	42249.48
11.	Manthani	Near Madhura Pochamma Temple (Temporary)	8942.5
12.	Manuguru	Annaram	24528
13.	Naspur	Mupidi Pochamma Temple	58254
14.	Nirmal	Edulapuram Shivar	122640
15.	Palwancha	Srinivasa Colony	81760
16.	Ramagundam	Jallaram	293825
17.	Sulthanabad	Yadav Nagar Near Railway Track	51100

Annexure-VIII

Water Quality of Rivers – October and November, 2021 results are placed in the following pages in landscape

Annexure-IX

Ground Water Quality – separate attachment

Annexure-X

Good Irrigation practices being adopted by the State

Monthly Progress Report by States / UTs in the matter of Hon'ble NGT in O.A. No.673/2018 Dt.06.12.2019.

Status of adopting Good Irrigation Practices:

The Government of Telangana is adopting different Irrigation Practices for improving crop yield. The Government of Telangana is adopting surface Irrigation, Sprinkler Irrigation and Lift Irrigation based on the different type of soils, claimants, crops and resources

The Government of Telangana state has taken up the massive programme of restoring minor irrigation sources under the name "Mission Kakatiya" (mana ooru - mana cheruvu) in a decentralized manner through community involvement. The Government is aiming to complete the restoration of all the tanks in phased manner.

The program was launched on 12-03-2015 by our Hon'ble Chief Minister Sri Kalvakuntla Chandrashekar Rao. So far restoration of 27625 no. of water bodies with a cost of Rs.9795.39 Crores were taken up in different phases for restoration of ayacut of 21.39 Lakhs Acres out of which 21436 tanks are restored with an expenditure of Rs. 5160.00 Crores restoring an ayacut of 15.05 Lakh acres.

The main works taken up are,

1) Strengthening of Bunds and Repairs to Sluices and Weirs.
2) Restoration of Irrigation Channels
3) Repairs to Cross Masonry and Cross Drainage works.
4) Restoration of feeder Channels
5) Desilting.

Further, Government vide G.O. Ms. No. 8 Irrigation & CAD (M.I) Dept., dt: 08.03.2019 has accorded administrative approval for an estimated cost of Rs.3825 Crores for construction of 1200 Nos of check dams on 4th order to 8th order streams in the command areas of Major & Medium Irrigation Projects. It is also proposed to complete the construction of check dams within two years in phased manner.

As on date, 638 no. of Check dams were technically sanctioned for an amount of Rs.2906.26 crores and works are in progress.

Annexure-XI

Rain Water Harvesting Structures in ULBs

Sl.No.	Name of the District	Name of the Municipality / Municipal Corporation	Total No. of RWH
1	2	3	4
1	Jangaon	Jangaon	100
	Jangaon Total		**100**
2	Warangal Urban	Warangal	380
	Warangal Urban Total		**380**
3	Warangal Rural	Parkal	7
4	Warangal Rural	Narsampet	17
5	Warangal Rural	Wardhannapet	6
	Warangal Rural Total		**30**
6	Mahabubabad	Mahabubabad	5
7	Mahabubabad	Dornakal	133
8	Mahabubabad	Maripeda	459
9	Mahabubabad	Thorrur	7
	Mahabubabad Total		**604**
10	Jayashankar	Bhupalpally	7
	Jayashankar Total		**7**
11	Karimnagar	Karimnagar Corpn.	689
12	Karimnagar	Jammikunta	46
13	Karimnagar	Huzurabad	83
14	Karimnagar	Choppandandi	575
15	Karimnagar	Kothapally	3407
	Karimnagar Total		**4800**
16	Jagityal	Jagityal	792
17	Jagityal	Korutla	288
18	Jagityal	Metpalli	25
19	Jagityal	Raikal	4680
20	Jagityal	Dharmapuri	25
	Jagityal Total		**5810**
21	Rajanna-Sircilla	Vemulavada	379
22	Rajanna-Sircilla	Sircilla	318
	Rajanna-Sircilla Total		**697**
23	Peddapalli	Ramagundam Corpn.	350
24	Peddapalli	Peddapalli	156
25	Peddapalli	Manthani	10
26	Peddapalli	Sulthanabad	56
	Peddapalli Total		**572**
27	Khammam	Khammam Corpn.	42
28	Khammam	Sattupalli	5
29	Khammam	Madhira	4
30	Khammam	Wyra	9
	Khammam Total		**60**
31	Bhadradri (Kothagudem)	Kothagudem	7
32	Bhadradri (Kothagudem)	Yellandu	21
33	Bhadradri (Kothagudem)	Manuguru	6
34	Bhadradri (Kothagudem)	Palvancha	40
	Bhadradri (Kothagudem) Total		**74**
35	Adilabad	Adilabad	189
	Adilabad Total		**189**
36	Nirmal	Nirmal	51
37	Nirmal	Bhainsa	34

Sl.No.	Name of the District	Name of the Municipality	Total No. of
38	Nirmal	Khanapur	4
	Nirmal Total		**89**
39	Komaram Bheem	Kagaznagar	11
	Komaram Bheem Total		**11**
40	Mancherial	Mancherial	59
41	Mancherial	Bellampally	25
42	Mancherial	Naspur	9
43	Mancherial	Chennur	8
44	Mancherial	Kyathanpally	382
45	Mancherial	Luxettipet	192
46	Mancherial	Mandamarri	36
	Mancherial Total		**711**
47	Ranga Reddy	Pedda Amberpet	52
48	Ranga Reddy	Badangpet Corpn.	1507
49	Ranga Reddy	Ibrahimpatnam	93
50	Ranga Reddy	Jalpally	97
51	Ranga Reddy	Meerpet Corpn.	589
52	Ranga Reddy	Shadnagar	89
53	Ranga Reddy	Shamshabad	
54	Ranga Reddy	Turkayamjal	33
55	Ranga Reddy	Manikonda	177
56	Ranga Reddy	Narsingi	53
57	Ranga Reddy	Bandlaguda jagir Corpn.	102
58	Ranga Reddy	Adibatla	299
59	Ranga Reddy	Shankarpaliy	25
60	Ranga Reddy	Thukkuguda	559
61	Ranga Reddy	Amangal	19
62	Ranga Reddy	Kothur	42
	Ranga Reddy Total		**3736**
63	Vikarabad	Tandur	232
64	Vikarabad	Vikarabad	211
65	Vikarabad	Parigi	127
66	Vikarabad	Kodangal	81
	Vikarabad Total		**651**
67	Medchal-Ma1kajgiri	Medchal	137
68	Medchal-Ma1kajgiri	Boduppal Corpn.	220
69	Medchal-Ma1kajgiri	Peerzadiguda Corpn.	356
70	Medchal-Ma1kajgiri	Jawaharnagar Corpn.	64
71	Medchal-Ma1kajgiri	Dhammaiguda	77
72	Medchal-Ma1kajgiri	Nagaram	38
73	Medchal-Ma1kajgiri	pocharam	45
74	Medchal-Ma1kajgiri	Ghatkesar	19
75	Medchal-Ma1kajgiri	Gundlapochampally	54
76	Medchal-Ma1kajgiri	Thumkunta	51
77	Medchal-Ma1kajgiri	Nizampet Corpn.	1710
78	Medchal-Ma1kajgiri	Kompally	1284
79	Medchal-Ma1kajgiri	Dundigal	213
	Medchal-Ma1kajgiri Total		**4268**
80	Nizamabad	Nizamabad Corpn.	223
81	Nizamabad	Bodhan	160
82	Nizamabad	Armur	217
83	Nizamabad	Bheemgal	13
	Nizamabad Total		**613**
84	Kamareddy	Kamareddy	73

Sl.No.	Name of the District	Name of the Municipality	Total No. of
85	Kamareddy	Banswada	83
86	Kamareddy	Yellareddy	6
	Kamareddy Total		**162**
87	Yadadri Bhuvanagiri	Bhongir	32
88	Yadadri Bhuvanagiri	Mothkur	5
89	Yadadri Bhuvanagiri	Choutuppal	167
90	Yadadri Bhuvanagiri	Alair	5
91	Yadadri Bhuvanagiri	Pochampally	11
92	Yadadri Bhuvanagiri	Yadagirigutta	13
	Yadadri Bhuvanagiri Total		**233**
93	Suryapet	Suryapet	316
94	Suryapet	Kodada	32
95	Suryapet	Huzurnagar	2
96	Suryapet	Neredcherla.	0
97	Suryapet	Tirumalagiri	0
	Suryapet Total		**350**
98	Nalgonda	Devarakonda	12
99	Nalgonda	Nalgonda	38
100	Nalgonda	Miryalguda	41
101	Nalgonda	Nandikonda	0
102	Nalgonda	Chityal	35
103	Nalgonda	Haliya	254
104	Nalgonda	Chandur	32
105	Nalgonda	Nakrekal	5
	Nalgonda Total		**417**
106	Siddipet	Siddipet	70
107	Siddipet	Gajwel	95
108	Siddipet	Dubbaka	5
109	Siddipet	Husnabad	135
110	Siddipet	Cherial	104
	Siddipet Total		**409**
111	Sangareddy	Sangareddy	31
112	Sangareddy	Sadasivapet	28
113	Sangareddy	Zaheerabad	39
114	Sangareddy	Andol-Jogipet	8
115	Sangareddy	Narayankhed	25
116	Sangareddy	Bollaram	364
117	Sangareddy	Teilapur	1678
118	Sangareddy	Ameenpur	
	Sangareddy Total		**2173**
119	Medak	Medak	6
120	Medak	Thoopran	5
121	Medak	Ramayampet	2
122	Medak	Narsapur	5
	Medak Total		**18**
123	Mahabubnagar	Mahaboobnagar	133
124	Mahabubnagar	Bhoothpur	33
125	Mahabubnagar	Jadcherla (Badepally)	44
	Mahabubnagar Total		**210**
126	Narayanpet	Narayanapet	131
127	Narayanpet	Makthal	73
128	Narayanpet	Kosgi	42
	Narayanpet Total		**246**
129	Jogulamba Gadwal	Gadwal	6

Sl.No.	Name of the District	Name of the Municipality	Total No. of
130	Jogulamba Gadwal	leeja	45
131	Jogulamba Gadwal	Waddepalle	6
132	Jogulamba Gadwal	Alampur	6
	Jogulamba Gadwal Total		**63**
133	Wanaparthy	Wanaparthy	10
134	Wanaparthy	Kothakota	3
135	Wanaparthy	Pebbair	3
136	Wanaparthy	Atmakur	2
137	Wanaparthy	Amarchinta	1
	Wanaparthy Total		**19**
138	Nagarkurnool	Nagarkurnool	15
139	Nagarkurnool	Kollapur	68
140	Nagarkurnool	Kalwakurthy	18
141	Nagarkurnool	Achampet	8
	Nagarkurnool Total		**109**
GRAND TOTAL			**27811**

Annexure-XII – RWH structures in Rural areas

Rain Water Harvesting Works Status as on Dt.: 31052021 **Cumulative up to 2020-21**

S. No	Name of the District	Bore well recharge structure				Check dam				Percolation Tank				Continuous contour trenches				Staggered Trenches				**Total**			
		No of works sanctioned	No of works Inprogress	No of works completed	Expenditure	No of works sanctioned	No of works Inprogress	No of works completed	Expenditure	No of works sanctioned	No of works Inprogress	No of works completed	Expenditure	No of works sanctioned	No of works Inprogress	No of works completed	Expenditure	No of works sanctioned	No of works Inprogress	No of works completed	Expenditure	**No of works sanctioned**	**No of works Inprogress**	**No of works completed**	**Expenditure**
1	Adilabad	456	36	10	2.29	161	0	161	198.61	811	0	811	241.76	2386	869	1000	2917.06	87	9	60	192.63	3901	914	2042	3552.35
2	Badradri Kothagudem	14	3	5	1.16	84	0	84	76.68	2994	0	2994	1979.95	52	2	12	6.32	5	0	0	0	3149	5	3095	2064.11
3	Jagityal	82	27	6	0.97	26	0	26	29.15	31	0	31	20.47	1122	188	773	2208.29	38	21	0	0	1299	236	836	2258.88
4	Jangaon	138	26	4	0.8	508	0	508	693.15	184	0	184	248.25	473	93	297	956.01	7	1	2	4.15	1310	120	995	1902.36
5	Jayashankar Bhupalpally	63	0	0	0	734	0	734	1291.4	68	0	68	50.59	14	0	7	4.02	4	0	0	0	883	0	809	1346.01
6	Jogulamba Gadwal	48	1	1	0.25	3	0	3	3.46	503	0	503	268.38	21	6	6	5.63	27	9	1	0.66	602	16	514	278.38

7	Kamareddy	525	258	38	7.88	262	0	261	470.83	717	0	717	846.45	1302	481	389	1866.14	2	0	0	0	2808	739	1405	3191.3
8	Karimnagar	89	18	4	0.94	18	0	18	13.72	9	0	9	6.7	276	23	221	227.23	6	2	0	0	398	43	252	248.59
9	Khammam	1251	61	20	4.06	55	0	55	65.09	1904	0	1904	1436.72	251	48	91	258.8	81	30	14	78.08	3542	139	2084	1842.75
10	Kumarambheem Asifabad					79	0	79	79	12214	0	12213	4820.85	1264	253	735	884.48	3	0	0	0	13560	253	13027	5784.33
11	Mahabubabad	3	0	0	0	647	0	647	944.18	424	0	424	214.45	833	152	523	676.76					1907	152	1594	1835.39
12	Mahabubnagar	35	1	1	0.21	122	0	122	128.08	339	0	339	201.31	142	54	37	109.98	441	186	116	974.24	1079	241	615	1413.82
13	Mancheriyal					70	0	70	67.32	2926	0	2926	1497.09	49	5	22	84.65	66	29	13	131	3111	34	3031	1780.06
14	Medak	112	24	9	2.13	7	1	6	10.47	129	0	129	102.17	26	11	1	0.5	260	80	5	5.47	534	116	150	120.74
15	Medchal					23	0	23	0.83	1	0	1	0.07	0	0	0	0	2	1	0	0	26	1	24	0.9
16	Mulugu					123	0	123	212.82	588	0	588	871.02	34	4	16	74.73					745	4	727	1158.57
17	Nagarkurnool	171	4	1	0.26	97	8	89	66.39	1383	1	1379	811.51	181	24	71	336.38	25	5	3	12.87	1857	42	1543	1227.41
18	Nalgonda	494	114	62	12.85	255	0	253	242.04	463	0	463	278.26	157	49	66	212.09	120	37	33	84.39	1489	200	877	829.63

19	Narayanpet	16	0	0	0	101	0	101	64.8	548	3	544	197.75	89	38	10	58.28	91	30	16	55.59	845	71	671	376.42
20	Nirmal	257	11	18	1.76	313	0	313	364.41	50	0	49	39.45	337	74	147	352.8	200	85	53	404.36	1157	170	580	1162.78
21	Nizamabad	95	26	1	0.25	65	0	65	81.31	220	0	220	242.32	2013	760	671	2136.96	20	4	1	1.41	2413	790	958	2462.25
22	Peddapalli	1	0	0	0	201	0	201	291.86	17	0	17	13.88	310	19	252	602.21	2	0	0	0	531	19	470	907.95
23	Rajanna Sirsilla	448	98	8	1.55	160	0	159	32.62	47	0	47	24.46	283	4	246	605.65	2	0	1	3.3	940	102	461	667.58
24	Rangareddy	84	2	10	2.07	91	1	90	19.56	281	0	281	184.18	394	87	223	723.3	137	37	60	196.85	987	127	664	1125.96
25	Sangareddy	278	2	34	6.87	389	0	389	566.74	332	0	332	175.13	568	216	168	742.72	3	0	1	3.51	1570	218	924	1494.97
26	Siddipet	53	17	0	0	97	0	97	76.36	207	0	207	182.35	249	15	209	369.35	5	2	1	1.05	611	34	514	629.11
27	Suryapet					32	0	32	10.29	74	0	74	63.67	22	1	13	12.61	20	3	3	21.41	148	4	122	107.98
28	Vikarabad	78	1	1	0.24	107	0	107	43.08	742	0	742	388.02	351	141	100	382.97	170	63	46	143.57	1448	205	996	957.88
29	Wanaparthy	306	0	0	0	95	0	95	137.42	406	0	406	232.48	99	28	25	114.99	183	77	19	103.71	1089	105	545	588.6
30	Warangal (Urban)	10	5	3	0.57	31	0	31	34.01	9	0	9	5.22	211	62	113	373.47					261	67	156	413.3
31	Waranga	3	1	0	0	331	0	331	473.92	43	0	42	44.1	207	18	139	179.88	3	1	0	0	587	20	512	697.9

	l Rural																							
32	Yadadri Bhuvanagiri	93	9	1	0.19	122	0	122	153.32	202	0	202	158.06	210	54	74	176.68	23	5	8	16.52	650	68	407	504.77
	Total	**5203**	**745**	**237**	**47.3**	**5409**	**10**	**5395**	**6942.95**	**28866**	**4**	**28855**	**15847.07**	**13926**	**3779**	**6657**	**17660.94**	**2033**	**717**	**456**	**2434.77**	**55437**	**5255**	**41600**	**42933.03**

Annexure-VI

Sewage and Solid waste management in Gram Panchayats along 15 KM distance of Polluted River Stretches

Details	Bhadradri Kothagudem			Jagtial	Jayashankar Bhupalpally		Jogulamba Gadwal	Karimnagar	Mancherial	Medak	Mulugu	Nagarkurnool	Nalgonda		Narayanpet	Nirmal
	Godavari	Kinnerasani	Karakavagu	Godavari	Godavari	Maneru	Krishna	Maneru	Godavari	Manjeera	Godavari	Krishna	Krishna	Musi	Krishna	Godavari
Number of GPs	107	40	17	124	36	23	71	117	146	135	80	14	91	93	53	152
Total Population	256911	41589	16987	222216	53934	35829	12057	236938	228984	193941	143157	26654	130759	213737	75956	247616
Solid Waste	320.089	12.16	4.97		0	0		27.57	Yes		0	27436			10.438	
Total waste generation-TPD	318.829	11.80	4.82	13.24 Tons	2.674	1.274	27.1	25.31	35.00	13485.25 Kgs	17.538	12500	6.5 Tons	7.2 Tons	1.591	16.14
Total Waste Collected - TPD	317.92	11.80	4.82	12.96 Tons	2.674	1.274	25.5	25.59	41.00	13485.25 Kgs	17.538	15000	5.9 Tons	6.7 Tons	1.283	16.14
SW Processing facilitiescapacity	114.7	10.02	4.09	12.39 Tons	26.66	5.82	25.5	25.45	32.00	874.8 Cubic Meters	Supported by ITC for recycling	665	9 Tons	9.5 Tons	1.4	11259.5
Gap in processing	26.6	2.08	0.85	-	0	0	1.6	5.49	0	2 Days	-	0	0	0	0.2	2-3 days
Total Plastic wasteGenerated TPD	254.75	1.83	0.75	0.40 Tons	0.094	0.184	0.78	30.52	86.04	6742.625 Kgs	6.5765	564	0.7 Tons	0.8 Tons	92.053	77513.71 Kg

Expenditure incurred inRs in Crores on SWM	0.6078	0.01	0.00	13.51 Cr	0.8198	0.3998	1.69	33.25	3.00	15.363 Crores	2.00	2283132	103.32 Lakhs	96.62 Lakhs	20.794	3.34 crores
Sewage	1580.85	687.64	280.87	0	0	0	0	38.25	0	0	0	14936	0	0	0	0
Total sewagegeneration- K. Lit per Day	1580.85	687.64	280.87	2409.56 KL	14701.2	1.2	3627	37.63	2634509	1.07882 Crore Liters	5726.28	634	180 KL	190 KL	59	161.49 Ltrs
Treatment systems	Soak Pits, Soaking & Drainage	Soak Pits	Soak Pits	Soak Pits & Community Soak Pits	1272	978	Soak Pits	Soakpits and Drainage	Individucal & Communinty Soak Pits,	5950 Individual Magic Litres	Soak pits	Soak pits 695	3544 Magic Soak pits completed & 7034 Magic Soak pits in progress	5798 Magic Soak pits completed & 10568 Magic Soak pits in progress	Soak pits	Soak Pits
Expenditure incurred in Rs in Crores in Sewage management	0.8248	0.51	0.21	12.98 crores	1.7369	0.3269	2.98	21.2	8.00	2.5835 Crores	10.41	0.22	87.18 Lakhs	159.66 Lakhs	90.42	3.27 crores

Proposed activities for the year 2021-22 and budget	No .of Soak pits 3777 , Budget 22.28 Cr	No .of Soak pits 8844 , Budget 5 .22.80	No .of Soak pits 1835 , Budget 1.08 Cr	Construction of 9679 Soak Pits & 193 Community Soak Pits taken up shall be completed in the year 2021-22 cost 54.77 crores	1. For Transportation of House to house Dry and wet wastage Collection & Preparation of compost Rs.0.64 Cr 2. Collection of Plastic waste and disposal Rs.0.05 Cr 3. (i) Desilting of drain's Completed-204, Required - 48. (ii) Construction of CC drains: Complet	1. For Transportation of House to house Dry and wet wastage Collection & Preparation of compost Rs.0.64 Cr 2. Collection of Plastic waste and disposal Rs.0.05 Cr 3. (i) Desilting of drain's Completed-204, Required - 48. (ii) Construction of CC drains: Complet	Propose for construction of Soak pits 2250 at all with in estimate Cost 1.2 Cores	Soak pits 14444 Estimated cost Rs.28.01 Cr	No.of Soak pits 39679 Estimated cost Rs.18.33 Cr	Community soak pits - 650 Individual soak pits - 1080 Cost 1.29 Crores	Soak pits 18326 Rs. 8.79 Cr	Soak pits 948 Rs. Rs.0.38 Cr	1. 7034 soak pits will be completed in the year 2021-22 Rs.3.26 Cr 2. Community Soak pits will be constructed in the necessary GPs	1. 10568 soak pits will be completed in the year 2021-22 Rs.4.90 Cr 2. Community Soak pits will be constructed in the necessary GPs	Rs.46 Lacks 940 Soakpits Proposed Estimated Cost Rs. 0.46 Cr	Soak pits 4275 Rs. 1.79 crores crores

					ed 232, Inprogress - 28, Required - 301. (iii) Magis Soak Pit's Completed - 1960, Inprogress - 5230, Required - 6155 Rs. 5.05 Cr	ed 232, Inprogress - 28, Required - 301. (iii) Magis Soak Pit's Completed - 1960, Inprogress - 5230, Required - 6155 Rs. 1.28 Cr											

Sewage and Solid waste management in Gram Panchayats along 15 KM distance from Krishna River

ANNEXURE I

Details	Nizamabad		Peddapalli		Rangareddy	Sangareddy		Suryapet		Wanaparthy	Yadadri Bhongiri
	Godawari	Manjeera	Godawari	Maneru`	Musi	Manjeera	Nakkavagu	Krishna	Musi	Krishna	Musi
Number of GPs	80	59	63	47	6	165	55	61	66	81	163
Total Population	175427	97243	81658	82329	14005	229506	126296	113821	94479	131854	270877
Solid Waste											
Total waste generation-TPD	5.7 Tons	4.1 Tons	13.2258	12.42	0.915 Tons	3.2 Tons	1.8 Tons	4.98 Tons	4.7 Tons	28.8	17665.75 Kgs
Total Waste Collected -TPD	5.2 Tons	3.9 Tons	5.21	4.35	0.915 Tons	2.88	1.62 Tons	4.25 Tons	4.16 Tons	27.3	17665.75 Kgs
SW Processing facilitiescapacity	9 Tons	8.5 Tons	31500		3960 Kgs	6.4	3.6	8.00 Tons	7.5 Tons	27.3	52160 Cubic feets
Gap in processing	0	0	0		0	0	0	0	0	1.5	2 Days
Total Plastic wasteGenerated TPD	0.5 Tons	0.4 Tons	86.321	79.72	0.233 Tons	0.96	0.54 Tons	0.4 Tons	0.4 Tons	0.86 Tons	8479.56 Kgs
Expenditure incurred inRs in Crores on SWM	1.99 Cr	1.46 Cr	2.41	1.29	1225243	7.04	3.96 Crs	2.47 Cr	2.32 Cr	1.94 Cr	16.0392 Crores
Sewage	0	0	0	0	0	0	-	0	0	0	0
Total sewagegeneration- K. Lit per Day	185 KL	125 KL	776618	897251	721121 Ltrs	153.6 KL	86.4 KLs	162 KL	140 KL	4087	176.65750 Lakhs Ltrs

Treatment systems	(8706) Magic Soak Pits Completed & (1052) Magic Soak Pits inprogress	(4350) Magic Soak Pits Completed and (180) Magic Soak Pits inprogress	Soak Pits	Soak pits	Soak Pits & Ugd	Soak Pits	Soak Pits	For Sewage treatment 533 individual and community soak pits are constructed and treating the sewage	For Sewage treatment 3017 individual and community soak pits are constructed and treating the sewage	Soak Pits 3832 Completed & 1077 under progress	9938
Expenditure incurred in Rs in Crores in Sewage management	3.65 Cr	1.82 Cr	4.39	2.69	2111524	1.81 Crs	1.01 Crs	7.44	56.62	1.59	4.1975 Crores
Proposed activities for the year 2021-22 and budget	1. (1052) Soak Pits will be completed in the year 2021-22. Rs.0.47 Cr 2. Community Soak Pits will be constructed in the necessary GPs	1. (180) Soak Pits will be completed in the year 2021-22. Rs.0.08 Cr 2. Community Soak Pits will be constructed in the necessary GPs	Sanitation (SWM+IWM) Liquid waste works 2733 Estimated Cost Rs. 2.64 Cr, Solid Waste activities-7, Cost Rs.1.51 Cr	Liquid Waste works 2520 cost Rs. 1.35 Cr solid waste Activities -7, Cost Rs.0.96 Cr	Soakpits 3763 , Rs.0.38 Cr	1. Indiidual Community Soak Pits are being constructed in the Gram Panchayats. 3917 Soak Pits were sanctioned out of which 2118 Soak Pits have been completed. The remaianing balance	1. Indiidual Community Soak Pits are being constructed In the Gram Panchayats. 2203 Soak Pits were sanctioned out of which 1169 Soak Pits have been completed. the remaining balance	Remaining 520 Soak Pits will be completed in the year 2021-22 under MGNREGS Scheme. Budget Rs.0.21 Cr	Remaining 2669 Soak Pits will be completed in the year 2021-22 under MGNREGS Scheme. Budget Rs.1.10 crores	Propose for construction of soak Pits at all with in estimate Cost 2.52Crores. Soak pits 5428	1.6212 Crores community soak pits - 1059, Segregation sheds 163 budget 1.62 crores

						1799 will be completed in the financial year. Rs.1.34 Cr budget available. 2.In these Gram Panchayts, the open drains and undergroun d drains are also being taken-up Drain water is connected to coomunity soak pits. But, not allowing to flow into Manjeera River. 3.Rs. 7.04 Crores budget is allocated from 15th F.C/SFC/G.P Funds.	1034 will be completed in this finanical year .Rs. 0.75 Cr budget available. 2.In these Gram Panchayts, the open drains and undergroun d drains are also being taken-up Drain water is connected to coomunity soak pits. But, not allowing to flow into Nakkavagu. 3.Rs. 3.96 Crores budget is allocated from 15th F.C/SFC/G.P Funds.				

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S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	River Godavari - Main stream						
1	River Godavari at Basara	6.6	7.31	680	2.1	6	17
2	Ali sagar Reservoir	6.5	7.34	337	2.1	4	14
3	Pochara Water Falls, Adilabad	6.5	7.02	687	2.1	2	17
4	River Godavari at mancherial, Near Rail Way Bridge B/C of Rallavagu	5.8	8.00	394	2.1	<1.8	37
5	River Godavari at Mancherial	5.8	7.90	396	2.1	<1.8	31
6	Outlet of ash pond effluents of M/s.NTPC, Ramagundam	4.0	10.9	1183	2.2	<1.8	40
7	D/s of River Godavari at Ramagundam near FCI intake well	5.0	7.10	410	2.1	<1.8	33
8	River Godavari at Godavarikhani near bathing ghat	5.0	7.20	406	2.2	<1.8	38
9	River Godavari at Ramagundam upstream near dam	5.5	7.90	390	2.1	<1.8	21
10	River Godavari d/s of Ramagundam at Manthani	5.2	8.00	406	2.1	<1.8	27

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
11	River godavari Kaleshwaram	5.6	7.40	443	2.1	6	210
12	U/s of River Godavari at Kamalapur (V) at M/s.AP Rayons Ltd., intake well	6.0	7.60	373	2.1	<1.8	27
13	D/s of River Godavari at Kamalapur (V) at M/s.AP Rayons Ltd., discharge point	5.9	7.44	376	2.2	<1.8	33
14	U/s of river Godavari at Bhadrachalam bathing ghat	5.4	7.20	340	2.2	<1.8	43
15	D/s of river Godavari at Bhadrachalam bathing ghat	5.4	7.10	336	2.2	2	70
16	River Godavari at Burgampahad	5.0	7.20	391	2.2	<1.8	33
	River Maneru / Manair						
17	Lower Maneru Dam, Karimnagar	5.8	7.5	376	2.1	<1.8	33
18	Maneru river D/S of municipal dump site, Karimnagar	2.1	7.60	1147	4.8	8	94
19	River Maneru at Ghattepalli (V) near Sulthanabad	4.2	7.20	626	2.1	8	110
20	Outlet of KTPP Ash Pond Joining Moranchavagu	4.0	8.00	890	2.1	4	94
21	River Maneru at Somanpally	5.8	7.5	520	2.1	2	63

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	River Manjeera						
22	Singoor Dam Reservoir,	6.7	7.27	496	2.1	2	13
23	River Manjeera at Raipally	6.3	7.35	529	2.2	4	20
24	Manjeera at Ganapathi sugars	6.5	7.22	512	2.2	6	26
25	U/s of River Manjeera at Gowdicherla before confluence with Nakkavagu	6.4	7.12	930	2.2	6	22
26	D/s of River Manjeera at Gowdicherla after confluence with Nakkavagu	6.6	7.03	1028	2.4	6	33
27	Nakka vagu at Bachugudem	2.8	7.01	1455	7.0	13	70
28	River Manjeera at Yedu Payala Temple	6.1	7.18	674	2.1	<1.8	12
	River Kinneresani						
29	Kinnerasani after confluence of KTPS ash pond effluents	5.0	8.47	475	2.1	<1.8	43
30	U/s of Karakavagu at Paloncha	4.9	7.5	657	2.1	<1.8	46
31	D/s of Karakavagu at Paloncha	4.6	7.2	590	2.1	<1.8	58

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	River Krishna						
32	River Krishna at Thangadi	6.0	8.34	756	2.1	4	170
33	River Krishna at Gadwal bridge	6.1	8.18	652	2.1	4	170
34	Jogulamba Temple, Gadwal	5.6	7.8	673	2.1	9	220
35	Nagarjuna Sagar Dam Spill way	6.4	7.29	667	2.2	2	20
36	Udaya Samudram balancing Reservoir,	6.2	7.33	743	2.1	4	21
37	Confluence of River krishna & River musi at at wadapally	6.3	7.45	1017	2.2	6	26
38	River Krishna at Mattepally, 500 mts. before bathing ghat	6.2	7.30	751	2.7	6	38
39	River Munneru at Thummala cheruvu/Madannapet	6.2	8.43	283	2.1	<1.8	12
40	Palair Reservoir, Khammam	5.8	8.43	548	2.1	<1.8	58
41	D/S of Munneru River, Prakash Nagar, Khammam	5.4	8.39	454	2.2	<1.8	63
	River Musi						

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
42	Musi sample at Bapughat sangam U/S of Musi	1.8	8.48	874	4.0	84	430
43	River Musi at Moosarambagh bridge, Hyderabad	0.6	7.97	885	6	79	430
44	River Musi at Nagole	0.3	7.48	1045	6.2	140	920
45	Outlet of Nalla Cheruvu, Peerajadiguda	0.3	7.4	1372	6.1	84	540
46	River Musi at Peerajadiguda	0.3	7.31	1033	6.2	93	430
47	D/s. of Musi at Pratapasingaram	0.3	7.39	1008	6	120	430
48	River Musi at Pillapalli	1.7	7.45	1066	4.0	70	430
49	River Musi sample at Rudravelly bridge	6.1	7.02	1254	5.0	6	110
50	River Musi at Valigonda bridge, Nalgonda dist	6.2	7.23	1273	3.3	2	70
51	River Musi at Solipet (Kasaniguda)	6.3	7.37	989	3.0	4	49

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	River Godavari - Main stream						
1	River Godavari at Basara	6.5	7.21	650	2.1	6	25
2	Ali sagar Reservoir	6.3	7.15	396	2.1	6	17
3	Pochara Water Falls, Adilabad	6.4	6.82	722	2.1	6	24
4	River Godavari at mancherial, Near Rail Way Bridge B/C of Rallavagu	5.6	7.84	497	2.1	<1.8	33
5	River Godavari at Mancherial	5.5	7.75	498	2.1	2	33
6	Outlet of ash pond effluents of M/s.NTPC, Ramagundam	3.8	10.80	1184	2.3	<1.8	33
7	D/s of River Godavari at Ramagundam near FCI intake well	4.9	8.11	509	2.1	<1.8	43
8	River Godavari at Godavarikhani near bathing ghat	5.0	7.66	498	2.1	2	43
9	River Godavari at Ramagundam upstream near dam	5.4	7.75	497	2.1	<1.8	27

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
10	River Godavari d/s of Ramagundam at Manthani	5.0	7.61	495	2.1	2	33
11	River godavari Kaleshwaram	5.8	7.94	344	2.1	2	180
12	U/s of River Godavari at Kamalapur (V) at M/s.AP Rayons Ltd., intake well	5.9	8.22	339	2.1	<1.8	33
13	D/s of River Godavari at Kamalapur (V) at M/s.AP Rayons Ltd., discharge point	5.8	8.08	336	2.1	<1.8	37
14	U/s of river Godavari at Bhadrachalam bathing ghat	5.2	7.84	342	2.1	<1.8	33
15	D/s of river Godavari at Bhadrachalam bathing ghat	5.2	7.71	351	2.1	4	43
16	River Godavari at Burgampahad	4.9	7.07	391	2.1	2	27
	River Maneru / Manair						
17	Lower Maneru Dam, Karimnagar	5.7	7.85	382	2.1	<1.8	33
18	Maneru river D/S of municipal dump site, Karimnagar	1.5	7.56	1538	3.2	11	70
19	River Maneru at Ghattepalli (V) near Sulthanabad	4.0	8.44	707	2.1	9	84
20	Outlet of KTPP Ash Pond Joining Moranchavagu	3.8	8.03	822	2.5	2	120

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
21	River Maneru at Somanpally	5.5	8.49	616	2.1	2	79
	River Manjeera						
22	Singoor Dam Reservoir,	6.3	7.32	514	2.1	4	14
23	River Manjeera at Raipally	6.2	7.21	540	2.6	6	25
24	Manjeera at Ganapathi sugars	6.4	6.98	528	2.1	8	38
25	U/s of River Manjeera at Gowdicherla before confluence with Nakkavagu	6.3	7.04	722	2.3	7	31
26	D/s of River Manjeera at Gowdicherla after confluence with Nakkavagu	6.2	7.11	746	2.6	6	40
27	Nakka vagu at Bachugudem	2.6	6.93	1678	8	17	110
28	River Manjeera at Yedu Payala Temple	6.2	6.96	628	2.1	2	15
	River Kinneresani						
29	Kinnerasani after confluence of KTPS ash pond effluents	4.9	7.86	606	2.1	<1.8	33
30	U/s of Karakavagu at Paloncha	4.6	7.84	683	2.1	<1.8	33

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
31	D/s of Karakavagu at Paloncha	4.1	8.11	571	2.1	<1.8	40
	River Krishna						
32	River Krishna at Thangadi	5.9	7.77	889	2.1	4	220
33	River Krishna at Gadwal bridge	5.9	7.85	810	2.1	4	220
34	Jogulamba Temple, Gadwal	5.8	7.51	633	2.1	9	210
35	Nagarjuna Sagar Dam Spill way	6.3	7.25	630	2.6	4	21
36	Udaya Samudram balancing Reservoir,	6.3	7.12	674	2.3	6	31
37	Confluence of River Krishna & River Musi at at Wadapally	6.1	6.97	839	2.5	8	33
38	River Krishna at Mattepally, 500 mts. before bathing ghat	6.3	7.09	728	2.6	8	40
39	River Munneru at Thummala cheruvu/Madannapet	6.2	7.90	277	2.1	<1.8	24
40	Palair Reservoir, Khammam	6.1	8.10	499	2.1	<1.8	40
41	D/S of Munneru River, Prakash Nagar, Khammam	5.8	8.43	568	2.1	<1.8	46

S.no	Station name	DO (mg/L)	pH	Conductivity (mS/cm)	BOD (mg/L)	Fecal Coliform (MPN/100ml)	Total Coliform (MPN/100ml)
	River Musi						
42	Musi sample at Bapughat sangam U/S of Musi	0.3	7.70	1230	6.0	63	540
43	River Musi at Moosarambagh bridge, Hyderabad	0.3	8.21	1114	11	79	430
44	River Musi at Nagole	0.3	8.18	1209	9	110	540
45	Outlet of Nalla Cheruvu, Peerajadiguda	0.3	7.77	1410	8	84	430
46	River Musi at Peerajadiguda	0.3	7.95	1276	10	63	430
47	D/s. of Musi at Pratapasingaram	0.3	7.65	1229	7.2	84	430
48	River Musi at Pillapalli	1.2	7.49	1212	4.0	43	430
49	River Musi sample at Rudravelly bridge	5.8	7.28	1422	5.6	7	140
50	River Musi at Valigonda bridge, Nalgonda dist	6.1	7.24	1340	4.2	6	110
51	River Musi at Solipet (Kasaniguda)	6.2	7.17	1096	3.8	6	84

Ground water Quality during Pre Monsoon 2021

S NO	River	Priority	pH at 25 °C	Sp. Cond. at25° Cmic.sie/cm	TDS Calculated mg/lit.	CO_3 as $CaCO_3$ mg/lit.	HCO_3 as $CaCO_3$ mg/lit.	Chloride mg/lit.	Fluoride mg/lit.	NO3 mg/lit.	Sulphate mg/lit.	Sodium mg/lit.	Potassium mg/lit.	Calcium mg/lit.	Magneisum mg/lit.	T.H. as $CaCO_3$ mg/lit.	SAR
1	Musi	I	6.74	997	638	0	340	80	1.07	38	19	81	2	104	19	340	1.91
2	Musi	I	7.18	810	518	0	310	70	0.56	2	14	51	2	64	39	320	1.24
3	Musi	I	6.94	1373	879	0	420	150	0.68	25	29	122	10	88	49	420	2.59
4	Musi	I	7.22	1072	686	0	300	140	0.92	34	23	84	3	96	34	380	1.87
5	Musi	I	7.38	1050	672	0	340	110	3.68	4	9	110	2	40	44	280	2.86
6	Musi	I	7.68	713	456	0	290	40	0.64	4	16	52	14	40	34	240	1.46
7	Musi	I	7.10	1295	829	0	310	150	0.55	32	19	110	10	96	19	320	2.67
8	Musi	I	7.54	1122	718	0	240	180	0.40	5	29	153	7	48	19	200	4.70
9	Musi	I	7.15	1082	692	0	330	100	1.64	64	33	66	2	112	34	420	1.40
10	Musi	I	7.70	820	525	0	290	80	1.43	20	18	100	6	64	15	220	2.93
11	Musi	I	7.58	555	355	0	200	50	0.31	2	8	41	11	40	19	180	1.33
12	Musi	I	7.06	995	637	0	310	110	0.41	23	23	83	9	80	29	320	2.02
13	Musi	I	7.77	522	334.08	0	200	50	1.65	5	17	43	3	24	34.034	199.942	1.32217
14	Musi	I	7.79	612	391.68	0	170	60	0.76	51	15	42	2	24	38.896	219.934	1.23133

15	Musi	I	8.21	1536	983.04	0	380	250	1.07	15	44	135	7	64	82.654	499.86	2.62532
16	Musi	I	8.16	1230	787.2	0	260	160	0.61	153	36	117	13	40	68.068	379.885	2.60995
20	Musi	I	8.04	1842	1178.88	0	330	250	0.63	269	49	160	6	80	102.102	619.827	2.7942
21	Musi	I	7.66	490	313.6	0	190	40	2.53	7	9	40	2	24	29.172	179.951	1.29645
22	Musi	I	7.91	1466	938.24	0	380	170	1.18	94	42	121	3	56	87.516	499.852	2.35308
23	Musi	I	8.3	743	475.52	30	210	90	0.82	8	20	62	2	32	43.758	259.926	1.67201
24	Musi	I	8.01	1148	734.72	0	300	140	0.53	70	30	101	4	56	58.344	379.901	2.25298
25	Musi	I	8.09	1030	659.2	0	300	90	1.3	99	27	102	3	40	53.482	319.91	2.47947
26	Musi	I	8.07	1143	731.52	0	260	190	1.56	37	31	108	3	40	63.206	359.893	2.47519
27	Musi	I	8.19	1237	791.68	0	300	160	0.69	93	36	109	3	40	72.93	399.877	2.36993
28	Musi	I	8.16	1676	1072.64	0	440	210	1.38	79	47	154	5	56	92.378	519.844	2.93668
29	Musi	I	7.05	1271	813	0	210	180	1.67	176	26	95	3	144	19	440	1.97
30	Musi	I	7.78	1855	1187	0	610	270	1.42	2	27	404	3	8	29	140	14.84
31	Musi	I	8.22	1763	1128	0	480	220	1.27	31	34	330	1	16	29	160	11.34
33	Musi	I	7.20	925	592	0	440	30	1.64	12	5	75	4	72	34	320	1.82
34	Musi	I	7.71	843	540	0	300	70	1.29	26	13	99	3	56	19	220	2.90

35	Musi	I	7.78	542	347	0	170	80	0.56	14	7	48	17	48	15	180	1.56
36	Musi	I	7.02	2089	1337	0	210	560	0.64	59	29	58	4	256	68	920	0.82
38	Musi	I	7.27	901	577	0	170	130	1.03	136	22	75	7	96	19	320	1.83
40	Musi	I	7.59	1488	952	0	330	240	1.27	8	22	112	1	128	39	480	2.22
41	Musi	I	7.66	1130	723	0	290	170	0.55	1	7	113	2	72	29	300	2.84
42	Musi	I	6.98	1418	908	0	280	250	1.95	87	26	69	4	192	19	560	1.28
44	Musi	I	7.45	626	401	0	140	100	0.88	52	16	64	2	48	19	200	1.98
45	Musi	I	7.45	980	627	0	230	160	1.80	28	13	62	2	72	44	360	1.42
46	Musi	I	7.44	729	467	0	240	90	0.58	4	7	92	3	48	15	180	2.98
47	Musi	I	7.72	643	412	0	240	60	0.66	4	10	94	2	40	10	140	3.45
48	Musi	I	7.70	1019	652	0	300	120	1.44	24	12	95	3	56	39	300	2.38
49	Musi	I	7.10	1518	972	0	490	190	1.17	4	11	150	6	80	63	460	3.04
50	Musi	I	7.77	583	373	0	140	110	0.65	6	16	53	4	40	24	200	1.63
51	Musi	I	7.47	1135	726	0	240	250	1.05	3	3	172	3	64	15	220	5.05
52	Musi	I	7.06	1415	906	0	250	260	1.33	63	16	74	4	136	49	540	1.38
54	Musi	I	7.56	854	547	0	130	150	0.79	79	30	94	3	48	29	240	2.63
55	Musi	I	7.94	1490	954	0	460	200	4.63	22	15	160	5	32	88	440	3.32
56	Musi	I	7.53	976	625	0	200	180	0.73	30	13	50	7	72	49	380	1.12
57	Musi	I	7.42	1145	733	0	260	180	0.73	31	19	103	5	56	49	340	2.43
58	Musi	I	7.53	2390	1530	0	300	560	0.95	18	39	288	3	128	53	540	5.39
59	Musi	I	7.07	1742	1115	0	200	360	0.46	154	24	72	7	240	24	700	1.18
60	Musi	I	8.01	1240	794	0	210	220	0.54	67	18	93	11	64	53	380	2.07

61	Musi	I	7.01	3212	2056	0	190	670	0.34	319	80	300	2	344	15	920	4.30
62	Musi	I	7.83	772	494	0	320	70	0.66	4	7	92	2	32	39	240	2.58
63	Musi	I	7.25	2956	1892	0	290	520	1.10	394	45	262	52	120	136	860	3.88
64	Musi	I	7.46	1236	791	0	380	140	0.72	47	21	102	1	112	34	420	2.16
65	Musi	I	7.80	782	500	0	320	30	0.35	81	6	25	2	80	44	380	0.55
66	Musi	I	7.89	790	506	0	330	50	0.43	25	5	56	2	48	44	300	1.42
67	Musi	I	8.21	943	604	0	350	80	2.76	4	16	97	2	64	29	280	2.51
68	Musi	I	7.79	1878	1202	0	450	180	0.53	273	26	94	2	136	102	760	1.48
69	Musi	I	7.40	897	574	0	410	30	1.02	21	7	36	2	72	53	400	0.78
70	Musi	I	7.72	992	635	0	470	20	1.02	33	6	30	0.4	56	78	460	0.61
71	Musi	I	7.36	972	622	0	400	50	0.75	38	10	35	2	88	53	440	0.73
72	Musi	I	7.55	1098	703	0	370	60	1.10	163	11	53	1	88	63	480	1.04
73	Musi	I	7.59	518	332	0	230	30	0.30	0	3	23	2	32	34	220	0.67
74	Musi	I	7.84	1277	817	0	570	50	2.05	40	8	130	3	16	83	380	2.89
75	Musi	I	7.70	934	598	0	400	30	1.94	50	9	51	0.4	40	68	380	1.13
76	Musi	I	7.84	964	617	0	430	30	2.64	16	13	67	3	24	73	360	1.52
77	Musi	I	7.40	1145	733	0	360	100	0.72	102	13	46	21	104	49	460	0.94
78	Musi	I	7.32	808	517	0	330	40	0.54	27	14	58	2	64	34	300	1.46
79	Musi	I	6.95	3163	2024	0	270	760	0.99	32	136	105	2	384	83	1300	1.26
80	Musi	I	7.52	1740	1114	0	560	160	1.19	126	18	160	3	96	78	560	2.95
81	Musi	I	7.42	1421	909	0	410	190	1.21	7	9	125	2	88	44	400	2.72
82	Musi	I	7.14	1823	1167	0	320	250	0.89	182	37	106	9	168	49	620	1.86

83	Musi	I	7.39	696	445	0	310	30	0.50	5	6	19	2	72	34	320	0.46
84	Musi	I	7.58	1445	925	0	390	140	0.61	128	19	115	25	104	39	420	2.44
85	Musi	I	7.67	1210	774	0	320	160	0.48	7	45	150	3	48	39	280	3.88
86	Musi	I	7.51	907	580	0	350	50	0.67	33	17	38	1	48	63	380	0.85
87	Musi	I	7.41	1525	976	0	330	230	0.43	120	19	63	1	128	73	620	1.10
88	Musi	I	7.71	918	588	0	230	140	0.26	10	26	78	32	88	10	260	2.10
89	Musi	I	8.16	1982	1268	0	930	60	4.22	27	14	387	1	32	29	200	11.90
90	Musi	I	7.65	1109	710	0	300	140	1.16	46	18	43	19	88	53	440	0.89
91	Musi	I	7.16	467	299	0	80	130	0.58	11	13	21	1	72	15	240	0.59
92	Musi	I	7.61	896	573	0	120	180	1.81	48	31	96	2	64	19	240	2.69
93	Musi	I	8.14	905	579	0	250	100	0.97	44	24	71	4	64	34	300	1.78
94	Musi	I	6.92	645	413	0	210	20	1.13	78	11	35	1	48	29	240	0.98
95	Musi	I	7.43	401	257	0	180	20	1.68	7	7	49	1	32	10	120	1.94
96	Musi	I	7.72	814	521	0	210	80	0.93	50	14	64	5	32	39	240	1.80
97	Musi	I	7.43	2063	1320	0	290	420	0.86	10	67	224	3	48	92	500	4.36
98	Musi	I	7.77	676	433	0	230	60	0.41	1	17	57	3	40	29	220	1.67
99	Musi	I	7.97	1494	956	0	330	200	0.58	194	15	115	2	80	83	540	2.15
100	Musi	I	7.02	1653	1058	0	360	220	1.09	140	21	116	16	120	58	540	2.17
101	Musi	I	7.64	706	452	0	240	60	0.55	9	20	62	5	56	19	220	1.81
102	Musi	I	7.83	749	479	0	160	110	0.47	34	22	69	4	64	15	220	2.01
103	Musi	I	8.13	899	575	0	270	90	1.17	20	30	87	6	64	24	260	2.35

104	Musi	I	8.18	670	429	0	220	70	0.98	5	14	56	2	48	24	220	1.63
105	Musi	I	7.70	1162	744	0	300	150	0.36	2	36	88	1	112	24	380	1.95
106	Musi	I	8.06	567	363	0	190	60	0.84	1	13	51	3	48	15	180	1.65
107	Musi	I	8.35	2780	1779	10	380	690	1.57	11	33	266	64	88	141	800	4.09
108	Musi	I	6.93	652	417	0	280	20	0.92	38	8	41	3	40	39	260	1.11
109	Musi	I	7.27	659	422	0	200	70	0.34	9	9	23	7	80	15	260	0.62
110	Musi	I	7.16	369	236	0	130	20	0.21	12	2	14	2	16	24	140	0.51
111	Musi	I	6.92	639	409	0	240	20	0.54	46	5	58	7	48	15	180	1.89
112	Musi	I	7.39	697	446	0	280	20	1.21	6	5	33	3	56	24	240	0.93
113	Musi	I	7.34	655	419	0	110	60	0.90	11	109	24	3	72	15	240	0.67
114	Musi	I	7.75	2481	1588	0	490	510	1.30	9	33	238	5	144	88	720	3.86
115	Musi	I	7.47	731	468	0	230	50	2.00	13	73	52	3	56	29	260	1.39
116	Musi	I	7.42	998	639	0	300	80	0.77	17	101	69	4	80	39	360	1.59
117	Musi	I	7.49	2746	1757	0	630	470	4.22	40	31	406	9	56	83	480	8.07
118	Musi	I	7.33	1063	680	0	250	130	1.53	91	44	67	2	128	24	420	1.42
119	Musi	I	7.65	1992	1275	0	510	190	3.07	203	25	135	126	136	49	540	2.52

120	Musi	I	7.73	799	511	0	350	30	0.99	12	10	110	1	32	24	180	3.57
121	Musi	I	7.69	611	391	0	230	30	0.36	3	11	47	3	40	19	180	1.52
122	Musi	I	7.52	1321	845	0	350	190	1.33	16	20	110	5	56	63	400	2.39
123	Musi	I	8.12	1380	883	0	470	160	1.35	5	8	186	34	64	24	260	5.03
124	Musi	I	8.21	1842	1179	0	270	330	0.45	33	161	200	70	80	44	380	4.46
125	Musi	I	7.84	1433	917	0	250	300	1.46	0	22	220	6	40	29	220	6.45
126	Musi	I	7.22	1451	929	0	390	140	0.45	172	22	81	3	192	24	580	1.46
127	Musi	I	7.63	1030	659	0	390	80	1.81	12	36	64	2	56	63	400	1.39
128	Musi	I	7.21	1805	1155	0	440	310	2.00	20	18	103	3	216	34	680	1.72
129	Musi	I	7.09	1635	1046	0	420	190	1.12	163	19	134	3	128	53	540	2.50
130	Musi	I	7.55	2278	1458	0	530	330	1.68	142	28	133	1	104	136	820	2.02
131	Musi	I	7.60	1570	1005	0	220	280	0.66	12	201	108	5	144	44	540	2.02
132	Musi	I	7.82	4199	2687	0	460	990	1.68	61	35	450	7	160	156	1040	6.07
133	Musi	I	7.62	1339	857	0	460	150	1.89	20	20	118	5	64	68	440	2.45
134	Musi	I	7.64	2968	1900	0	160	870	1.11	50	4	239	28	232	73	880	3.51
13	Musi	I	7.45	756	484	0	340	30	1.55	14	10	76	3	72	15	240	2.12

5																	
136	Musi	I	7.68	2115	1354	0	430	410	0.53	34	9	105	12	64	156	800	1.61
137	Musi	I	7.26	6228	3986	0	420	1670	0.76	235	96	500	4	488	190	2000	4.86
138	Musi	I	7.45	1804	1155	0	570	230	1.74	14	24	120	4	80	117	680	2.00
139	Musi	I	7.60	855	547	0	370	20	0.94	9	46	30	12	88	34	360	0.68
140	Manjeera (Nakkavagu is part of Manjeera)	II	6.91	1769	1132	0	290	370	1.88	74	29	227	3	104	34	400	4.93
141	Manjeera (Nakkavagu is part of Manjeera)	II	7.76	466	298	0	170	30	0.28	18	7	16	1	40	24	200	0.49
142	Manjeera (Nakkavagu is part of Manjeera)	II	6.97	879	563	0	300	80	1.71	7	11	77	3	56	29	260	2.09
143	Manjeera (Nakkavagu is part of Manjeera)	II	8.66	1948	1247	100	470	140	3.91	7	144	338	3	24	34	200	10.39
144	Manjeera (Nakkavagu is part of Manjeera)	II	8.24	490	314	0	190	30	1.33	2	10	37	2	40	15	160	1.27
145	Manjeera (Nakkavagu	II	7.17	2359	1510	0	370	440	1.34	13	169	150	4	168	112	880	2.20

	is part of Manjeera)															
146	Manjeera (Nakkavagu is part of Manjeera)	II	7.41	865	554	0	230	140	0.84	10	20	82	2	40	44	280	2.14
147	Manjeera (Nakkavagu is part of Manjeera)	II	7.22	832	532	0	330	50	0.75	44	11	29	3	64	53	380	0.65
148	Manjeera (Nakkavagu is part of Manjeera)	II	7.75	3468	2220	0	440	790	1.58	22	42	325	21	152	141	960	4.56
149	Manjeera (Nakkavagu is part of Manjeera)	II	7.43	961	615	0	380	70	1.60	14	14	101	2	64	29	280	2.63
150	Manjeera (Nakkavagu is part of Manjeera)	II	7.36	461	295	0	220	10	0.80	5	7	31	2	64	5	180	1.00
151	Manjeera (Nakkavagu is part of Manjeera)	II	7.29	1095	701	0	310	140	1.55	23	30	112	2	80	29	320	2.73
152	Manjeera (Nakkavagu is part of Manjeera)	II	7.73	1063	680	0	330	110	0.82	16	11	60	3	56	58	380	1.34
153	Manjeera (Nakkavagu	II	7.92	3268	2092	0	570	480	2.13	347	41	438	6	152	63	640	7.52

	is part of Manjeera)															
154	Manjeera (Nakkavagu is part of Manjeera)	II	8.12	816	522	0	180	120	0.28	48	14	53	4	72	24	280	1.39
155	Manjeera (Nakkavagu is part of Manjeera)	II	7.54	1062	680	0	380	60	0.41	42	30	78	33	72	34	320	1.90
156	Manjeera (Nakkavagu is part of Manjeera)	II	8.14	761	487	0	250	70	1.23	14	16	72	2	56	19	220	2.12
157	Manjeera (Nakkavagu is part of Manjeera)	II	7.74	1493	956	0	270	260	0.71	41	30	103	4	128	39	480	2.04
158	Manjeera (Nakkavagu is part of Manjeera)	II	7.05	1485	950	0	310	230	0.78	77	24	69	3	136	58	580	1.24
159	Manjeera (Nakkavagu is part of Manjeera)	II	7.91	1194	764	0	370	120	0.88	28	15	99	2	72	44	360	2.28
160	Manjeera (Nakkavagu is part of Manjeera)	II	8.03	1029	659	0	360	120	1.01	4	12	113	8	40	44	280	2.94
161	Manjeera (Nakkavagu	II	7.87	1540	986	0	230	280	0.53	171	34	235	2	32	49	280	6.09

	is part of Manjeera)															
162	Manjeera (Nakkavagu is part of Manjeera)	II	7.83	983	629	0	180	220	0.70	5	22	112	9	72	19	260	3.03
163	Manjeera (Nakkavagu is part of Manjeera)	II	6.99	826	529	0	270	80	1.08	48	21	58	2	56	44	320	1.41
164	Manjeera (Nakkavagu is part of Manjeera)	II	7.30	379	243	0	150	30	0.61	3	9	37	1	24	15	120	1.47
165	Manjeera (Nakkavagu is part of Manjeera)	II	7.83	543	348	0	190	40	1.72	25	11	73	2	16	19	120	2.90
166	Manjeera (Nakkavagu is part of Manjeera)	II	8.47	472	302	20	100	70	1.00	2	12	71	2	8	15	80	3.45
167	Manjeera (Nakkavagu is part of Manjeera)	II	8.13	446	285	0	120	60	0.86	4	8	35	2	24	19	140	1.29
168	Manjeera (Nakkavagu is part of Manjeera)	II	7.48	1230	787	0	440	100	0.42	15	14	61	6	56	83	480	1.21
169	Manjeera (Nakkavagu	II	8.36	847	542	10	200	130	0.62	30	17	91	3	24	44	240	2.55

	is part of Manjeera)															
170	Manjeera (Nakkavagu is part of Manjeera)	II	8.22	1710	1094	0	160	450	0.57	41	30	188	3	64	73	460	3.81
171	Manjeera (Nakkavagu is part of Manjeera)	II	8.08	790	506	0	230	100	0.56	4	16	69	2	40	34	240	1.94
172	Manjeera (Nakkavagu is part of Manjeera)	II	7.96	1593	1020	0	210	320	0.46	104	31	101	3	88	83	560	1.86
173	Manjeera (Nakkavagu is part of Manjeera)	II	8.24	2014	1289	0	190	430	0.64	139	41	233	7	48	88	480	4.62
174	Manjeera (Nakkavagu is part of Manjeera)	II	8.27	966	618	0	300	90	0.53	26	35	60	3	40	63	360	1.38
176	Manjeera (Nakkavagu is part of Manjeera)	II	8.05	1052	673	0	310	120	1.15	24	17	83	2	64	44	340	1.96
177	Manjeera (Nakkavagu is part of Manjeera)	II	7.90	518	332	0	130	90	0.63	18	8	38	1	24	34	200	1.17
178	Manjeera (Nakkavagu	II	7.62	2317	1483	0	220	510	0.46	168	43	141	8	192	83	820	2.14

	is part of Manjeera)															
179	Manjeera (Nakkavagu is part of Manjeera)	II	7.63	1138	728	0	360	160	0.61	46	15	62	3	112	53	500	1.21
180	Manjeera (Nakkavagu is part of Manjeera)	II	8.19	768	492	0	150	140	0.63	12	15	100	3	32	19	160	3.44
181	Manjeera (Nakkavagu is part of Manjeera)	II	8.21	1130	723	0	200	220	0.24	49	20	79	1	32	78	400	1.72
182	Manjeera (Nakkavagu is part of Manjeera)	II	8.10	608	389	0	150	60	0.46	40	18	39	6	56	15	200	1.20
183	Manjeera (Nakkavagu is part of Manjeera)	II	7.63	2094	1340	0	190	510	0.21	90	43	136	4	176	68	720	2.20
184	Manjeera (Nakkavagu is part of Manjeera)	II	7.92	1056	676	0	200	190	1.01	45	20	109	2	64	29	280	2.83
185	Manjeera (Nakkavagu is part of Manjeera)	II	8.32	908	581	10	220	120	0.65	44	17	52	2	72	39	340	1.23
186	Manjeera (Nakkavagu	II	8.23	788	504	0	180	110	0.56	27	33	66	2	40	34	240	1.85

	is part of Manjeera)															
187	Manjeera (Nakkavagu is part of Manjeera)	II	7.01	1310	838	0	470	110	0.52	12	18	114	7	120	24	400	2.48
188	Manjeera (Nakkavagu is part of Manjeera)	II	7.52	843	540	0	260	90	1.75	5	15	79	4	64	19	240	2.21
189	Manjeera (Nakkavagu is part of Manjeera)	II	7.34	968	620	0	320	90	0.81	30	15	42	5	88	44	400	0.90
190	Manjeera (Nakkavagu is part of Manjeera)	II	7.81	1871	1197	0	430	340	1.13	9	24	102	3	88	122	720	1.66
191	Manjeera (Nakkavagu is part of Manjeera)	II	7.79	1050	672	0	380	80	0.74	16	9	48	1	24	88	420	1.01
192	Manjeera (Nakkavagu is part of Manjeera)	II	8.77	668	428	20	250	40	1.06	6	9	97	2	8	29	140	3.55
193	Manjeera (Nakkavagu is part of Manjeera)	II	7.62	559	358	0	210	40	0.31	9	9	25	4	64	15	220	0.73
194	Manjeera (Nakkavagu	II	7.30	1194	764	0	360	110	0.64	144	15	97	2	120	29	420	2.06

	is part of Manjeera)																
195	Manjeera (Nakkavagu is part of Manjeera)	II	8.14	720	461	0	310	40	1.15	4	10	47	3	88	15	280	1.22
196	Manjeera (Nakkavagu is part of Manjeera)	II	8.05	740	474	0	300	30	1.34	44	11	44	3	88	15	280	1.14
197	Manjeera (Nakkavagu is part of Manjeera)	II	7.23	1427	913	0	410	160	1.23	12	25	162	1	56	39	300	4.07
198	Manjeera (Nakkavagu is part of Manjeera)	II	7.60	1668	1068	0	420	260	0.70	11	18	142	1	112	58	520	2.71
199	Manjeera (Nakkavagu is part of Manjeera)	II	7.84	1578	1010	0	410	220	0.71	29	31	107	1	136	49	540	2.00
200	Manjeera (Nakkavagu is part of Manjeera)	II	7.02	2277	1457	0	370	400	1.81	133	37	256	8	152	44	560	4.70
201	Manjeera (Nakkavagu is part of Manjeera)	II	7.47	330	211	0	100	20	0.19	19	3	11	1	40	5	120	0.44
202	Manjeera (Nakkavagu	II	6.41	1768	1132	0	350	310	1.81	52	30	110	2	144	68	640	1.89

	is part of Manjeera)															
203	Manjeera (Nakkavagu is part of Manjeera)	II	7.25	1035	662	0	400	100	0.92	24	15	56	2	104	49	460	1.14
204	Manjeera (Nakkavagu is part of Manjeera)	II	6.91	660	422	0	300	30	0.72	18	7	30	1	72	29	300	0.75
205	Manjeera (Nakkavagu is part of Manjeera)	II	7.41	770	493	0	400	10	0.61	3	5	18	1	64	53	380	0.40
206	Manjeera (Nakkavagu is part of Manjeera)	II	7.88	1137	728	0	370	110	0.63	67	12	50	1	128	39	480	0.99
207	Manjeera (Nakkavagu is part of Manjeera)	II	7.18	1151	737	0	250	200	1.02	12	18	85	2	96	39	400	1.85
208	Manjeera (Nakkavagu is part of Manjeera)	II	7.63	414	265	0	130	40	0.38	9	14	24	0.1	24	24	160	0.83
209	Manjeera (Nakkavagu is part of Manjeera)	II	8.20	585	374	0	250	20	2.77	8	4	71	3	24	19	140	2.61
210	Manjeera (Nakkavagu	II	7.89	474	303	0	170	50	0.33	15	4	31	10	48	15	180	1.00

	is part of Manjeera)																
211	Manjeera (Nakkavagu is part of Manjeera)	II	6.89	745	477	0	400	30	0.41	1	4	68	1	72	29	300	1.72
212	Manjeera (Nakkavagu is part of Manjeera)	II	7.54	639	409	0	110	120	0.12	23	5	30	1	32	39	240	0.84
213	Manjeera (Nakkavagu is part of Manjeera)	II	6.99	952	609	0	440	40	0.61	23	8	31	1	112	44	460	0.63
214	Maner	III	8.14	910	582	0	300	60	0.76	43	50	50	5	72	43.76	360	1.15
215	Maner	III	7.98	540	346	0	250	30	0.34	19	32	25	6	56	34.03	280	0.65
216	Maner	III	7.92	616	394	0	280	30	0.68	35	5	35	2	56	34.03	280	0.91
217	Maner	III	8.15	817	523	0	120	180	1.04	49	57	84	11	56	34.03	280	2.18
218	Maner	III	7.98	642	411	0	100	120	0.83	3	49	83	4	24	19.45	140	3.05
219	Maner	III	7.62	1326	849	0	260	200	0.92	75	56	54	1	112	68.07	560	0.99
220	Maner	III	7.93	631	404	0	210	100	0.42	42	3	30	4	64	38.90	320	0.73
221	Maner	III	7.96	364	233	0	210	30	0.33	35	16	44	2	40	24.31	200	1.35
222	Maner	III	7.67	777	497	0	110	120	0.52	21	56	42	4	40	38.90	260	1.13

223	Maner	III	8.32	1755	1123	20	380	210	0.86	95	59	334	27	16	9.72	80	16.24
224	Maner	III	7.81	824	527	0	100	220	0.38	25	22	74	11	56	34.03	280	1.92
225	Maner	III	7.67	1910	1222	0	200	470	1.39	124	47	128	16	152	92.38	760	2.02
226	Maner	III	7.4	1276	816.64	0	300	160	0.32	34	32	108	12	40	82.654	439.86	2.23892
227	Maner	III	7.6	1034	661.76	0	170	240	0.59	14	21	112	5	64	48.62	359.918	2.56678
228	Maner	III	8.14	1395	893	0	500	120	1.14	78	56	65	3	120	92.38	680	1.08
229	Maner	III	7.99	551	353	0	110	90	0.74	38	48	35	3	48	29.17	240	0.98
230	Maner	III	8.30	405	259	10	190	20	0.35	35	44	26	5	48	29.17	240	0.73
231	Maner	III	7.7	5497	3518.08	0	500	1340	0.13	3	150	801	225	96	189.618	1019.68	10.9062
232	Maner	III	8.28	892	571	0	260	100	2.08	12	36	82	4	48	38.90	280	2.13
233	Maner	III	8.29	1179	754.56	0	340	160	1.16	25	32	101	4	48	68.068	399.885	2.19597
234	Maner	III	8.04	646	413.44	0	190	80	0.42	18	18	54	2	24	38.896	219.934	1.58314
235	Maner	III	7.56	560	358	0	170	60	1.81	29	7	51	3	32	24	180	1.65
236	Maner	III	7.14	1821	1165	0	390	300	0.90	84	25	147	16	88	88	580	2.66
237	Maner	III	7.43	784	502	0	290	50	0.97	30	9	35	2	88	24	320	0.85

238	Maner	III	7.31	1361	871	0	300	220	0.80	47	18	78	5	88	68	500	1.52
239	Maner	III	7.77	273	175	0	120	10	0.73	2	5	17	2	32	5	100	0.74
240	Maner	III	6.89	1505	963	0	270	270	0.68	67	20	62	3	144	53	580	1.11
241	Maner	III	6.95	854	547	0	180	140	2.25	30	13	37	4	88	29	340	0.88
242	Maner	III	7.52	650	416	0	190	80	0.62	13	12	39	2	56	24	240	1.09
243	Maner	III	7.35	847	542	0	170	160	0.68	12	17	58	4	88	19	300	1.46
244	Maner	III	7.93	1078	690	0	210	140	1.39	65	40	106	6	48	38.90	280	2.75
245	Maner	III	7.87	430	275	0	120	40	0.33	21	21	44	1	24	14.59	120	1.75
246	Maner	III	8.18	639	409	0	180	50	0.57	48	32	66	2	32	24.31	180	2.14
247	Maner	III	7.88	780	499	0	180	80	1.08	51	33	70	3	40	29.17	220	2.05
248	Maner	III	8.17	353	226	0	110	30	0.78	3	15	34	1	16	14.59	100	1.48
249	Maner	III	8.45	1425	912	50	270	200	0.92	53	57	154	58	56	43.76	320	3.74
250	Maner	III	7.79	809	518	0	180	100	0.53	53	34	74	4	40	34.03	240	2.08
251	Maner	III	7.83	1010	646	0	270	130	0.52	10	39	105	5	48	38.90	280	2.73
252	Maner	III	7.98	688	440	0	170	70	1.58	29	30	60	2	32	29.17	200	1.84
253	Maner	III	7.85	425	272	0	140	40	0.29	16	15	40	1	24	19.45	140	1.47

254	Maner	III	7.93	894	572	0	220	100	1.89	53	37	87	4	48	34.03	260	2.35
255	Maner	III	8.12	774	495	0	170	80	0.55	84	29	67	3	40	34.03	240	1.88
256	Maner	III	8.24	381	244	0	130	30	0.71	8	13	35	1	24	14.59	120	1.39
257	Maner	III	8.09	690	442	0	180	60	0.71	46	32	72	2	32	24.31	180	2.33
258	Maner	III	8.19	2095	1341	0	310	440	1.29	19	74	234	12	88	77.79	540	4.38
259	Maner	III	8.39	713	456	20	100	120	0.54	49	17	38	3	64	24	260	1.02
260	Maner	III	7.47	729	466.56	0	210	90	0.94	9	29	64	2	24	43.758	239.926	1.79644
261	Maner	III	8.3	1697	1086.08	30	410	250	2.95	2	57	169	14	48	87.516	479.852	3.35433
262	Maner	III	7.81	838	536.32	0	240	110	0.65	8	32	63	2	32	53.482	299.91	1.58168
263	Maner	III	7.94	768	491.52	0	230	80	0.25	44	27	58	4	32	48.62	279.918	1.50725
264	Maner	III	8.28	1493	955.52	0	410	180	1.5	43	52	115	11	72	82.654	519.86	2.19294
265	Maner	III	7.43	885	566	0	80	150	0.41	137	27	57	5	104	10	300	1.43
266	Maner	III	7.49	4324	2767	0	510	1080	3.00	168	69	520	14	112	190	1060	6.95
267	Maner	III	8.24	1070	685	0	330	120	1.82	38	11	116	4	32	49	280	3.01
268	Maner	III	7.80	806	516	0	140	140	1.04	50	18	68	6	56	24	240	1.91

269	Maner	III	6.48	942	603	0	120	180	0.72	110	20	93	10	48	39	280	2.41
270	Maner	III	8.21	1309	838	0	300	120	1.60	194	18	152	6	16	68	320	3.70
271	Maner	III	7.14	918	588	0	370	80	0.86	29	15	69	7	104	24	360	1.58
272	Maner	III	8.01	699	447	0	130	130	0.38	36	11	41	3	64	24	260	1.11
273	Maner	III	7.34	499	319	0	100	90	0.86	9	19	34	3	48	15	180	1.10
274	Maner	III	7.30	2218	1420	0	500	350	1.87	170	48	226	4	96	107	680	3.77
275	Maner	III	7.51	557	356	0	90	110	0.49	25	19	29	7	64	15	220	0.85
276	Maner	III	7.97	595	381	0	190	30	1.37	74	10	84	2	32	10	120	3.33
277	Maner	III	7.90	679	435	0	60	160	0.36	37	15	35	2	80	15	260	0.94
278	Maner	III	7.88	556	356	0	220	40	1.18	20	7	63	3	32	19	160	2.17
279	Maner	III	8.02	498	319	0	200	30	0.86	39	9	37	4.0	16	39	200	1.14
280	Maner	III	7.63	1430	915	0	250	280	0.69	39	25	91	3.0	104	58	500	1.77
281	Maner	III	7.06	1276	817	0	330	90	2.32	79	125	81	4	136	34	480	1.61
282	Maner	III	7.90	502	321	0	140	50	0.19	43	4	15	26	48	15	180	0.49
283	Maner	III	7.45	630	403	0	170	90	0.61	28	12	38	4	24	44	240	1.07
28	Maner	III	7.70	166	106	0	150	380	0.36	50	41	117	5	56	92	520	2.23

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285	Maner	III	7.38	1237	792	0	380	120	1.85	77	22	189	3	24	39	220	5.54
286	Maner	III	7.68	870	557	0	220	120	0.65	25	22	66	49	64	15	220	1.93
287	Maner	III	7.25	881	564	0	100	210	0.75	17	17	49	2	64	39	320	1.19
288	Maner	III	7.50	600	384	0	130	80	0.92	50	9	32	3	72	10	220	0.94
289	Maner	III	7.74	1026	657	0	160	230	0.49	18	10	82	12	104	15	320	1.99
290	Maner	III	7.81	400	256	0	90	60	0.71	29	7	28	3	32	15	140	1.03
291	Maner	III	7.42	796	509	0	320	60	0.20	2	11	27	14	88	29	340	0.64
292	Maner	III	7.70	543	348	0	190	30	0.32	35	15	35	3	32	29	200	1.08
293	Maner	III	7.51	979	627	0	100	180	0.48	131	17	57	8	88	29	340	1.34
294	Maner	III	7.85	540	346	0	220	40	0.43	4	14	35	11	64	10	200	1.08
295	Maner	III	7.75	468	300	0	150	40	1.04	50	7	33	3	24	29	180	1.07
296	Maner	III	8.01	480	307	0	110	50	1.08	36	18	32	5	32	19	160	1.10
297	Maner	III	7.90	361	231	0	90	30	0.81	42	8	23	3	32	10	120	0.91
298	Maner	III	7.70	1467	939	0	150	270	0.35	155	19	76	2	152	29	500	1.48
299	Maner	III	7.61	894	572	0	260	90	1.59	44	16	56	5.0	72	34	320	1.36

300	Maner	III	7.88	616	394	0	80	100	1.99	87	10	78	1.0	32	15	140	2.87
301	Maner	III	7.5	972	622.08	0	260	160	1.4	1	43	132	6	56	24.31	239.959	3.70491
302	Maner	III	7.29	618	395.52	0	210	50	0.69	53	5	112	6	24	4.862	79.9918	5.44462
303	Maner	III	7.17	1056	675.84	0	350	140	0.58	34	46	64	5	56	82.654	479.86	1.27027
304	Maner	III	7.28	796	509.44	0	210	100	0.92	12	26	80	14	48	19.448	199.967	2.4597
305	Maner	III	7.3	604	386.56	0	220	20	0.28	72	21	58	3	48	19.448	199.967	1.78329
306	Maner	III	7.34	1011	647.04	0	340	100	2.42	6	35	65	6	48	63.206	379.893	1.44996
307	Maner	III	7.25	1000	640	0	260	120	0.68	44	34	123	12	48	24.31	219.959	3.60584
308	Maner	III	7.26	1717	1098.88	0	410	260	2.36	65	42	210	10	24	87.516	419.852	4.45598
309	Maner	III	7.28	925	592	0	200	130	0.6	65	40	70	6	32	58.344	319.901	1.70162
310	Maner	III	7.22	840	537.6	0	230	100	0.92	38	44	136	12	48	4.862	139.992	4.99758
311	Maner	III	7.27	672	430.08	0	180	90	0.64	39	24	47	2	48	34.034	259.942	1.26745
312	Maner	III	7.38	549	351.36	0	150	40	0.74	57	26	64	2	48	4.862	139.992	2.3518
313	Maner	III	7.33	832	532.48	0	250	90	0.79	27	29	95	4	64	14.586	219.975	2.78489
314	Maner	III	7.41	888	568.3	0	310	80	1.43	19	20	120	2	48	19.44	199.9	3.689

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315	Manor	III	7.19	1199	767.36	0	330	170	0.81	51	23	79	4	72	68.068	459.885	1.60168
316	Maner	III	7.33	1752	1121.28	0	420	280	0.47	54	48	132	21	56	111.826	599.811	2.34336
317	Maner	III	7.2	1042	666.88	0	340	110	0.8	15	21	160	19	48	9.724	159.984	5.4999
318	Maner	III	7.35	961	615.04	0	320	100	0.96	24	41	47	5	32	82.654	419.86	0.99728
319	Maner	III	7.19	1460	934.4	0	480	130	0.92	54	35	88	12	88	77.792	539.868	1.64669
320	Maner	III	7.16	1202	769.28	0	280	170	0.54	103	38	101	21	72	53.482	399.91	2.1959
321	Maner	III	7.2	846	541.44	0	180	120	0.55	59	36	66	10	72	24.31	279.959	1.71502
322	Maner	III	7.24	1080	691.2	0	280	120	0.57	60	48	48	5	56	72.93	439.877	0.99506
323	Maner	III	7.51	1464	936.96	0	480	100	3.59	74	37	75	21	56	97.24	539.836	1.40347
324	Maner	III	8.19	1615	1034	0	120	520	0.25	3	11	325	66	24	9.72	100	14.13
325	Maner	III	7.98	873	559	0	160	180	1.13	26	47	38	4	64	58.34	400	0.83
326	Maner	III	7.93	1016	650	0	240	150	0.98	23	50	60	2	72	53.48	400	1.30
327	Maner	III	8.32	906	580	10	120	140	**2.28**	**55**	53	78	3	48	34.03	260	2.10
328	Maner	III	7.85	882	564	0	220	100	0.29	**48**	50	60	3	64	38.90	320	1.46

329	Maner	III	7.66	821	525	0	110	150	0.64	80	31	54	2	48	43.76	300	1.36
330	Maner	III	7.62	614	393	0	170	100	0.86	1	46	56	1	48	29.17	240	1.57
331	Maner	III	7.08	1299	831	0	120	320	1.20	32	45	88	6	112	43.76	460	1.78
332	Maner	III	7.92	677	433	0	200	120	1.10	75	40	60	4	64	43.76	340	1.41
333	Maner	III	7.92	638	408	0	120	170	0.31	11	8	34	4	64	34.03	300	0.85
334	Maner	III	7.94	2046	1309	0	200	500	0.74	47	34	198	19	96	77.79	560	3.64
335	Maner	III	7.98	1068	684	0	220	200	7.94	2	11	188	8	24	14.59	120	7.46
336	Maner	III	7.67	286	183	0	130	50	0.62	7	14	17	4	40	19.45	180	0.55
337	Maner	III	7.11	1069	684	0	350	160	0.85	2	14	38	5	88	72.93	520	0.72
338	Maner	III	7.93	1366	874	0	190	250	4.41	40	44	204	17	32	24.31	180	6.61
339	Maner	III	7.84	3424	2191	0	130	1140	0.65	42	17	633	112	80	38.90	360	14.51
340	Maner	III	7.92	834	534	0	140	140	1.27	31	22	47	6	48	38.90	280	1.22
341	Maner	III	7.7	5497	3518.08	0	500	1340	0.13	3	150	801	225	96	189.618	1019.68	10.9062
342	Godavari	IV	7.69	694	444	0	190	90	0.20	3	28	51	2	32	38.90	240	1.43
343	Godavari	IV	7.54	1026	657	0	270	100	0.30	78	41	89	4	48	48.62	320	2.16
34	Godavari	IV	7.60	700	448	0	210	60	0.35	44	26	55	2	32	38.90	240	1.54

4																	
345	Godavari	IV	7.57	1200	768	0	250	140	0.31	158	37	104	2	64	58.34	400	2.26
346	Godavari	IV	7.56	481	308	0	160	40	1.44	3	20	38	1	8	34.03	160	1.31
347	Godavari	IV	7.62	763	488	0	280	90	1.3	18	13	71	5	32	49	280	1.85
348	Godavari	IV	7.86	1139	729	0	220	230	0.5	1	26	60	3	80	63	460	1.22
349	Godavari	IV	7.45	1105	707	0	440	70	1.0	26	10	105	2	32	68	360	2.41
350	Godavari	IV	7.86	1201	769	0	460	70	1.2	22	18	105	4	40	68	380	2.34
351	Godavari	IV	8.12	3031	1940	0	680	480	0.5	54	18	227	12	40	209	960	3.19
352	Godavari	IV	8.56	2602	1665	40	540	460	1.0	40	26	401	2	48	97	520	7.65
353	Godavari	IV	7.78	1806	1156	0	510	270	1.0	14	24	260	1	32	73	380	5.80
354	Godavari	IV	7.30	779	499	0	300	60	1.0	28	17	79	1	24	49	260	2.13
355	Godavari	IV	8.01	543	348	0	200	40	1.3	16	11	46	19	40	15	160	1.58
356	Godavari	IV	7.80	623	399	0	240	50	0.2	29	8	18	7	96	15	300	0.45
357	Godavari	IV	8.23	569	364	0	220	60	1.4	2	7	50	23	56	10	180	1.62
358	Godavari	IV	8.02	947	606	20	190	130	1.2	95	27	70	16	80	34	340	1.65
359	Godavari	IV	8.20	1728	1106	0	320	350	0.6	42	30	301	3	24	44	240	8.45

360	Godavari	IV	7.50	458	293	0	100	90	0.1	22	3	22	33	32	19	160	0.76
361	Godavari	IV	8.19	1012	648	0	360	110	0.9	7	13	80	6	24	73	360	1.83
362	Godavari	IV	7.88	1362	872	30	390	150	0.5	89	18	113	40	32	88	440	2.34
363	Godavari	IV	7.93	1039	665	0	190	170	0.7	70	30	71	70	48	39	280	1.85
364	Godavari	IV	7.89	2114	1353	0	240	350	0.3	310	33	165	6	1	156	643	2.83
365	Godavari	IV	8.17	439	281	0	200	20	0.29	25	31	36	3	40	24.31	200	1.11
366	Godavari	IV	7.2	227	145.28	0	70	10	0.13	0	8	33	5	8	4.862	39.9918	2.26882
367	Godavari	IV	7.34	1215	777.6	0	170	190	0.5	54	30	100	10	64	53.482	379.91	2.23065
368	Godavari	IV	7.42	2354	1507	0	270	400	0.43	22	89	418	18	56	38.90	299.934	10.49
369	Godavari	IV	7.87	355	227	0	240	40	0.29	40	7	26	1	56	34.03	280	0.68
370	Godavari	IV	7.83	384	246	0	190	30	0.28	25	22	29	11	40	24.31	200	0.89
371	Godavari	IV	7.98	373	239	0	210	30	0.29	37	16	43	37	32	19.45	160	1.48
372	Godavari	IV	7.92	1020	653	0	370	100	0.27	5	4	24	2	96	58.34	480	0.48
373	Godavari	IV	8.14	364	233	0	200	20	0.37	20	14	62	4	24	14.59	120	2.46
374	Godavari	IV	8.09	753	482	0	300	50	1.45	35	42	36	7	72	43.76	360	0.83

375	Godavari	IV	7.85	527	337	0	260	50	0.26	4	39	33	19	56	34.03	280	0.86
376	Godavari	IV	7.47	462	295.68	0	140	30	0.22	1	14	16	5	72	4.862	199.992	0.49191
377	Godavari	IV	7.52	197	126	0	40	10	0.14	10	10	9	2	24	4.86	79.9918	0.44
378	Godavari	IV	7.62	1530	979.2	0	200	240	0.29	80	37	146	5	104	43.758	439.926	3.02646
379	Godavari	IV	7.65	1821	1165	0	160	410	0.32	65	74	252	9	80	82.65	539.86	4.72
380	Godavari	IV	7.96	2664	1705	0	300	610	0.46	177	30	101	4	160	179.89	1140	1.30
381	Godavari	IV	7.14	219	140	0	100	40	0.31	21	14	12	2	32	19.45	160	0.41
382	Godavari	IV	7.09	657	420	0	120	120	0.47	43	47	42	3	56	34.03	280	1.09
383	Godavari	IV	7.65	758	485	0	130	40	0.39	62	20	51	8	24	34.03	199.942	1.57
384	Godavari	IV	7.42	1030	659.2	0	170	200	0.57	12	45	103	21	64	58.344	399.901	2.23941
385	Godavari	IV	7.45	864	553	0	160	40	0.20	154	22	75	7	64	24.31	259.959	2.02
386	Godavari	IV	7.35	678	433.92	0	160	40	0.14	41	21	23	4	56	34.034	279.942	0.59768
387	Godavari	IV	7.60	1034	662	0	160	120	0.15	184	21	105	15	64	38.90	319.934	2.55
388	Godavari	IV	8.19	1408	901	0	350	180	0.44	20	50	130	8	64	58.34	400	2.83
389	Godavari	IV	7.92	1259	806	0	330	160	0.43	0	44	115	6	56	53.48	360	2.64

390	Godavari	IV	8.24	550	352	0	190	50	0.37	8	23	44	1	32	29.17	200	1.35
391	Godavari	IV	8.04	556	356	0	190	50	1.13	4	24	43	1	32	29.17	200	1.32
392	Godavari	IV	8.11	345	221	0	130	30	0.12	2	17	24	1	24	19.45	140	0.88
393	Godavari	IV	7.97	978	626	0	170	110	0.15	167	36	83	5	56	43.76	320	2.02
394	Godavari	IV	7.83	1250	800	0	370	150	1.41	23	42	118	6	64	58.34	400	2.57
395	Godavari	IV	8.18	2306	1476	0	400	440	1.60	3	72	218	10	104	97.24	660	3.69
396	Godavari	IV	8.23	550	352	0	160	50	0.93	18	22	43	1	32	24.31	180	1.39
397	Godavari	IV	8.21	552	353	0	180	50	0.28	2	21	45	1	32	24.31	180	1.46
398	Godavari	IV	8.12	759	486	0	190	70	0.58	29	31	68	3	32	29.17	200	2.09
399	Godavari	IV	7.85	972	622	0	220	100	0.42	82	35	86	5	48	38.90	280	2.23
400	Godavari	IV	7.94	1055	675	0	280	130	0.54	47	38	96	5	56	48.62	340	2.26
401	Godavari	IV	8.31	542	347	30	130	40	0.41	13	21	42	1	32	19.45	160	1.44
402	Godavari	IV	7.96	982	628	0	280	100	1.87	3	37	87	5	48	38.90	280	2.26
403	Godavari	IV	7.88	1375	880	0	330	170	1.06	45	47	124	7	64	58.34	400	2.70
404	Godavari	IV	8.24	783	501	0	200	90	1.05	21	31	65	3	40	34.03	240	1.82
405	Godavari	IV	8.30	895	573	30	220	100	0.80	24	35	79	4	48	38.90	280	2.05

406	Godavari	IV	7.97	1469	940	0	310	180	1.27	114	49	138	8	72	58.34	420	2.93
407	Godavari	IV	7.78	839	537	0	220	100	0.61	19	33	71	4	48	34.03	260	1.91
408	Godavari	IV	8.29	912	584	0	250	110	0.76	41	34	82	5	56	38.90	300	2.06
409	Godavari	IV	8.01	948	607	0	250	90	1.75	126	36	85	5	56	48.62	340	2.00
410	Godavari	IV	7.82	779	499	0	230	80	0.66	8	30	67	3	40	34.03	240	1.88
411	Godavari	IV	7.87	654	419	0	210	50	0.81	15	24	56	2	32	29.17	200	1.72
412	Godavari	IV	7.84	726	465	0	230	70	1.21	17	27	63	2	40	34.03	240	1.77
413	Godavari	IV	7.91	710	454	0	230	60	1.34	12	26	62	2	40	29.17	220	1.82
414	Godavari	IV	7.75	813	520	0	260	90	1.02	14	32	72	4	48	38.90	280	1.87
415	Godavari	IV	7.83	717	459	0	240	70	0.33	5	28	61	2	40	34.03	240	1.71
416	Godavari	IV	8.15	1599	1023	0	490	180	1.70	2	49	147	8	80	72.93	500	2.86
417	Godavari	IV	7.09	593	380	0	190	40	1.57	54	13	29	3	40	34	240	0.82
418	Godavari	IV	8.14	478	306	0	150	40	0.76	14	17	46	1	24	19.45	140	1.69
419	Godavari	IV	7.24	812	520	0	230	70	0.41	62	19	63	2	24	48.62	260	1.70
420	Godavari	IV	7.54	983	629	0	270	130	0.92	27	36	83	2	48	53.48	340	1.96
421	Godavari	IV	7.70	697	446	0	240	70	1.08	9	27	63	2	32	38.90	240	1.77

422	Godavari	IV	7.80	765	490	0	240	90	0.76	8	29	66	2	32	43.76	260	1.78
423	Godavari	IV	7.89	1020	653	0	300	110	1.32	52	33	81	2	48	58.34	360	1.86
424	Godavari	IV	7.90	1011	647	0	300	120	1.06	50	33	88	3	48	58.34	360	2.02
425	Godavari	IV	8.30	3550	2272	30	770	630	0.97	5	101	341	11	136	179.89	1080	4.51
426	Godavari	IV	7.67	418	268	0	160	40	0.47	18	15	31	2	16	34.03	180	1.00
427	Godavari	IV	8.30	5055	3235	30	1310	730	13.90	4	151	341	25	168	369.51	1939	3.37
428	Godavari	IV	7.59	1319	844	0	390	150	2.66	11	45	122	3	56	63.21	400	2.65
429	Godavari	IV	7.72	413	264	0	180	30	0.84	1	14	36	2	16	29.17	160	1.24
430	Godavari	IV	7.90	1277	817	0	360	180	0.59	4	39	121	4	56	63.21	400	2.63
431	Godavari	IV	7.89	2000	1280	0	520	310	0.87	3	58	182	10	88	102.10	640	3.13
432	Godavari	IV	7.59	418	268	0	170	30	0.71	21	9	36	2	16	29.17	160	1.24
433	Godavari	IV	7.82	1037	664	0	300	110	1.42	50	33	79	4	24	72.93	360	1.81
434	Godavari	IV	7.69	2394	1532	0	190	550	2.77	114	91	375	2	40	68.07	380	8.37
435	Godavari	IV	7.42	741	474	0	250	60	0.71	57	15	19	1	40	63.21	360	0.44
436	Godavari	IV	7.84	1450	928	0	350	160	1.97	57	82	149	12	24	82.65	400	3.24
43	Godavari	IV	7.39	852	545	0	240	90	0.31	41	30	33	3	24	72.93	360	0.76

7																	
438	Godavari	IV	7.96	756	484	0	180	120	0.37	13	24	65	8	24	43.76	240	1.82
439	Godavari	IV	8.02	741	474	0	220	90	0.52	7	21	36	1	16	63.21	300	0.90
440	Godavari	IV	8.14	835	534	0	70	160	0.62	84	16	20	2	48	53.48	340	0.47
441	Godavari	IV	7.88	1153	738	0	200	180	0.25	77	41	142	9	40	38.90	260	3.83
442	Godavari	IV	7.96	1196	765	0	260	140	1.12	35	92	101	2	32	77.79	400	2.20
443	Godavari	IV	7.42	710	454	0	190	100	0.61	26	11	32	1	16	63.21	300	0.80
444	Godavari	IV	7.68	589	377	0	170	70	0.82	14	13	35	3	24	38.90	220	1.03
445	Godavari	IV	7.33	492	315	0	90	50	0.47	61	30	19	2	16	38.90	200	0.58
446	Godavari	IV	7.84	611	391	0	200	50	1.66	34	11	71	1	24	24.31	160	2.44
447	Godavari	IV	7.45	1129	723	0	230	120	1.67	165	34	113	15	40	58.34	340	2.66
448	Godavari	IV	7.58	1449	927	0	280	210	0.58	99	47	185	4	40	58.34	340	4.36
449	Godavari	IV	8.15	696	445	0	180	90	0.79	25	13	58	3	16	44	220	1.70
450	Godavari	IV	7.81	1923	1231	0	450	250	1.31	129	51	101	2	152	88	740	1.62
451	Godavari	IV	8.15	1088	696	0	270	180	0.84	21	14	73	3	16	88	400	1.59
452	Godavari	IV	7.05	1433	917	0	250	260	0.48	90	17	68	3	104	73	560	1.24

453	Godavari	IV	6.98	1060	678	0	360	80	0.82	48	11	57	5	48	68	400	1.24
454	Godavari	IV	7.16	1442	923	0	400	180	0.89	47	21	91	6	112	58	520	1.74
455	Godavari	IV	6.96	676	433	0	250	30	0.95	24	10	31	3	88	10	260	0.84
456	Godavari	IV	7.57	877	561	0	340	50	1.82	14	11	64	4	40	49	300	1.60
457	Godavari	IV	7.78	744	476	0	160	110	0.55	34	15	90	8	32	19	160	3.10
458	Godavari	IV	7.55	550	352	0	140	50	0.59	50	9	36	4	32	24	180	1.18
459	Godavari	IV	7.47	1134	726	0	260	160	1.86	63	23	106	2	48	53	340	2.51
460	Godavari	IV	7.81	603	386	0	180	70	0.48	10	11	38	1	56	19	220	1.12
461	Godavari	IV	8.73	916	586	30	310	70	1.19	0	19	186	5	8	10	60	10.42
462	Godavari	IV	7.11	929	595	0	270	100	1.07	17	14	68	2	56	39	300	1.71
463	Godavari	IV	7.57	802	513	0	250	90	1.36	0	8	73	2	48	29	240	2.06
464	Godavari	IV	8.09	787	504	0	280	70	1.11	3	9	62	2	24	49	260	1.68
465	Godavari	IV	8.00	1019	652	0	110	220	0.33	12	33	100	2	64	24	260	2.70
466	Godavari	IV	7.41	663	424	0	250	40	0.63	14	10	31	3	64	24	260	0.84
467	Godavari	IV	8.21	877	561.28	0	250	100	1.04	30	31	80	3	32	48.62	279.918	2.07896
46	Godavari	IV	7.8	550	352	0	210	40	1.04	2	25	44	2	24	34.03	199.9	1.352

8															4	42	92
469	Godavari	IV	7.66	538	344.32	0	190	40	1.03	3	24	44	2	16	34.034	179.942	1.42613
470	Godavari	IV	7.67	821	525.44	0	240	100	0.56	31	26	71	4	32	48.62	279.918	1.84508
471	Godavari	IV	8.31	812	519.68	30	190	100	1.02	31	27	64	3	32	48.62	279.918	1.66317
472	Godavari	IV	8.09	614	392.96	0	170	80	0.3	2	25	41	2	24	38.896	219.934	1.20201
473	Godavari	IV	7.64	648	414.72	0	170	80	2.02	20	27	51	3	24	38.896	219.934	1.49519
474	Godavari	IV	7.42	2354	1506.56	0	270	400	0.43	22	89	418	18	56	38.896	299.934	10.4939
475	Godavari	IV	7.52	197	126.08	0	40	10	0.14	10	10	9	2	24	4.862	79.9918	0.43751
476	Godavari	IV	7.65	1821	1165.44	0	160	410	0.32	65	74	252	9	80	82.654	539.86	4.71555
477	Godavari	IV	7.45	864	552.96	0	160	40	0.2	154	22	75	7	64	24.31	259.959	2.02247
478	Godavari	IV	7.6	1034	661.76	0	160	120	0.15	184	21	105	15	64	38.896	319.934	2.5523
479	Godavari	IV	7.65	758	485.12	0	130	40	0.39	62	20	51	8	24	34.034	199.942	1.56816
480	krishna	V	7.14	3474	2223	0	220	720	0.59	304	183	487	4	216	19	620	8.50
481	krishna	V	7.04	1818	1164	0	290	350	0.36	61	45	84	6	104	107	700	1.38
482	krishna	V	7.44	1538	984	0	370	240	0.67	26	65	135	3	88	68	500	2.63

483	krishna	V	7.57	2935	1878	0	520	520	1.27	297	78	304	29	80	170	900	4.40
484	krishna	V	6.88	5983	3829	0	490	1500	0.66	68	200	558	4	240	277	1740	5.82
485	krishna	V	7.45	906	580	0	200	130	0.21	33	27	36	2	120	15	360	0.83
486	krishna	V	6.88	3673	2351	0	310	750	0.18	480	73	308	38	336	68	1120	4.00
487	krishna	V	7.77	3550	2272	0	770	610	0.80	182	24	612	9	32	88	440	12.69
488	krishna	V	7.63	2104	1347	0	300	380	0.63	88	112	242	6	88	73	520	4.61
489	krishna	V		1659	1062	0	220	360	0.16	72	21	51	4	184	53	680	0.85
490	krishna	V	7.64	5263	3368	0	490	1070	1.01	366	197	861	1	112	170	980	11.96
491	krishna	V	7.43	5092	3259	0	390	1090	0.51	160	235	500	16	192	238	1460	5.69
492	krishna	V	7.77	1257	804	0	200	280	0.43	3	24	103	1	40	73	400	2.24
493	krishna	V	7.97	865	554	0	310	70	1.34	17	8	72	3	24	53	280	1.87
494	krishna	V	7.85	1275	816	0	300	160	0.38	108	23	97	7	80	53	420	2.06
495	krishna	V	8.11	1716	1098	0	340	200	0.97	254	24	161	21	24	102	480	3.19
496	krishna	V	7.84	969	620	0	200	170	0.36	42	14	81	28	56	34	280	2.09
497	krishna	V	7.88	1229	787	0	210	250	1.00	11	33	114	4	24	73	360	2.61
49	krishna	V	8.75	159	102	30	600	100	1.79	14	16	292	0.1	8	39	180	9.45

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8				8	3												
499	krishna	V	7.41	3797	2430	0	130	860	0.25	333	135	285	9	232	160	1240	3.52
500	krishna	V	7.66	1358	869	0	150	310	0.78	48	28	104	2	56	73	440	2.15
501	krishna	V	8.12	1615	1034	0	210	400	0.44	7	20	85	2	48	122	620	1.49
502	krishna	V	7.95	1405	899	0	150	250	0.94	221	18	39	2	96	92	620	0.68
503	krishna	V	8.15	1351	865	0	290	210	0.79	55	22	169	47	24	44	240	4.74
504	krishna	V	8.08	1187	760	0	170	270	0.54	3	30	171	3	24	39	220	5.00
505	krishna	V	8.22	2192	1403	0	140	520	0.42	176	25	259	38	64	73	460	5.25
506	krishna	V	8.44	1628	1042	20	460	190	1.18	57	20	205	1	32	73	380	4.57
507	krishna	V	7.67	2318	1484	0	430	470	1.52	26	25	423	15	24	39	220	12.39
508	krishna	V	7.37	1047	670	0	240	140	0.23	65	22	62	5	72	49	380	1.38
509	krishna	V	7.71	1894	1212	0	430	280	0.92	79	35	73	3	144	102	780	1.14
510	krishna	V	7.41	2200	1408	0	330	460	0.59	101	36	99	4	256	58	880	1.45
511	krishna	V	7.75	1815	1162	0	390	300	1.21	73	31	54	2	128	117	800	0.83
512	krishna	V	7.26	2025	1296	0	270	470	0.44	7	50	182	8	24	131	600	3.23
513	krishna	V	7.41	1954	1251	0	430	360	0.83	4	36	248	2	64	68	440	5.14

514	krishna	V	7.00	3528	2258	0	380	720	1.03	374	53	295	4	296	92	1120	3.83
515	krishna	V	7.07	1163	744	0	350	100	1.44	80	11	55	1	104	49	460	1.12
516	krishna	V	7.89	2152	1377	0	230	410	0.52	217	60	353	24	40	39	260	9.51
517	krishna	V	7.65	1798	1151	0	580	200	1.22	3	29	250	29	64	39	320	6.08
518	krishna	V	7.40	2374	1519	0	150	550	0.37	119	140	83	5	176	136	1000	1.14
519	krishna	V	7.30	545	349	0	160	50	0.70	40	9	34	4	56	15	200	1.05
520	krishna	V	7.39	520	333	0	160	40	0.82	52	11	22	5	40	29	220	0.64
521	krishna	V	8.59	1947	1246	20	770	90	4.04	14	23	400	6	24	15	120	15.88
522	krishna	V	8.03	969	620	0	320	70	1.53	53	17	104	3	40	39	260	2.80
523	krishna	V	7.79	899	575	0	250	50	0.89	128	16	86	4	40	39	260	2.32
524	krishna	V	7.75	1005	643	0	270	150	0.63	21	26	60	1	96	39	400	1.30
525	krishna	V	7.86	855	547	0	290	80	0.47	23	18	74	4	56	34	280	1.92
526	krishna	V	7.22	852	545	0	240	90	1.20	53	8	78	1	72	19	260	2.10
527	krishna	V	7.35	1478	946	0	170	250	0.45	214	35	32	7	152	73	680	0.53
528	krishna	V	7.58	1751	1121	0	200	270	0.49	335	25	82	10	136	88	700	1.34
529	krishna	V	7.59	3222	2062	0	560	560	3.48	209	41	394	68	80	92	580	7.11

530	krishna	V	7.91	1140	730	0	260	130	1.12	128	11	62	2	40	83	440	1.29
531	krishna	V	7.28	1080	691	0	330	80	0.72	85	11	56	3	64	58	400	1.22
533	krishna	V	7.19	1069	684	0	280	130	1.46	18	26	89	1	40	53	320	2.16
534	krishna	V	8.07	1257	804	0	180	240	0.64	54	21	86	2	40	73	400	1.87
535	krishna	V	7.27	618	396	0	160	70	0.80	44	13	42	2	32	34	220	1.23
536	krishna	V	7.62	1088	696	0	280	130	1.68	91	21	106	3	64	44	340	2.50
537	krishna	V	8.43	3645	2333	20	710	520	2.42	340	103	701	63	32	63	340	16.53
538	krishna	V	8.67	2289	1465	30	880	150	3.35	13	17	501	4	32	19	160	17.22
539	krishna	V	7.75	1673	1071	0	200	340	1.32	153	33	94	3	120	92	680	1.56
540	krishna	V	7.29	798	511	0	280	70	0.39	0	18	53	2	56	34	280	1.38
541	krishna	V	7.95	789	505	0	230	100	0.44	0	14	77	3	32	34	220	2.25
542	krishna	V	7.26	1701	1089	0	340	170	0.53	217	60	115	10	104	73	560	2.11
543	krishna	V	7.63	2341	1498	0	450	310	0.74	260	35	219	112	120	68	580	3.95
544	krishna	V	7.95	568	364	0	200	50	0.32	6	12	32	3	32	34	220	0.94
545	krishna	V	7.06	2511	1607	0	220	690	0.36	25	29	119	6	240	97	1000	1.64
546	krishna	V	7.08	2489	1593	0	360	480	1.28	42	45	300	4	104	63	520	5.72

547	krishna	V	7.85	2283	1461	0	460	350	1.50	49	49	304	79	80	34	340	7.17
548	krishna	V	7.65	989	633	0	260	130	1.34	17	22	105	4	40	39	260	2.83
549	krishna	V	7.70	556	356	0	130	90	0.19	5	15	62	3	32	15	140	2.26
550	krishna	V	8.00	579	371	0	160	90	0.35	1	12	64	3	48	10	160	2.20
551	krishna	V	8.05	1490	954	0	540	90	2.69	131	18	309	3	24	19	140	11.36
552	krishna	V	7.04	1609	1030	0	280	250	0.58	177	25	219	8	120	10	340	5.16
553	krishna	V	7.33	739	473	0	160	100	0.54	28	35	67	1	64	15	220	1.97
554	krishna	V	7.20	1945	1245	0	350	420	0.89	29	25	236	6	88	68	500	4.59
555	krishna	V	7.46	590	378	0	170	90	0.41	3	17	53	2	40	24	200	1.64
556	krishna	V	7.64	676	433	0	180	90	0.32	2	17	50	1	48	24	220	1.47
557	krishna	V	8.28	786	503	0	290	60	0.79	19	14	112	5	32	19	160	3.85
558	krishna	V	8.26	1419	908	0	210	290	0.39	50	26	54	3	104	78	580	0.97
559	krishna	V	7.69	1112	712	0	190	220	0.53	34	18	68	4	96	39	400	1.47
560	krishna	V	8.21	1521	973	0	260	280	0.97	57	25	110	3	112	53	500	2.14
561	krishna	V	8.14	3235	2070	0	370	720	2.58	5	102	403	7	64	126	680	6.72
562	krishna	V	7.37	887	568	0	300	60	2.88	45	14	44	8	64	44	340	1.04

563	krishna	V	7.70	1159	742	0	180	180	1.20	136	21	63	27	80	49	400	1.37
564	krishna	V	7.64	1515	970	0	170	150	1.02	356	27	81	2	1.2	126	523	1.54
565	krishna	V	7.64	2075	1328	0	450	290	1.36	35	85	200	64	88	73	520	3.81
566	krishna	V	8.16	1820	1165	0	400	310	1.78	31	22	257	1	40	58	340	6.06
567	krishna	V	7.05	1050	672	0	200	150	0.59	43	22	70	1	80	29	320	1.70
568	krishna	V	8.50	1652	1057	30	560	140	3.97	19	30	301	6	32	29	200	9.26
569	krishna	V	8.63	1223	783	30	340	150	0.75	4	19	109	28	40	58	340	2.57
570	krishna	V	7.39	469	300	0	110	50	0.34	34	14	38	3	40	10	140	1.40
571	krishna	V	8.56	759	486	30	260	70	2.27	4	16	147	3	24	10	100	6.39
572	krishna	V	7.68	1397	894	0	320	220	1.27	24	47	165	29	48	49	320	4.01
573	krishna	V	8.09	2313	1480	0	250	420	1.30	76	140	235	3	200	15	560	4.32
574	krishna	V	7.69	1339	857	0	440	130	1.15	7	14	170	11	56	34	280	4.42
575	krishna	V	8.41	555	355	20	140	70	0.46	2	16	46	2	48	15	180	1.49
576	krishna	V	6.55	1882	1204	0	150	280	0.46	376	120	111	115	112	78	600	1.96
577	krishna	V	7.85	1780	1139	0	440	240	0.57	140	24	113	2	152	68	660	1.91
578	krishna	V	7.25	494	316	0	210	20	0.79	16	7	23	0.3	24	39	220	0.68

579	krishna	V	7.70	952	609	0	270	140	0.38	43	10	52	13	104	29	380	1.17
580	krishna	V	7.86	848	543	0	360	20	1.13	58	7	72	1	64	29	280	1.88
581	krishna	V	7.30	831	532	0	70	230	0.08	11	6	46	71	24	39	220	1.36
582	krishna	V	6.97	1616	1034	0	310	230	0.51	140	32	160	2	96	49	440	3.32
583	krishna	V	7.02	1702	1089	0	330	280	0.47	96	28	178	6	72	63	440	3.69
584	krishna	V	7.71	2471	1581	0	660	380	2.62	48	27	378	48	32	68	360	8.66
585	krishna	V	7.62	2861	1831	0	750	400	1.42	152	48	250	1	32	209	940	3.54
586	krishna	V	7.12	1740	1114	0	310	270	0.31	148	33	152	2	112	53	500	2.95
587	krishna	V	6.92	1508	965	0	390	240	0.49	61	15	46	1	144	78	680	0.77
588	krishna	V	7.70	864	553	0	350	40	0.81	18	6	24	1	80	44	380	0.54
589	krishna	V	7.21	857	548	0	130	110	1.19	168	10	65	2	72	29	300	1.63
590	krishna	V	7.78	922	590	0	250	100	0.76	43	22	45	1	112	19	360	1.03
591	krishna	V	7.51	1813	1160	0	310	320	0.74	6	106	145	2	168	39	580	2.62
592	krishna	V	7.64	736	471	0	300	80	1.06	6	13	108	1	48	19	200	3.32
593	krishna	V	7.70	2681	1716	0	720	330	0.21	177	32	356	2	184	53	680	2.40
594	krishna	V	6.92	1027	657	0	210	220	0.87	9	13	106	2	88	24	320	2.58

595	krishna	V	7.26	1147	734	0	220	170	0.69	80	18	60	3	104	39	420	1.27
596	krishna	V	7.09	1494	956	0	300	210	1.77	159	20	60	2	152	58	620	1.05
597	krishna	V	7.45	1192	763	0	180	180	0.16	62	28	26	1	152	34	520	0.50
598	krishna	V	7.60	1801	1153	0	430	280	1.28	7	53	206	3	48	83	460	4.18
599	krishna	V	7.38	2491	1594	0	390	440	1.03	171	59	277	3	80	102	620	4.83
600	krishna	V	7.33	836	535	0	190	150	0.55	1	24	67	4	56	34	280	1.74
601	krishna	V	7.26	2457	1572	0	350	430	1.03	216	50	273	3	80	102	620	4.76
602	krishna	V	7.61	846	541	0	210	140	0.55	0	23	70	5	56	34	280	1.82
603	krishna	V	7.38	1147	734	0	230	200	0.48	16	33	83	3	80	44	380	1.86
604	krishna	V	7.07	824	527	0	230	110	0.46	4	28	73	2	56	29	260	1.97
605	krishna	V	7.33	2997	1918	0	400	380	0.80	680	55	201	2	240	117	1080	2.66
606	krishna	V	8.14	2845	1821	0	380	570	1.01	149	120	430	6	72	92	560	7.90

Basic Information	
Name of Non Attainment City	Hyderabad & Pancheruvu
Sate/ Union Territory	Telangana
Name of Nodal Officer at PCB/ PCC	Dr.D.Prasad
Email Id	esci1-tspcb@telangana.gov.in
Contact Number	9177303234
Date till which progress is submitted	March'2022

Action Point Code	Sector	Total Number of Actions	Number of Actions Completed	Number of Actions Under Porgress
CB	CAPACITY BUILDING, MONITORING NETWORK AND SOURCE APPORTIONMENT	CB5	2	3
PO	PUBLIC OUTREACH	PO2	2	0
RD/ C&D	ROAD DUST AND CONTRUCTION & DEMOLITION	RD3&CD1	3	1 not proposed in the action plan (installation of Wayu)
VE	VEHICLES	VE13	11	2
IP	INDUSTRIES	IP13	3 completed	3
BB/DF	WASTE AND BIOMASS- DUMPING AND BURNING		7 activities not available in GHMC area	
AQ	AIR QUALITY DATA	BB11&DF1	7 completed	4 under progress
		AQ 1	1	

*** some of the sub action points execution is continuous and its difficult to segregate as completed and in progress**

**** if maximum sub actions in the main action point are completed and are already under implementation they are shown as completed**

some of the points are not included in the approved action plan

ANNEXURE-III

CAPACITY BUILDING, MONITORING NETWORK AND SOURCE APPORTIONMENT

All funds details in INR crore

Action Point Code	Action Point	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated	Funds released	Funds Utilized	Additional Funds Required
CB1	**Insatllation & Commissioning of Monitoring Stations**												
CB1.1	TSPCB Strengthening of Ambient Air Quality Management Additional stations proposed to CPCB	i. Existing 5 CAAQMS stations ii. Proposed strengthening with 8 CAAQMS iii. Work awarded to M/s.Envea India Pvt. Ltd., for supply and installation of 8 CAAQMS in February,2021. iv. Installation and Commissioning of 8 CAAQMS is completed	Completed 12 as per CPCB norms 5 existing and 8 installed and commissioned	24 months	completed	8 CAAQMS stations	Number	Annexure-CB1.1	List of existing CAAQMS locations	8.0 (NCAP)	8.0 (NCAP)	6.14	Nil
CB3	**Assessment of sources**												
CB3.1	Emission Inventory	i. Work awarded to IIT Kanpur for an amount of Rs.100.3 Lakhs for SAS, EI & CC and duration of the work is 12months. ii. Summer sampling is under process. iii.SAS work will be completed by August,2022.	EI & SA Study should be completed by August,2022	24 months as per approved action plan	Deviation due to Covid pandemic	timelines as per the contract signed, August,2022.	Yes	Annexure-CB3.1	SA/CC&EI timelines and status of study report	0.8	0.8	0.309	0.203
CB3.3	Source Apportionment Study					timelines as per the contract signed, June, 2022. duration of the contract extended till August,2022 upon client request.	Yes	Annexure-CB3.1	SA/CC&EI timelines and status of study report	0.8	0.8	0.309	0.203
CB4	**Training & Capacity Building**								Steps taken				
CB4.2	Establish an air quality management division at SPCB Head quarters to oversee air quality management activities in the state and interact with CPCB	AQM Cell is constituted at TSPCB, Head office.	Already established	Completed and to Continue the activity	No deviation	completed	Yes	Annexure-CB4.2	Board Resolution for upgradation of 1 post	nil	nil	not applicable	not applicable
CB5	Emergency Response System	GRAP is also proposed in the action plan and the air pollution is mostly in satisfactory range	100% (GRAP implementation) & 100% Development of ERS as per of order of Hon'ble NGT	-	No deviation	1. GRAP implementation 2. Development of ERS as per of order of Hon'ble NGT	Enforcement	-	-	nil	nil	nil	nil

PUBLIC OUTREACH

All funds details in INR crore

Action Point Code	Action Point	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated	Funds released	Funds Utilized	Additional Funds Required
PO1	**Public Outreach**												
PO1.1	Daily Air Quality Public Information Dissemination System	i) Disseminated through TSPCB portal and through Electronic Display Boards at 4 places in the City.	Implemented and Continuing as a regular activity	Completed and to Continue the activity	No Deviation	Regular activity	Yes	Annexure-PO1.1	TSPCB i. https://tspcb.cgg.gov.in/Pages/Envdata.aspx/ , EDB photo ii. CO and Noise display boards photographs	0.19	0.19	0.19	Nil
PO2	**Public Greivance Redressal System**		-	-	-	-			http://183.82.109.75/TSPCB/	-	-	-	-
PO2.1	App Based System	48no complaints have received via TSAIR app and same is regularly forwarding to concern departments for further necessary action.	monthly bais and continue as a Regular activity	completed	No deviaiton	completed	Number	-	-	-	-	-	-
PO2.2	Set–up and publicize helpline in Hyderabad City for complaints against reported non-compliance.	Toll Free Number for grievances: 10741 Online through Website and TSAIR app	Operational	Completed and regular implementation	No Deviation	Continuing activity	Number	-	-	-	-	-	-

ROAD DUST AND CONTRUCTION & DEMOLITION										All funds details in INR crore			
RD1	**Road dust**	**Present Status**	**Target**	**Target Date**	**Deviation from Approved Action Plan Target**	**Annual Target**	**Field type**	**Attachment**	**Attachment Contents**	**Total Funds Allocated**	**Funds released**	**Funds Utilized**	**Additional Funds Required**
RD1.2	Maintain pot holes free roads for free-flow of traffic	Potholes are being filled on priority basis. Pot holes filled from 1.04.2021 to 27.01.2022 - 17247nos. Road length repaired in 2021-22, BT-50Km & CC-30Km, Road length recarpeted in 2021-22, BT-208.94Km & CC-288.91Km	maintaining of total road length of the city in 9013Kms	Regular Activity	No Deviation	regular maintaining of roads	Number Number	-	-	14	-	-	6
RD1.4	Blacktopping of metalled roads, including pavement of road shoulders.	193 No. BT road works with an amount of 61.02 Cr. Have been sanctioned, 65 works with an amount of Rs.65 works with an amount of Rs.19.51 Cr. Are completed, and the remaining works are under various stage.	193	31.3.2022	No Deviation	250	Number	-	-	6102	6102	1952	-
		Further government sanctioned an amount of Rs. 1839.00 Cr under CRMP for maintenance of 709.49km main roads (3 lane and above width) covering total GHMC area with a total of 401 stretches under 7 packages for 5 years with the agencies given the responsibility of overall upkeep and maintenance of all the road stretches in traffic worthy condition and works are under progress. 132.07 kms of BT road has been laid from the 1st quarter to till date (cumulative BT length laid till date is 498.34 km)	132.07	31.3.2022	No Deviation	209				118900	60210	60210	58690
RD1.6	Regular cleaning of the roads with mechanised sweepers and removing the silt from the roads	13 sweeping machines have been deployed by CRMP agency and 2,78,637km have been travelled by mechanical sweepers under comprehensive road maintenance programme (CRMP) during 1st quarter. Total serviceable road length (km): 2530 km. Road length under mechanical sweeping (km): 2530km (transport:1820 km + CRMP: 710 km) No of MRS deployed: 18(Hired)+ 17Nos. (Owned)+7 Nos.(CRMP) operating at 43 Nos. of road.	no of MRS required for daily cleaning of all serviceable roads to be provided:40Nos.(18+17+17), 17 machines are to be condemned, hence new procurement of 15nos. Mechanized sweeping machines is proposed.	Regular	No Deviation	-	Text	-	-	8085	8085	5075	1800
RD1.9	Introduce water fountain at major traffic intersection	No. of fountains constructed at major traffic intersection: 55 nos. during this year 2 No. fountain is developed.	No. of fountains at junction proposed to develop during 3rd quarter: 01 No.	31.3.2022	No Deviation	No. of fountains at junction proposed to develop during 3rd quarter:01 Nos.	Text	-	-	0.75	0.2147	0.0826	1
RD1.11	Prepare plan for widening of road and improvement of infrastructure for decongestion of road.	Works taken up under widening of roads - 49 (completed - 15, works under progress- 17, works to be started - 5, other stage-12) detailed report. SRDP project is taken up for development of infrastructure such as flyovers/underpasses/ROBs and RUBs for decongestion of roads. Works taken up: 70, works completed:25 works (12 flyovers, 04 underpasses, 05 ROBs/RUBs,01 Cable stayed bridge, others-3).	Target /probable date of completion attached	Varies from work to work as detailed in annexure RD1.10		It is proposed to complete 6 works by the end of financial year 2021 22	Number	-	-	30472lakhs	-	3,398.99 lakhs	27073.0 lakhs
RD2	Creation of green cover						Text						
RD2.2	Prepare plan for creation of green buffers along the traffic corridors	Traffic junction development by improving greenery: 58Nos. 1 Rotary is developed.	No. of new junctions to be developed:03	31.3.2022	No Deviation	No. of new junctions to be developed:03	Number			0.5	0.08	0.08	-
		GHMC 1. Steps Taken: Under TKHH Plantation Programme plantations has been taken up under Avenue Plantation component in GHMC area. 1. Upto September-2021 total 14.34 Lakhs Nos. Plantations is done. 2. From November-2021 to Dec-2021 14.893 Lakhs Nos. 3. Total 29.23 Lakhs plantation is done during this year.	target for plantation during 3dr quarter - 14.893 Lakhs(completed)	31.3.2022	No Deviation	completed and continue as regular actibity	Number & Text	-	-	20	12	5	8
		HMDA 1. Steps Taken: Under TKHH Plantation Programme plantations have been taken up under Avenue Plantation component in HMDA area. 2. No. of plantation took up: 62.18 lakhs	Target for plantation: 62.18 Lakhs	Annual	No Deviation	Target for plantation: 62.18 Lakhs			-	27	27	3.29	23.71
RD2.4	Greening of open areas, gardens, community places, schools and housing societies.	For pillars of 11 Flyovers the vertical gardens were developed 3No. Of Vertical Gardens developed during 2021-22.	No. of vertical gardens to be developed during 3rd quarter: 03 No.	31.3.2022	No Deviation	No. of vertical gardens to be developed during 3rd quarter: 01Nos.	Number	-	-	3	3	1.503	1
		No. of Parks developed:956 Nos.	No. of parks to be developed 10no.	31.3.2022	No Deviation	No. of new parks to be developed: 10Nos.	Number	-	-	15	12	7.33	-
		Traffic junction development by improving greenery: 58Nos. 1 Rotary is developed.	No. of new junctions to be developed:03	31.3.2022	No Deviation	No. of new junction to be developed: 03Nos.	Number	-	-	0.5	0.08	0.08	-

RD1	Road dust	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated	Funds released	Funds Utilized	Additional Funds Required
C&D1	Construction Activities						Number						
C&D1.1	Ensure transportation of construction materials in covered vehicles	Concessionaire engaged for the C&D Waste management project transport the C&D waste in tarpaulin covered carriages. Clause included in the concession agreement.	Regular Activity	-	No Deviation	Zero incidance	Text	-	-	-			
C&D1.2	Strict enforcement of CPCB guidelines for construction (use of green screens, side covering of digging sites, etc.)	As per the CPCB guidelies and also as per the conditions laid in Environmental Clearance issued by SEIAA (under category Air Quality Monitoring and preservation condition No.II (v)), the same are being followed and insisted while grant of building permission in addition to incorporating specific condition in the building permit order.	Regular Activity	-	-	-	Number	-	-	-	-	-	-
C&D1.4	Covering of construction site.	As per the CPCB guidelies and also as per the conditions laid in Environmental Clearance issued by SEIAA (under category Air Quality Monitoring and preservation condition No.II (v)), the same are being followed and insisted while grant of building permission in addition to incorporating specific condition in the building permit order for the built up area above 20,000 Sq.mts.	-	-	-	-	-	-	-	-	-	-	-
C&D1.8	Enforcement of Construction and Demolition Waste Rules	Regular inspections are being carried out to enfirce the C&D waste management. (104) instances of violations observed and lavied a total penalty of Rs. 184500 in this quarter.	Regulatory activity	regular	No Deviation	-	Text	No	-	-	-	-	-
		Engagement of consultant to improve the effectiveness of C&D Waste Management project	Regular Activity	Regular Activity	No Deviation	Regular Activity)	Text	-	-	-	-	-	-
C&D1.9	Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.	As per the conditions lead in environment clearance issued by SEIAA (under category transport condition No. VII), the same are being followed and instead insisted while grand of building permission for the builder area about 20000 Smts. Managed by the skilled labour and specialised equipment for housing project. GHMC adopted wet processing technology for C&D waste recycling the plant machineries are being operating within vast shed enclosure to restrict fugitive emission from activity. The concessionaire has installed sprinklers at the unloading bay of jeedimetla recycling facility to restrict the dispersion of dust.	Regular Activity	Regular Activity	Nil	Regular Activity)	Yes/No	-	-	-	-	-	-

VEHICLES										All funds details in INR crore			
VE1	**Improve and strengthen PUC programme**	**Present Status**	**Target**	**Target Date**	**Deviation from Approved**	**Annual Target**	**Field type**	**Attachment**	**Attachment Contents**	**Total Funds Allocated**	**Funds released**	**Funds Utilized**	**Additional Funds Required**
VE1.1	Number of PUC centers in the city	Out of total 249 stations, there are 50 fixed PUC Centres and 199 mobile PUC Centres in the Hyderabad City .	It is a regular activity	It is a regular activity	No deviation as it is a regular activity	It is a regular activity	Number	-	-	Nil			
VE1.2	Regular checking of Vehicular emission and issue of Pollution under Control Certificate (PUC)	I) Hyderabad: Enforcement checks on PUC Centres running with expired licenses are being seized and vehicles plying on roads without valid PUC Certificate are being fined . During the period, 277 cases have been booked for not having the PUC Certifications and Compounding Fee of Rs 13,92,360/- was collected in the quarter.	Periodic inspection programme	It is a regular activity	No deviation as it is a regular activity	It is a regular activity	Number	-	-	Nil			
VE1.4	Installation of remote sensor based PUC system, regular calibration of the checking instruments and online integration of the vehicle details with PUC	109 PUC Centres are online integrated.	Connecting remaining PUC centres	It is a regular activity	No deviation as it is a regular activity	It is a regular activity	-	-	-	Nil			
VE4	**Clean fuel and fuel Quality**	**Overall Grade (VE4.1+VE4.2.../Total points)**						-	-	-	-	-	-
VE4.1	Check on fuel adulteration and random monitoring of fuel quality data	Number of inspections conducted for assessing fuel quality (January,2022 to March,2022) : 65 Nos.	The Vehicular Emissions is partly connected to CS Dept and action plan to check fuel adulteration	Regular Activity	No	Number of inspections for assessing fuel quality: 696 Nos.	Number	-	-	-	-	-	-
VE4.2	Alternative clean fuel policy for vehicle	Alternate clean fuel policy yet to be notified • Number of Compressed Natural Gas (CNG) Outlets-82. Number of Liquefied Petroleum Gas (LPG) Outlets-54.	CNG policy to be approved	March 2022	Yes due to COVID	installation of Additional stations	Number (2)	-	-	Nil Gas Distribution suppliers	-	-	-
VE5	**Parking Management**	**Overall Grade (VE5.1+VE5.2.../Total points)**						-	-	-	-	-	-
VE5.1	Prevent parking of vehicles in the non-designated areas	Cyberabad Commissionerate 1. No. of challans issued for parking at non-parking areas:2894Nos.	Regular Activity	31.3.2022	No	Regular Activity	Number	-	-	-	-	-	-
		Hyderabad Commissionerate 1. No. of challans issued for parking at non-parking areas: 690822Nos.	Regular Activity	31.3.2022	No	Regular Activity	Number	-	-	5.01	2.52	2.52	-
		Rachakonda Commissionerate 1. No. of challans issued for parking at non-parking areas: 44447Nos.	Regular Activity	31.3.2022	No	Regular Activity	Number	-	-	1.44	0.64	0.64	-
VE5.2	Development of Multi-layer parking	1. The work for MLP at Nampally is in progress. 2. Tenders for construction of the MLP at Khilawath under DBFOT has been called. 3. Proposal for construction of (20) nos. of MLPs is submitted to Govt for approval.	No. of multilevel parking proposed to be constructed: 23 Nos.	2 years	Yes due to covid as the MLP is linked with the metro rail and the	-	-	-	-	-	-	-	-
VE6	**Government has prohibited 15 year old and above, Educational Institution buses, Public Service Vehicles, Stage Carriages and Contract carriages to ply in the area of Hyderabad, w.e.f. 1-11-2006.**	**Overall Grade (VE6.1+VE6.2.../Total points)**											
VE6.2	Assess and introduce a city bus system of appropriate fleet size of small buses and desirable bus type replete with GPS tracking, ETVMs for fare collection and Passenger Information Systems.	Small Buses Introduced 08 Minibuses were introduced from Gachibowli to Tondupalli. 1. No. of Employees deployed in the year 2021-2022:-21	Regular Activity	Regular Activity	Regular Activity	Regular Activity	Text	-	-	0.09	0.09	0.09	0
		GPS Tracking High End vehicles	1201 Buses are planned for GPS tracking	-	-	Installation of GPS tracking system - 1201	Number	-	-	12.97	0	0	12.97
VE6.6	CNG infrastructure for auto gas supply in the city and transition of public transport vehicles to CNG mode Introduction of e-buses for Public transport in metro cities	Transport dept: Number of Public Transport vehicles running on CNG - 132 and Electric Vehicles (Battery Operated) - 01(One) with respect to total no of Public Transportation Vehicles -517 TSRTC: 1) CNG is being supplied by M/s Bhagyanagar Gas Ltd a Joint Venture of HPCL and GAIL. The Supplies are made from a Mother station, Shameerpet to Online Mother station avaialble at Medchal Depot with pipe line distance of arund 9.0 KMs and through cascades to Daughter Booster Stations at Cantonment and Hakimpet depots. 2) CNG: 132 CNG buses are in operation from three (3) depots viz., Medchal, Hakimpet & Cantonment depots.	Regular activity	-	no deviation	-	Number (3)	No	Details on the steps	-	-	-	-

VE6.7	Steps for promoting battery operated vehicles like Erickshaw/ECart	Framed guidelines in 2017 for registration of E-rickshaw / e-Cart. As per G.O.MS.19, Tr.R&B (Tr.I) Dpt., Dt.07-07-2017, e-rickshaws and e-carts are restricted to ply on National Highways and GHMC limits. ii) Number of Autorickshaw -22, E-Rickshaw/E-Cart -01, Goods Carriages - 76, Motor Cab-4, Motor Car-136, Motor Cycle -1717 and all together 1956 battery operated vehicles in different categories are registered for the period .	It is a regular activity	It is a regular activity	No deviation as it is a regular activity	It is a regular activity	Text			Nil			
		1. Steps taken for setting up EV Charging station (attachment) 2. No. of Public EV Charging Station: 25 Nos 3. No. of total EV Charging Station to be setup FY 2025-26*: 196 No's (171 EVCS & 25 Battery Swapping Stations) 4. Upfront Electrical Infrastructure Cost for a) 3 No. of EVCS under Fame-I and b) 118 No's of EVCS under FAME-II in GHMC Limits along with c. Development of web Link and Mobile App for day to day operations.											
		2. Installation of 50 No's of EVCS in GHMC Limits by TSREDCO along with Web link and App development 3. Installation of 25 No's of Charging cum Battery Swapping Stations along with retorfitment of 250 No.s 3-Wheelers autos in GHMC Limits.											
VF7.	**Traffic Congestion**	**Overall Grade VE7.1+VE7.2../total**											
VE7.1	Conducting audit of traffic intersections and install functional traffic signals at all major intersections	1. Requirement study for ATSC & PSS completed. 2. Commissioning of 02 nos. of model junctions at Megha hills, Madhapur (ATSC) and Sarojini Devi Hospital (PSS) completed. 3. Foundation work completed for 40 nos. of ATSC junction and 01 no. of PSS. 4. O&M of existing signals is being carried by M/s. IBI group India Pvt Ltd under HTRIMS project.	Time Lines as enclosed	17.09.2022	-	-			1. Brief Note on status				
VE7.2	Synchronize traffic movements/Introduce intelligent traffic system for lane-driving	Cyberabad Police Commissionerate: The Traffic Signals in GHMC limits of Cyberabad Commissionerate are synchronized under HTRIMS (Hyderabad Traffic Integrated management System) IBI O&M (Operations and Management) including Hyderabad and Rachakonda Commissionerate. ITMS project has been extended in Cyberabad Commissionerate in (7) stretches with (28) locations and (32) VMBs. The objective of ITMS is to model a highly complex, city wide ITMS that can automate the process of traffic management by predicting the optimal traffic routes, traffic signal junctions, minimizing the traffic congestions and waiting times, integrating with emergency services such as ambulances, fire vehicles, etc., modelling external factors and city road network topology, VIP movement clearances best possible traffic routing; optimizing traffic junction signals and disseminating the traffic information, guidance, and awareness to the citizens and road users. Traffic policemen at signal and bottleneck spots co-ordinate with the help of VHF man pack to synchronize traffic movements.	Based on regular interval assessment	As Regular Activity	No	-		no	2. Project Timelines	Status and project timelines	59.86 Cr	15 Cr	
		Hyderabad Police Commissionerate At present hyderabad traffic integrated management system signal system regulating traffic in hydetabad city. Soon Intelligent traffic management system will replace HTRIMS. Hyderabad city-wide integrated & integent traffic management system (ITMS) is aimed at providing a universal view of traffic flows; modeling traffic flow optimization; best possible traffic routing; optimization;best traffic routing; optimizin traffic junction signals and disseminating the traffic information and awareness to the citizens and road users.	Based on regular interval assessment Rachakonda Police Commissionerate:	As Regular Activity	No	Procurement of (10) VHF Man pack sets	Text	-	-	0.013	0.013	0.013	0.013
		Rachakonda Police Commissionerate: The Traffic Signals in GHMC limits of Rachakonda Commissionerate are synchronized under HTRIMS (Hyderabad Traffic Integrated management System) including Hyderabad and Cyberabad Commissionerates.ITMS project has been extended in Rachakonda Commissionerate in (4) stretches with (23) locations and (09) VMBs.	Based on regular interval assessment	As Regular Activity	No	Regular Activity VHF Manpack: 100 Nos	Text	-	-	-	-	-	0.08
VE7.3	Prepare plan for construction of diversion ways/ bypasses to avoid congestion due to nondestined vehicles.	Nehru Outer Ring Road of 168 km, 8 Lane expressways encircling the city is constructed to bypass the non-destined vehicles	Regular Activity.	As Regular Activity	No	Regular Activity	Number (2)	-	-	-	-	-	-

VE8	Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	TS RTC Public awareness campaigns are being conducted during Road Safety Programmes by Transport Department and by all stake holder departments.	Continues as regular activity	-	no deviation	-	Number	No	-	-	-	-	-
		Cyberabad Commissionerate: 1. Awareness campaigns are conducted at Traffic Training Institute, Cyberabad, Traffic Awareness in Mobile vans and the staff visits all Educational institutions i.e. Schools, Colleges, Auto and Cab centres and conducts traffic awareness programmes participants have been organized by Cyberabad Traffic Police. 2. Cyberabad Traffic Police is also creating awareness among the commuters through our social media platforms viz., Twitter media apps (https://twitter.com/cyberabadpolice), & Facebook page (https://www.facebook.com/cyberabadtpBarricades)											
		Hyderabad Police Commissionerate 1. Awareness campaign was conducted at Traffic Training Institute, Goshamahal & Begumpet by Hyderabad Traffic Police. 2. Hyderabad Traffic Police is also creating awareness among the commuters at Traffic Training Institutes and through our social media platforms viz., Twitter handle (https://twitter.com/HYDTP), facebook page (https://www.facebook.com/HYDTP) 3. (13) Nos. of Big VMS Boards Multi Colour installed at various places in Hyd City by Bharath Electronic Ltd @ Rs 22 Lakh (approx) each under ITRIMS Project. (66) small VMS boards single colour installed at various places in Hyd City under ITMS project @ Rs 12 Lakh (approx) each. 4. Procured 1300 Nos. of cones for lane discipline in Rs. 9.88 Lakh in July'21											
		Rachakonda Police Commissionerate 1. Awareness campaign was conducted in FY 2021-22 with 33,900 Nos. of participants by Rachakonda Traffic Police. 2. Rachakonda Traffic Police is also creating awareness among the commuters at Traffic Training Institutes and through our social media platforms viz., Twitterhandle ,Facebook page 3. 09 Nos. of VMS board erected for dissemination of information to public	Equipment are procured based on regular interval assessment	Regular Activity	No								
VE11	**Phase out old vehicles and vehicle scrappage policy**	**Overall Grade (VE11.1+VE11.2.../Total points)** In GHMC total (306) nos. of vehicles are condemned and out of which (188) nos. are sold out as scrap by dismantling the vehicles, and remaining vehicles are in the process of phasing out					Yes/No						
VE11.2	Restriction on plying and phasing out of 15 years old commercial diesel driven vehicles	Government has prohibited 15 year old and above, Educational Institution buses, Public Service Vehicles, Stage Carriages and Contract carriages to ply in the area of Hyderabad, w.e.f. 1-11-2006.	Regular Activity	As Regular Activity	no deviation	Regular Activity	Numbers (2) & Text	No	-	-	-	-	-
VE11.3	Launch extensive drive against polluting vehicles for ensuring strict compliance	Cyberabad Commissionerate: Smoke Pollution Cases: i. Total no. of cases Registered in FY 2021-22 :205 Nos. ii. Total amount of penalty imposed in FY 2021-22: Rs. 1.74 Lakhs	Regular Activity	Regular Activity	No	Regular Activity	Numbers (2)	No	-	-	-	-	-
		Hyderabad Commissionerate: Smoke Pollution Cases: i. Total no. of cases Registered in FY 2021-22 :552 Nos. ii. Total amount of penalty imposed in FY 2021-22: Rs. 5.52 Lakh						No	-	-	-	-	-
		Rachakonda Commissionerate: Smoke Pollution Cases: i. Total no. of cases Registered in FY 2021-22 :219 Nos. ii. Total amount of penalty imposed in FY 2021-22: Rs. 2.09 Lakhs						No	-	-	-	-	-
VE11.4	Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-VI fuels are available.	The retrofitting models are yet to be evaluated by the GoI for implementation in the state. The implementation will by commenced with the approval of the technologies for retorfitment	-	Based on availability of approved technology	-	-	Number(2)	NO	-	-	-	-	-

	conversion of public transport and educational institute's buses and taxis to clean fuel	Only registration of BS VI vehicles are permitted from 01.04.2020	It is a regular activity	It is a regular activity	No deviation as it is a regular activity	It is a regular activity				Nil				
	dis-incentivizing the growth of vehicles	Rs.162.26 Lakh on collection of tax on second vehicles	It is a regular activity	It is a regular activity	No deviation as it is a regular activity	It is a regular activity				Nil				
VE11.5	To increase fine on vehicle owners (not drivers) where the visible smoke is emitted and noticed.	Cyberabad Police Commissionerate: Efforts are being made to impose penalty on owner rather than driver. Images are being captured through digital cameras and e-challan is generated against the violators and communicated to vehicle's owner	Regular Activity	Regular Activity	No	Purchase of Iron Barricades: 100 Nos.	Number	-	-	-	-	-	-	
		Hyderabad Police Commissionerate: Efforts are being made to impose penalty on owner rather than driver. • Images are being captured through digital cameras and e-challan is generated against the violators and communicated to vehicle's owner. • Barricades are strategically placed to slow down the vehicles during check-up drives	Regular Activity	Regular Activity	No	Purchase of Iron Barricades: **100 Nos.**	Text					0.1 (@ Rs.10,000)		
		Rachakonda Police Commissionerate: Efforts are being made to impose penalty on owner rather than driver. • Images are being captured through digital cameras and e-challan is generated against the violators and communicated to vehicle's owner.												

INDUSTRIES													
IP1	**Industrial air pollution control**	**Present Status**	**Target**	**Target Date**	**Deviation from Approved Action Plan Target**	**Annual Target**	**Field type**	**Attachment**	**Attachment Contents**	**Total Funds Allocated**	**Funds released**	**Funds Utilized**	**Additional Funds Required**
IP1.1	To intensify monitoring of industries to reduce of emission by the industries.	53 Industries are using PNG	Regular activity	Continuous activity	No deviation		Number	Yes Annexure-IP 1.1	list of Industries using PNG enclosed				
IP1.2	Action against non-complying industrial units	8no. Number of show cause notices and closure notices issued for this quarter(Jan-March,2022). 1No. Industri closure issued & 7No. Industries directions issued.	Regular activity	Quarterly	No deviation	TSPCB is taking regular action on all noncomplying industries,	Number (2)	Yes Annexure IP 1.2	**List of industries enclosed** Closure-2no, Directions-40no				
IP1.3	Shifting of Polluting Industries	Infrastructure facilities have been already developed in all the three industrial parks i.e. Indrakaran, Buchinelly and Rakamcherla	Policy Declared by the Government and is under implementation	Regular	No deviation	Continuous	three facilities developed and shifting modalities are under proces						
IP1.4	Ban on Polluting Industries	No polluting industry is being permitted	Ban is under implementation since 1998	Continuous activity	No deviation	Continuous	Number		**Hyderabad & Patancheruvu :** Already under implementatio n and continuing				
IP4	**Clean fuel in industries**												
IP4.1	Introduction and shifting towards cleaner fuels in industries	Sending introductory mail along with BGL company profiles to industries Regular interaction with industrial associations and individual industrial unit officials Providing information's regarding the tangible and non-tangible benefits to industries for the use of piped natural gas (PNG) for industrial applications.	53 Industries are using PNG	Long term	No deviation	Continuous activity	Yes	-	list of industries using natural gas				
IP4.2	Conversion to CNG/PNG from pet coke /wood / coal and urgent ban on furnace oil, pet coke, which are dirty industrial fuels with high sulphur and heavy metals	Under implementation. The pipeline works pertaining to gas supply are in progress.	-	Long term	No deviation	Being implemented	Yes	-	Details of the industries				
IP4.4	Establish a protocol for using cleaner fuels & technology in industries	Under process, CNG policy meeting held between oil industries and user industries such as pharma,steel,iron and cement industries.	-	Long term	No deviation		Yes/No	Yes	TSPCB-medchal, rangareddy & patancheruvu Being Implemented				
IP5	**Control of air pollution from Brick kilns**												
IP5.1	Adapting new technologies for Brick kilns	1. A communication letter sent to respective regions district collector stating that stipulate a condition that natural draft will not be allowed and only induced draft will be permitted for the brick kilns. ii. Communication sent to Reputed Technical Institutes based in Hyderabad for Expression of Interest for mobile/modular technology –Developing a cost effective air pollution control equipment for Brick kilns.	-	-	No deviation		Number (2)						
IP5.2	identification of brick kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.		-	-	No deviation		Yes/No	Yes	Details on the action undertaken				
IP5.3	Conversion of natural draft brick kilns to Force/ induced draft.		-	-	No deviation		Number (2)						
IP5.4	Closure of unauthorized units by seeking the possibility for shifting of kilns outside corporation limits		-	-	No deviation		Number (2)						
IP5.5	Prescribe design specifications for improved kilns and ensure compliance checking to know that conversion has actually taken place.		-	-	No deviation		Yes/No	Yes	Details on the action undertaken				
IP11	**Control of air pollution from generator sets**												
IP11.1	Allow only DG sets meeting emission and design of chimney/ exhaust, acoustic enclosures standards to operate	Condition is being incorporated in the consent order for implementation.	-	-	No deviation		Yes/No	Yes	The units have provided acoustic enclosures with chimneys/ exhuast to the DG Set for control emissions.				

WASTE AND BIOMASS- DUMPING AND BURNING

BB1	Biomass Burning	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated	Funds released	Funds Utilized	Additional Funds Required
BB1.1	Regular check and control of burning of municipal solid wastes	Regular enforcement were carried out by the enforcement team.	No incidence of Waste Burning	Regular	no deviation	No Incidence	Awareness	No	N/A	N/A			
BB1.2	Defaulters for open burning to be imposed fines	Penalty are imposing on violators. 01 incident of biomass burning reputed and Rs.2000 penalty was lavied	No incidence of Waste Burning	Regular	no deviation	No Incidence	Enforcement	No	N/A	N/A			
BB1.3	Identify Garbage burning locations and	No Locations at present.	No such Locations.	Regular	no deviation	No such Locations.	Monitoring	No	-	N/A	-	-	-
BB1.4	Prohibition/complete ban on garbage burning.	Circular issued	No incidence of Waste Burning	Notification issued	no deviation	No Incidence	Enforcement	-	Circular copy No. SWM/0183/EESWM/GHMC, Dt.	N/A	-	-	-
BB1.5	Launch extensive drive against open burning of bio-mass, crop residue, garbage, leaves, etc.	IEC & BCC experts have been engaged for developing the awareness program to cover all the stakeholder involved in handling of segregated MSW.	No incidence of Waste Burning registered	Regular	no deviation	No Incidence	IEC	-	-	N/A	-	-	-
BB1.7	Regular collection and control of municipal solid wastes.	100% waste generated has been collected. Avg. 6503 TPD MSW was collected and processed.	100% Collection and Transportation of waste.	Regular	no deviation	100% Collection and Transportation of waste.	Collection and Transportation	-	Details of Infrastructure	-	-	-	-
BB1.8	Providing Organic Waste Compost machines , decentralization of processing of Waste, dry waste collection centers.	1. In 406 Nos parks compost pits are provided for generation of compost from Horticulture waste. 2. 82 No of DRCs are established through ITC.	Converting wet waste into compost	Regular	no deviation	Converting wet waste into compost	Composting	-	-	-	-	-	-
BB1.9	Awareness for controlling of burning of agricultural waste and crop residues.	No information provided	-	-	no deviation	-	-	-	-	-	-	-	-
BB2	Ensure segregation of waste at source	IEC & BCC experts have been engaged for developing the awareness program to cover all the stakeholder involved in handling of segregated MSW	Segregation at Source by Maximum no. of House Holds.	Regular	no deviation	Segregation at Source by Maximum no. of House Holds.	Awareness	Annexure BB2	IEC & BCC experts have been engaged for developing the awareness program to cover all the stakeholder involved in handling of segregated MSW	-	-	-	-
BB3	Proper collection of Horticulture waste and its disposal following composting-cumgardening approach	Composting in most of the parks with special emphasis on Major Parks with an optimistic thought to prepare compost in situ with the garden and market waste. 482 compost pits in colony parks and other major parks has been taken up and completed.	100% collection of Horticulture waste	Regular	no deviation	100% collection of Horticulture waste	Collection of waste	-		-	-	-	-
BB4	Recycling plants for dry waste.	50 MT capacity plastic recycling plant is established and in operation at the Centralized T&P plant at Jawaharnagar.342 MT of the plastic recycled in this quarter	-	-	no deviation	-	Recycling	Yes	Details provided in BB1.6 Component	Fund for the construction and operation of the recycling plant are being utilized from the			
DF1	Domestic Fuel												
DF1.1	Increasing the LPG connections in low income strata.	LPG Penetrartion in the State of Telangana is 121.46%. 113.63 Lakhs LPG connections which Includes Deepam & PMUY connections in almost all BPL families	Regular activity	continues activity	no deviation	continues activity	Number (2)	Yes DF 1.1 and 1.2	Number of LPG connectiosn list	-	-	-	-
DF1.2	Ensuring promotion and use of cleaner fuel (i.e. LPG) instead of coal fired chulas or fire-woods in the hotels and open spaces	Continuously LPG Non-Domestic Connections relaesed to Commercial establishments In GHMC area 20047 Connections are avaialble.	Regular activity	continues activity	no deviation	continues activity	Text	Yes DF 1.1 and 1.2	Number of LPG connectiosn list	-	-	-	-
DF1.3	Introduce schemes for providing subsidized LPG connections as well as providing means of finance to small tea vendors/hawkers using kerosene stoves in order to reduce emissions from burning of kerosene	Steps taken					Text	Yes	Details on the scheme	-	-	-	-
DF1.6	Ensure easy availability of affordable cleaner cooking fuels (LPG in urban areas & biogas in rural areas)	Steps taken					Text	Yes	Details on the steps	-	-	-	-
DF1.8	Implemen tation of Pradhan Mantri Ujjwala Yojana (PMUY)	Under PMUY 10.72 Lakhs connections are released in the State of Telangana effective 14th April,2018.	Regular activity	continues activity	no deviation	continues activity	Text	No	-	-	-	-	-
DF1.9	Shift to LPG from solid fuel & kerosene for domestic applications	As of Q4 of 2020-21 total 1.13 Crs LPG Connections are released in TS which is 121.46% penetration as per prorata House Holds.	-	continues activity	no deviation	continues activity	Number	Annexure-DF1.9	Number of LPG connections list	-	-	-	-
DF1.10	Use of LPG in Bakeries	On continuous basis Non-Domestic LPG connections are relaesed by Oil Cos. Pl refer attchment.	Regular activity	continues activity	no deviation	continues activity	Number (2)	Annexure-DF1.9	On continuous basis Non-Domestic LPG connections are relaesed by Oil Cos.	-	-	-	-
DF1.11	Adopting Better construction practices with PM reduction of 50%	Steps taken					Text	Yes	Details on the steps	-	-	-	-

AIR QUALITY DATA

Action Code	Action Point	Field type	Attachment	Attachment Contents (Hyderabad)
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average PM2.5 sheet attached.
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average PM10 sheet attached.
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average SO2 sheet attached.
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average NO2 sheet attached.
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	Yes	36
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	Yes	97
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	4.9
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	30.3
AQ1.9	Monthly Meterological Data		Yes	Monthly averages of Meterological parameters

Action Code	Action Point	Field type	Attachment	Attachment Contents (Patancheruvu)
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average PM2.5 sheet attached.
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average PM10 sheet attached.
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average SO2 sheet attached.
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April'2021 to March'2022 the monthly average NO2 sheet attached.
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	Yes	37
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	Yes	77
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	6.9
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	27.6
AQ1.9	Monthly Meterological Data		Yes	Monthly averages of Meterological parameters

AIR QUALITY DATA

	Hyderabad														
Action Code	**Action Point**	**Field type**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Nov-21**	**Dec-21**	**Jan-22**	**Feb-22**	**Mar-22**	**Attachment Contents**
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	44	24	19	15	18	17	40	47	64	51	47	49	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	130	69	61	57	61	52	99	101	134	137	131	135	
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	4.7	3.6	4.2	4.4	5.0	5.0	5.5	5.2	4.9	5.0	5.7	5.9	
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	37.5	30.4	26.5	23.8	26.7	25.4	31.3	32.2	33.3	31.8	32.1	32.1	
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	36												
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	97												
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	4.9												
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	30.3												
AQ1.9	Monthly Meterological Data														Monthly averages of Meterological parameters

	R.C.Puram														
Action Code	**Action Point**	**Field type**	**Apr-21**	**May-21**	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**	**Nov-21**	**Dec-21**	**Jan-22**	**Feb-22**	**Mar-22**	**Attachment Contents**
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	-	-	-	-	-	-	37	36	31	34	36	45	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	93	56	60	67	64	64	83	92	83	86	84	92	
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	5.3	4.8	5.2	5.7	6.9	7.6	8.3	8.2	6.6	7.6	7.5	8.6	
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	27.6	22.4	25.0	25.2	27.3	27.5	29.6	29.5	26.5	28.4	28.8	33.6	
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	37												
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	77												
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	6.9												
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	27.6												
AQ1.9	Monthly Meterological Data														Monthly averages of Meterological parameters

Annexure-IV

FORMAT FOR SUBMISSION OF INFORMATION ON PROPOSED ACTION PLANS FOR "RESTORATION OF POLLUTED WATER BODIES (LAKES AND PONDS)" IN COMPLIANCE TO HON'BLE NGT ORDERS DATED 10.5.2019 & 25.02.2020 IN O.A. NO. 325/2015

<table>
<tr><th>S. No</th><th>Content</th><th></th><th></th></tr>
<tr><td>1</td><td>Name of the State/UT</td><td>:</td><td>Telangana State</td></tr>
<tr><td></td><td>Contact Details (Department-wise)</td><td>:</td><td>
<table>
<tr><th>Name of the State/UT Department</th><th>Name of the Nodal Officer</th><th>Contact Tel. No</th><th>Mobile No.</th><th>E.mail</th></tr>
<tr><td>HMWS&SB</td><td>Mr. D. Sridhar Babu Dir (P-2)</td><td>040-23442881</td><td>9908639888</td><td>sridhardammuhmwssb@gmail.com</td></tr>
<tr><td>I&CAD</td><td>Sri M.A. Hameed Khan,CE, Minor Irrigation</td><td></td><td>9701362416</td><td>cemikbts@gmail.com</td></tr>
<tr><td>HMDA (L&P)</td><td>Sri Krishna Rao, EE</td><td></td><td>9849909794</td><td>ee-lp@hmda.gov.in</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>2</td><td>Information on water bodies such as Lakes & Ponds</td><td></td><td>
<table>
<tr><th rowspan="2">Type of Water Body</th><th rowspan="2">Total No. of Water Bodies Identified</th><th colspan="2">Ownership of Identified Water Bodies (Indicate No. Of Water Bodies)</th><th colspan="3">Status On-going Restoration of Water Bodies with Financial Support from NRCD/MoJS/with own resources of the State/UT</th></tr>
<tr><th>Government</th><th>Private/ Individual</th><th>Total No. of Water Bodies Selected for Restoration</th><th>Total No. of Water Bodies restored so far</th><th>Total No. Of Water Bodies presently under restoration</th></tr>
<tr><td>Lakes / Ponds</td><td>46,697</td><td>46,697</td><td>--</td><td>30,297</td><td>23,735</td><td>6562</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Whether water bodies are geo-tagged/ provided with Unique Identification Number (UIN)</td><td>:</td><td>Yes, the Geotagging of 44,672 water bodies has been completed.</td></tr>
<tr><td>4</td><td>Major causes of pollution in identified water bodies (Improper disposal of Sewage / Industrial effluent / Waste like Municipal Solid Waste / Hazardous waste / Plastic waste / Construction & Demolition Waste)</td><td>:</td><td>Improper disposal of Sewage (√)
Waste like Municipal Solid Waste (√)
Plastic waste (√)
Construction & Demolition Waste (√)</td></tr>
<tr><td>5</td><td>Other Problems Associated with the Identified Water Bodies
(Silting/Weeding/Encroachments/No Provision of inflow or outflow control measures/ Poor Embankment/Poor Watershed Management in Catchment/No Adequate Buffer Zone / any other)</td><td>:</td><td>Silting (√)
Poor Embankment (√)</td></tr>
<tr><td>6</td><td>Water Quality Compliance Status of Identified lakes, and ponds in the State/UT</td><td>:</td><td>
<table>
<tr><th rowspan="2">Type of Water body</th><th rowspan="2">No. of identified water bodies</th><th rowspan="2">No. of Water Quality Monitoring Stations</th><th colspan="3">No. of Water Bodies complying to</th></tr>
<tr><th>Primary Water Quality Criteria for Bathing</th><th>Drinking Water Quality Criteria after Conventional Treatment</th><th>Water Quality Criteria for Agriculture/ Fishing/Any other criteria</th></tr>
<tr><td>Lakes / Ponds</td><td>235</td><td>235</td><td>13 (Class B)</td><td>Nil (Class C)</td><td>43 (Class D)
128 (Class E)
51 (Dry)
(Annexure-A)</td></tr>
</table>
</td></tr>
</table>

<table>
<tr>
<td>7</td>
<td>Proposed Water Body-wise Action Plans for restoration of prioritised water bodies with timelines and implementing agencies</td>
<td>:</td>
<td>(Pl. attach water body-wise details as per Annexure-I)
<table>
<tr><th>Departme nt</th><th>Total No. of lakes</th><th>Name of the programme</th><th>Sanction ed program mes</th><th>No. of programm es completed</th><th>Ongoing / under process</th><th>Yet to be complet ed</th></tr>
<tr><td rowspan="4">Minor Irrigation Dept.</td><td rowspan="4">46531* (included HMDA lakes-2947, GHMC-19)</td><td>1. Mission Kakatiya (MK)</td><td>27625</td><td>21436</td><td>6189</td><td rowspan="4">16240</td></tr>
<tr><td>2. Repair, Renovation Restoration Programme (RRR)</td><td>1484</td><td>1117</td><td>367</td></tr>
<tr><td>3. Telangana State Community Based Tank Management Programme (TSCBTMP)</td><td>1182</td><td>1182</td><td>Nil</td></tr>
<tr><td>Total:</td><td>30291 (A)</td><td>23735 (A)</td><td>6556 (A)</td><td>16240 (A)</td></tr>
<tr><td>GHMC</td><td>166</td><td>Corporate social responsibilit y</td><td>6 (B)</td><td>0 (B)</td><td>6 (B)</td><td>6 (B)</td></tr>
<tr><td>Grand total:</td><td>46697</td><td></td><td>30297 (A+B)</td><td>23735 (A+B)</td><td>6562 (A+B)</td><td>16246 (A+B)</td></tr>
</table></td>
</tr>
<tr>
<td>8</td>
<td>Any other relevant information</td>
<td>:</td>
<td>Water bodies taken up under Mission Kakatiya for restoration i.e., de-siltation, bund strengthening, feeder channels, sluice repairs, weir repair, irrigation channels.</td>
</tr>
</table>

Annexure-IV

(Pl. Provide Following Details Water Body-Wise)

1	Location details of the Water Body (Address with GPS location)	:	• **As per the data provided by stake holder departments, there are 46,697 lakes in the State of Telangana, out of which 30,297 lakes are sanctioned for taking up restoration programmes under various schemes.** • **44672 lakes are geo-tagged, 1240 lakes geo-tagged and are at approval stage, 619 lakes yet to be geo-tagged.** • **The lake wise information pertaining to Sl.No.1 to 11 is submitted to CPCB.**
2	Details of Area and Dimensions of the Water Body	:	
3	Water Depth (in m) (During monsoon and non-monsoon period)	:	
4	Ownership of the water body	:	
5	Allocated Unique Identification Number (UIN)	:	
6	Details on Habitat (Surrounding Areas/towns with population and no. of industries in the surrounding area /industrial estates in the catchment of pond or lake)	:	
7	Details on inflow/outflow, evaporation, flooding frequency, magnitude of flow into the water body	:	
8	Major Plant and Animal communities present in the water body	:	
9	Designated Use of Pond or Lake (Drinking/Irrigation/Aqua Culture/Tourism/ Protected Bio-diversity	:	
10	Major Drains outfall into Water Body	:	
11	Physical condition of the water Body	:	
12	Water Quality of Water Body **(w.r.t** pH, Temperature, Turbidity; BOD, COD, DO, Salinity; Dissolved Gases; Dissolved or Suspended Nutrients; Dissolved Organic Carbon; Conductivity, Heavy Metals and Faecal Coliform)	:	**Water Quality Data of 235 lakes /ponds monitored by TSPCB is attached along with water quality classification. (Class A-Nil, Class B-13, Class C-Nil, Class D-43, Class E-128, Dry -51)**
13	Proposed Action Plans with action-wise implementing agency, estimated cost and timelines for completion		

14	Status of Sewage Management in the Catchment area	:	Total sewage inflow into the water body (in MLD)	Existing Sewage Treatment Capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementing Agency, Estimated Cost and Time lines for completion
			1800(*)	735	1065	62 Nos.	1065	HMWSSB/ Rs.5000cr (appx)
			(*) : Pertains to Greater Hyderabad Municipal Corporation & within the Outer Ring Road					

15	Status of Industrial Effluent Management in the Catchment area	:	Total Industrial Effluent Inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Treatment Capacity (in MLD)	Implementing Agency, Estimated Cost and Time lines for completion
			Total waste water generated from the industries – 603 MLD	Captive – 593 MLD, CETP-6.3 MLD	Nil	1	0.48 MLD	TSIIC Timeline-Oct., 2020

16	Waste Management in the Catchment area of water body	:	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal Facilities and Capacity in the catchment area (in TPD)	Gap in Treatment and Disposal of Waste in the catchment area (in TPD)	Proposed No. of Facilities and their (in TPD)	Implementing Agency, Estimated Cost and Time lines for completion
			MSW	6,125	1 Integrated SWM facility with 6500 TPD capacity	Nil	—	--
			HW	-	-	-	-	-
			BMW	-	-	-	-	-
			C & D	1000 TPD	1 No. 750		1 No	GHMC

				Approx in GHMC area	TPD		proposed with capacity 750 TPD	One year
			Plastic	500 TPD which is part of MSW	1 Integrated SWM facility with 6500 TPD capacity	--	--	--
17	Additional Measures (Pl. indicate action-wise implementing agency, estimated cost and the timelines for completion)		I & D of Sewage/Industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains: Silt control measures in natural drains contributing to inflow; Inflow and outflow flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching); In-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options); Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programme; Public Participation for Cleaning of surroundings, any other actions				

Annexure-V

TELANGANA STATE MINERAL
DEVELOPMENT CORPORATION LIMITED
(A State Government Undertaking)
An ISO 9001: 2015 Corporation

Department of Industries & Commerce
Government of Telangana
6-2-915, HMWSSB Premises, Rear block,
3rd Floor, Khairatabad, Hyderabad - 500 004. T.S.
Off: 040-23323150, Fax: 040-23373155,
Email: tsmdcltd@gmail.com; mdcltd@telangana.gov.in
www.tsmdc.telangana.gov.in
The CIN of the Company is U14220TG2014SGC095923

Ref: TSMDC/GM (Sand)/140/2019/28

Date: 11.04.2022

To
The Member Secretary,
Telangana State Pollution Control Board
Paryavarana Bhavan, A-3,
Industrial Estate, Sanathnagar,
Hyderabad-500 018

Dear Sir,

Sub: EFS&T Dept- Hon'ble NGT, New Delhi - Original Application No.606 of 2018- Compliance of SWM, C&D, PWM, BMWM Rules, 2016- submission of 4th quarterly report on sand mining- Reg.

Ref: 1. Mail received from TSPCB on 11.04.2022.

****

I invite perusal to the subject and reference cited, and inform that TSMDC is only entity to excavate, store and sell the sand in the state of Telangana and I am herewith furnishing report on 4th quarterly status from January-2022 to March-2022.

Current status	Desirable level of compliance in terms of statues	Gap between current status and desired levels	Proposal of attending the gap with timelines	Name and designation of designated officer for ensuring compliance to provisions under statute
I) De-siltation De-siltation of reservoirs. 1 Medigadda Barrage 2. Annaram Barrage	Prepared a) Scientific Study report on impact of de-siltation conducted in 3 areas where de-siltation is taken up. i. Medigdda Barrage ii. Annaram Barrage iii. Mid- Maneru Project b) District Survey Report for 9 Districts where	No gap	------	General Manager (S&M)

	sand is available for extraction. i. Jayashankar Bhupalpally ii. Mulugu iii. Bhadradri Kothugudem iv. Karimnagar v. Peddapalli vi. Suryapet vii. Rajanna Sircilla viii. Gadwal ix. Mancherial			
II) Extraction from sand bearing areas. a) Total sand bearing areas received EC/CFO/CFE b) Total Sand bearing area received ECs and waiting for CFO/CFE c) EC/CFE/CFO is yet to be receive	EC,CFE & CFO required to operate sand bearing areas . 72 5 26 (4 sand reaches are not feasible)	The sand bearing areas with EC/CFE/CFO only will be operated	26 reaches required EC, and will be obtained by May-2022	
III) de-casting pattalands **No. 52**	De-casting of pattalands abutting to river does not require EC as per sustainable Sand Mining Management Guidelines.	No gap	-----	
IV) Compliance to other issues **a)** Issuing waybills with security stationary & barcode.	Complied	No gap		
b) issuing way bills through online portal (SSMMS)	Complied	No gap		
c) Daily quantities keeping in the online to enable the customers to book sand.	Complied	No gap		
d) Daily reports about sand extraction and dispatches	Complied	No gap		

e) In case of vehicle breakdown the validity of waybill shall be extended in the online	Complied	No gap		
f) The validity of transport permit can be checked using website and android application.	Complied Sand App	No gap		
g) Geo-tagging of vehicles transporting sand	1)Geo tagging of vehicles carrying bulk sand for sand irrigation & Double Bed room houses completed 2) GPS tagging is under progress for sand transportation lorries for general bookings	Installed Till now 9107 lorries installed GPS	1 month	
V) All sand extracting areas fixed boundaries with geo-co-ordinates	Complied	No gap		
a) In some of the reaches way bridges have to be setup.	Installed 28 weighbridges		As and when reaches become operational weighbridge will be established	
b) CC cameras have to setup in some sand reaches.	Installed CC cameras in 69 sand reaches.		As and when new reaches start CC cameras will be installed accordingly	

Thanking you,

Yours faithfully

(Dr. G. MALSUR)
Vice Chairman & Managing Director

Copy to: Director of Mines & Geology, Telangana, Hyderabad for information

ANNEXURE-VI

Status of Sewage Management in Telangana state:

Sl.No.	Action Point	A	B	C=A-B	D
		Existing Status	**Desired / Projected**	**Gap**	**Timeline**
1.	Estimated Sewage Generation	2750 MLD	3870 MLD	1120 MLD	-
2.	Treatment Capacity (Projection for 05 Years to be taken into consideration)	899.55 MLD	3778 MLD	2878 MLD	HMWS&SB has undertaken sewerage master plan for a proposed total sewerage treatment plant capacity of 2073 MLD at 62 locations. Identifications of location and allocation of land for construction of STPs is in progress. Public Health dept, prepared tentative plan for construction of STPs at 134 towns in the state for 10 years and will be taken up as per the availability of funds.
3.	Status of Sewerage System (in Km)	100% coverage in GHMC area. Sewerage service area: 169.19 sq.km No of sewerage connections: 491989 nos. Population 2018: 47.67 lakhs Population 2021: 50.44 lakhs Length of sewer main: 5767.05 km Length of 600 mm dia &: 612 kms	8218 km., in other ULBs except GHMC.	7543 km., in other areas.	Sewerage master plan is proposed to be implemented.

		above			
		Trunk mains	172.05 kms		
		Lateral & sub mains	4958 / 6083.41 kms		
		No of manholes	274219 / 235173		
		675.10km. in other ULBs			
4.	No. of STPs	32 STPs are provided.	100% treatment of the sewage generated	--	The details of STPs existing and proposed are enclosed.
5.	Has bulk users identified for reuse of treated Water such as Industrial Clusters, Metro Rail, Indian railways, Infrastructure Projects, Agriculture, Bus Depots and PWD ? (Y/N)	Yes	-	-	The Bulk users are addressed letters to use recycled treated water in lieu of potable water / ground water. Instructions issued to Municipalities wherever STPs are located to utilize the treated waste water for Horticulture and industrial
6.	Quantity of treated wastewater being used by Bulk User (in MLD)				
	Industrial Clusters,	There are 4 CETPs with a total capacity of 7 MLD. Presently, part of the treated effluents from one of the CETP is being used by the member industries.	-	-	The TSPCB is encouraging the industries to re-used the treated water from CETPs for their non process requirement.
	Metro Rail,	HMRL is having two recycling units with a capacity of 50 KLD each. The same is utilized for washings of wagons and	HMRL is recycling 100% of sewage generated in their	-	HMRL was addressed a letter to use the treated recycled water from STPs for their gardening purpose.

		gardening within their premises.	premises.		
	Indian Railways,	1300 KLD STPs are available	All the major Railway stations have to install STPs.	-	The treated waste water is being reused for washing and gardening purpose.
	Infrastructure Projects,	344 nos. of infrastructure projects have STPs of capacity 54.63 MLD.	As per the norms of GHMC/HMDA all the construction projects having more than 50 flats should have STPs.	Providing a concession of 50% of sewerage cess to those premises who have STPs.	The treated waste water is being reused for flushing and gardening purpose.
	Agriculture,	The treated water from 4 major STPs with a capacity of 592 MLD is being let into River Musi after treatment. At the downstream the River water is being utilized for Agriculture purpose.	-	-	Further reuse of water will be encouraged.
	Bus Depots and	-	-	-	MAUD has addressed a letter to MD, TSRTC to use recycled treated water in lieu of potable water / ground water.
	PWD.	-	-	-	Addressed a letter to use recycled treated water for real estate projects.
7.	No. of Water Aquatic Sources (Lakes, Pond, etc.,) being developed through treated wastewater.	-	-	-	A condition is being stipulated in the Consent issued to construction projects to provide artificial recreation pond with treated waste water in their premises.

Overall status of Sewage Management in the State:

I. Total Population: Urban Population & Rural Population separately: 3.9 crores

II. Estimated Sewage Generation (MLD) : 2750

III. Details of Sewage Treatment Plants(STPs):

- Existing no. of STPs and Treatment Capacity (in MLD) : 32 No.s & 899.55 MLD (1 STP with 11MLD commissioned)
- Capacity Utilization of existing STPs : 765.58 MLD
- MLD of sewage being treated through Alternate technology : Nil
- Gap in Treatment Capacity in MLD : 1850.45
- No. of Operational STPs : 30 No.s
- No. of Complying STPs : 30 No.s
- No. of Non-complying STPs : Nil

Details of each existing STP in the State: Details are placed below

Details of under construction STPs 48 STPs (1458.9MLD) in the State and complete details are placed and the gist of which is as follows:

- **Polluted River Stretches:** Works commenced for construction of the STPs in HAM model for 17 STPs (15 (349.5MLD) under Priority –I and 2 STPs (27MLD) under Priority-II) with a capacity of 376.5MLD
- **Tendering process in Priority I & II-** 14 STPs with a capacity of 883 MLD an estimate of Rs.2585.34 crores in Priority-I for which administrative sanction is issued and tender process is being initiated under HAM mode.
- **Other than Polluted River Stretches:** 17 STPs with a capacity of 199.4 MLD are under different stages.

Details of proposed STPs in the State: Total 82 STPs with a capacity of 655.50MLD details are placed at **Annex-III**

- **DPRs Ready**- 52 STPs with a capacity of 555.67 MLD (includes Priority-II to Priority-V)
  - PHED-42 STPs with a capacity of 215.17MLD,
  - HMWSSB-10 STPs with a capacity of 340 MLD
- **DPRs under preparation** - 30 STPs with a capacity of 99.85MLD

Details of existing STP

No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
1	Amberpet	339	319.65	Working	Meeting
2	Nagole	172	172	Working	Meeting
3	Nallacheruvu	30	30	Working	Meeting
4	Attapur 1	51	47.10	Working	Meeting
5	Attapur 2	23	23	Working	Meeting
6	Pedda Cheruvu, Nacharam	10	9.84	Working	Meeting
7	Miralam Tank 1	10	9.86	Working	Meeting
8	Miralam Tank 2	5	4.80	Working	Meeting
9	Durgam Cheruvu, SLP	5	5.00	Working	Meeting
10	Patel Cheruvu, Nacharam	2.5	2.50	Working	Meeting
11	Saroor Nagar	2.5	2.50	Working	Meeting
12	Langer House	1.2	1.20	Working	Meeting
13	NMK Lake	4	3.23	Working	Meeting
14	Safilguda, Malkajgiri	0.6	0.60	Working	Meeting
15	Khajakunta, Metro, KKP	12	12.00	Working	Meeting
16	Khajaguda, Gachibowli	7	7.00	Working	Meeting
17	Nanakramguda,	4.5	4.50	Working	Meeting
18	Nagarjuna Circle	0.5	0.50	Working	Meeting
19	Lingam Kunta, BHEL	30	17.48	Working	Meeting
20	Gopanapally, SLP	4.5	3.57	Working	Meeting
21	Necklace Road	20	20	Working	Meeting
22	Pattigadda	30	30	Working	Meeting
23	Rangadhamini Lake, KKP	5	5	Working	Meeting
24	Krishnakanth Park,	0.5	-	Not working	-
25	Amber Cheruvu, Pragatinagar	2.5	-	Not working	-
26	Bommakal Road, Karimnagar	38	3	Working	Meeting
27	Chakali Gadda, Vikarabad	13	7.50	Working	Meeting
28	Dubba Nizamabad	31.5	7	Working	Meeting
29	Yellammagutta Nizamabad	15	3	Working	Meeting
30	Thallagadda Miryalguda	11.5	1	Working	Meeting
31	Chinthala Cheruvu Siddipet	7.25	6.25	Working	Meeting
32	Narsapur Cheruvu Siddipet	11.00	6.50	Working	Meeting
	Total	899.55	765.58		

Details of under construction STPs in the State (GHMC)

No.	Location	Capacity in MLD	Physical Progress in %	Status of I&D	Completion Timeline
Package-III					
1	Ambar Cheruvu (Pragathi Nagar)	37.0	Work started. Detailed Drawings & designs are approved for some of STPs and for other STP's under approval. Site leveling, marking and excavation is in progress. For 3 STPs PCC completed and laying of raft for SBR basins is in progress.	I&D Structures work commenced	2 years 2023
2	Chinna Maisamma	14.5			
3	Nalla Cheruvu (Kukatpally)	15.0			
4	Khajakunta	22.0			
5	Yellammakunta Lake (Jaya Nagar)	13.5			
6	Fathe Nagar	100.0			
7	Vennelagadda	5.0			
8	Fox Sagar Lake	14.0			
9	Shivalaya Nagar Cheruvu	14.0			
10	Pariki Cheruvu (Kandri Gutta)	28.0			
11	Durgam Cheruvu	7.0			
12	Khajaguda	21.0			
13	Miyapur Patel Cheruvu	7.0			
14	Gangaram Cheruvu	20.0			
15	Kamuni Cheruvu	20.0			
16	Mullakathuva Cheruvu	33.50			
17	Gayatri Nagar (Chintal)	5.00			
	Total	371.50			
Package-I					
18	New Alwal Lake	15.50	Work started. Detailed Drawings are being approved for some of STPs, designs are under preparations. Site leveling, marking and excavation is in progress		
19	R K Puram Lake	5.50			
20	Banda Cheruvu	15.00			
21	Kapra Lake	20.00			
22	Rama Cheruvu	30.00			
23	Pedda Cheruvu	17.50			
24	Nalla Cheruvu	86.50			
25	Amberpet	212.50			
	Total	**402.50**			
Package-II					
26	Miralam Site 1	30.00	Work started. Detailed Drawings are being approved for some of STPs, designs are under preparations. Site leveling, marking and excavation is in progress		
27	Miralam Site	11.50			
28	Bapughat STP at Attapur Site	48.00			
29	Kokapat Lake	15.00			
30	Ibrahim Cheruvu	56.00			
31	Nagole	320.00			
	Total	**480.50**			

Details of under Construction STP's in the State (Urban other GHMC) and not pertaining to PRS:

S. No	City/Town	Location of STP	Capacity of STP in MLD	Physical Progress in %	Completion Timeline
1	Miryalguda	Ramnagar Bandam	5.45	97%	31-03-2022
2	Nalgonda	Sheshammagudem	17.16	77%	31-03-2022
		Arjalabavi	2.55	11%	31-05-2022
3	Nagar Kurnool	Bus Depot Backside	3.20	60%	31-03-2022
		Bus Depot Backside	2.30	81%	31-03-2022
4	Khammam	Dhamsalapuram	20.00	12%	30-06-2022
5	Suryapet	Pullareddy cheruvu	10.00	81%	31-03-2022
		Nallacheruvu	10.00	5%	Works stopped by locals
6	Gajwel	Rajareddy Pally	1.5	83%	31-03-2022
		Pidichedu Road	3.5	83%	31-03-2022
		Pragnapur (By Pass Road)	1.25	70%	30-04-2022
		Pandavula Chervu	0.5	84%	31-03-2022
7	Devarakonda	Bellamoni Kunta (Nainoni Kunta)	1.50	8%	31-05-2022
		Peta Cheruvu	1.50	0%	30-07-2022
8	GWMC	Reddypuram	100	0% (to be Started)Site alienation not completed	
		Pragathinagar	15	12%	30-06-2022
		Ursugutta	5	21%	30-06-2022
		Total	**199.41**		

Details of STPs proposed in the State (Urban other GHMC)

S. No.	ULB Name	No. of STPs	STP - 1	STP -2	STP -3	STP-4	Total MLD	Status of Project	Likely date of completion**
			MLD	MLD	MLD	MLD			
1	Bellampally	2	8.50	4.5			13.00	A/S awaited	Proposed to take up under Hybrid annuity Model as per Govt. Memo Dt:25.05.2021 of MA & UD (TP&E.2) . Accordingly, this office vide Letter Dt:01-11-2021 has requested Govt to accord AS for appointment of consultant M/s. Green Design and Engineering Services Pvt., Ltd
2	Mandamarri	3	7.00	6	1		14.00		
3	Ramagundam	3	32.00	9	4		45.00		
4	Jagtial	4	14.10	4.9	0.6	0.56	20.16		
5	Metpally	2	4.30	5.3			9.60		
6	Bhainsa	2	7.50	2			9.50		
7	Korutla	1	12.71				12.71		
8	Manuguru	2	5.00	1.2			6.20		
9	Armoor	3	4.10	6.5	0.8		11.40		
10	Dharmapuri	2	2.00	1.70			3.70	DPR under prep.	
11	Chennur	2	3.00	2.50			5.50		
12	Kyathanpally	2	4.00	3.20			7.20		
13	Luxettipet	2	3.00	2.00			5.00		
14	Mancherial	4	7.50	3.00	3.00	3.00	16.50		
15	Naspur	3	8.00	5.00	5.00		18.00		
16	Khanapur	2	3.00	1.80			4.80		
17	Nirmal	3	8.50	6.00	5.50		20.00		
18	Manthani	2	2.00	1.75			3.75		
19	Gadwal	2	12.90	3.36			16.26	A/S awaited	
20	Kollapur	3	0.57	4.33	1.24		6.14		
21	leeja	2	4.81	2.11			6.92		
22	Alampur	2	1.60	1.5			3.10	DPR under prep.	
23	Makthal	2	2.60	2.6			5.20		
24	Palwancha	4	2.00	2.8	9.3	2.00	16.10	A/S awaited	
25	Huzurabad	2	4.75	1.7			6.45		
26	Jammikunta	2	4.90	1.4			6.30		
27	Parkal	2	4.00	2.6			6.60		
28	Bhupalpally	3	6.00	2.2	0.63		8.83		
29	Kothapalli	2	1.50	1.10			2.60	DPR under prep.	
30	Sultanabad	2	3.00	1.50			4.50		
		72					**315.02**		