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**CHIEF SECRETARY
GOVERNMENT OF TELANGANA**

Lr.No.4582/For.III/A2/EFS&T/2019, Date:29.01.2022

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 – 3rd 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.
* * *

In compliance to the Hon'ble National Green Tribunal Order dated 29.04.2019 in Original Application No. 606 of 2018, the 3rd Quarterly report for the Year 2021-22 (October, 2021 to December, 2021) of the State of Telangana is herewith submitted.

Yours faithfully,

CHIEF SECRETARY,

Encl: Report with Annexures.



**3rd QUARTERLY STATUS REPORT FOR THE YEAR 2021-22
(OCTOBER, 2021 TO DECEMBER, 2021) 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
31-01-2022**

INDEX

S.No.	Subject	Page No.
1.	Introduction	1
2.	Status of Compliance of Solid Waste Management Rules, 2016, including Legacy Waste.	1 – 16
3.	Status Report on Compliance to Plastic Waste Rules, 2016 (as amended in 2018).	17 – 20
4.	Status of Compliance of Construction & Demolition Waste Rules, 2016.	21
5.	Status of Bio-Medical Waste Management Rules, 2016.	22 – 27
6.	Status of Compliance of Hazardous Waste (Management) Rules.	28
7.	Status of Compliance to E-Waste Management Rules.	29 – 34
8.	Status of compliance with directions of the NGT passed in O.A.No.673/2018, 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".	35 – 38
9.	Non attainment cities in O.A.No.681 of 2018.	39 – 43
10.	Status report on compliance of Hon'ble NGT order in OA No.1038 of 2018 on the news item published "The Asian Age" titled "CPCB to rank industrial units on pollution levels".	44 – 46
11.	Status on Rejuvenation of water bodies, Ground water extraction/contamination and re-charge	47 – 48
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.	49 – 50
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	51 – 52

S.No.	Subject	Page No.
	wastewater from STPs.	
14.	Status of setting up and proper functioning of STPs/CETPs/ETPs in the State of Telangana (OA No.593/2017).	53 – 54
15.	Annexure – I – Compliance status of the Monitoring Committee recommendations of the State as per the CPCB format in Hazardous Waste (Management) Rules 1989.	55 – 62
16.	Annexure – II – Monthly progress report furnished to NMCG for the State of Telangana for the month of October to December 2021.	63 – 154
17.	Annexure – III – Compliance report on implementation of National Clean Air Programme on reducing the air pollution.	155 – 251
18.	Annexure – IV – Compliance report in OA No 325 of 2015 on restoration of polluted water bodies.	252 – 255
19.	Annexure – V – Compliance Report dated 23.10.2021 on Sand Mining submitted by Telangana State Mineral Development Corporation.	256 – 258
20.	Annexure – VI – Details of Sewage Management & reuse of treated wastewater in the State.	259 – 266

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 October, 2021 to December, 2021 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)	10819
b	Quantity of MSW Collected (TPD)	10819
c	Quantity of MSW segregated & transported (TPD)	The waste generated is collected and transported. However, only 39 % (4235 TPD) of waste generated is segregated at source during the present quarter.
d	Quantity of MSW processed (TPD)	8373
e	Quantity of MSW disposed in secured land fill site (TPD)	1058 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 15% of waste generated is segregated at source in GHMC and 39% in remaining 141 ULBs.

S.No	ITEM	COMPLIANCE
c	ULBs in which Transportation of segregation of waste is implemented (No)	142
4	Waste Processing	
a	<u>Material Recovery facilities</u>	
(i)	Total Capacity (TPD)	2214
(ii)	Number	291
(iii)	Number of ULBs Covered	142
b	<u>Recycling</u>	
(i)	Total Capacity (TPD)	600.2
(ii)	Number	2
(iii)	Number of ULBs Covered	2
c	<u>Composting</u>	
(i)	Total Capacity (TPD)	5120
(ii)	Number	145
(iii)	Number of ULBs Covered	142
d	<u>Bio-methanation</u>	
(i)	Total Capacity (TPD)	21 (Siddipet Municipality has finalized agency for establishment Bio-gas plant with 10 TPD capacity. Work is under progress)
(ii)	Number	7
(iii)	Number of ULBs Covered	5
e	<u>RDF</u>	
(i)	Total Capacity (TPD)	3000
(ii)	Number	2
(iii)	Number of ULBs Covered	1
f	<u>Waste to Energy Plants</u>	
(i)	Total Capacity (TPD)	78.4 MW. However, only one WtE plant of capacity 19.8 MW is under operation utilizing 1500 TPD of RDF.
(ii)	Number	6
(iii)	Number of ULBs Covered	6
5	Waste Disposal	
a	<u>Landfill</u>	
(i)	Total Capacity (TPD)	1058
(ii)	Number	1
(iii)	Number of ULBs Covered	1
6	<u>Legacy Waste Management</u>	
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

S.No	ITEM	COMPLIANCE
		for Jawaharnagar site after maximum recovery. Capping work completed. In other ULBs 1,18,639 MTs of waste processed.
d	Number of Dumpsites in which biomining has commenced (No)	52 ULBs commenced bio-mining.
e	Time frame for clearing all Dumpsites	<p>18 months for 52 ULBs</p> <p>Bio-mining of Legacy waste in GWMC initiated.</p> <p>Karimnagar municipal corporation floated tender and same is under technical evaluation.</p> <p>The Committee headed by the Principal Secretary to the Government, MA&UD Department met on 09.08.21 and after detailed discussions cancelled the tenders for 78 ULBs and decided to re-call the same. Accordingly, fresh tender for processing of fresh waste was recalled on 27.01.22. In respect of Bio mining tender, technical evaluation is under process.</p>
7	Other Information	
a	Information regarding development of model Towns/cities/Villages	<p>In compliance to the orders of the Hon'ble NGT, the State has identified the following:</p> <p>a) Three major cities selected for Model Cities:</p> <ol style="list-style-type: none"> 1. Greater Hyderabad Municipal Corporation 2. Greater Warangal Municipal Corporation 3. Karimnagar Municipal Corporation <p>b) Three major towns selected for Model Towns:</p> <ol style="list-style-type: none"> 1. Siddipet Municipality 2. Sircilla Municipality 3. Boduppal Municipality <p>c) 96 villages @ three villages each in 32 Districts (except Hyderabad District) have been identified.</p>

S.No	ITEM	COMPLIANCE
b	Creation of Environmental Cell	Yes
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		
SI.No	Item	Present Status
1	Door-to-Door Collection (%)	100%
2	Source segregation of waste (%)	39%
3	Waste processing (TPD)	8373
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)	<p>52 ULBs started biomining. 1,18,639 MTs of waste processed.</p> <p>Balance 67 ULBs are grouped into 5 clusters for allotting the Biomining work on PPP basis. Technical evaluation is under process.</p> <p>Agency finalized in GWMC for Biomining of Legacy waste and work is under process.</p> <p>Karimnagar municipal corporation floated tender and same is under technical evaluation.</p> <p>The Committee headed by the Principal Secretary to the Government, MA&UD Department met on 09.08.21 and after detailed discussions cancelled the tenders for 78 ULBs and decided to re-call the same. Accordingly, fresh tender for processing of fresh waste was recalled on 27.01.22.</p>

Door-to-Door Collection and Source Segregation:

Particulars	Corporations	Municipalities	Total
No. of ULBs	13	129	142
Door to Door Collection			
ULBs achieved 98 to 100 % collection	13	129	142
Source Segregation			
No of ULBs achieved 100 %	1	9	10
No of ULBs achieved 75% to 99%	1	12	13
No of ULBs achieved 50% to 74%	4	24	28
No of ULBs achieved less than 50%	7	84	91

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 statuses 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.	<ul style="list-style-type: none"> • 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,	<ul style="list-style-type: none"> • 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 statuses and desired levels	Proposals for attending the gaps with time lines
facilities	<p>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).</p> <p>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.</p>	<p>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</p>	<p>Sanitary Landfill facility needs to be set-up in Telangana.</p>	<p>2 agencies – M/s Cube Bio-Energy and M/s Sagar Motors have been shortlisted to provide MSW processing facilities in 52 ULBs in 4 clusters out of 9 clusters</p> <p>Agency finalized in GWMC for Bio-mining of Legacy waste and work is under process.</p> <p>Karimnagar municipal corporation floated tender and same is under technical evaluation.</p> <p>The Committee headed by the Principal Secretary to the Government, MA&UD Department met on 09.08.21 and after detailed discussions cancelled the tenders for 78 ULBs and decided to re-call the same. Accordingly, fresh tender for processing of fresh waste was recalled on 27.01.2022. In respect of bio-mining tender, technical evaluation is under process.</p> <p>Sanitary Landfill Facilities: ULBs are being clustered (at regional/district level) for setting up Sanitary Landfill facility. Landfill facility. Land identification and</p>

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statuses and desired levels	Proposals for attending the gaps with time lines
				<p>tender for setting up and operating SLF will be subsequently taken-up.</p> <p>Waste to Energy Plants:</p> <p>One Waste to energy plant of capacity 19.8 MW is under operation utilizing 1500 TPD of RDF from GHMC area and Obtained Environmental Clearance for expansion of capacity to 48 MW for utilising 3000 TPD of RDF. Another 14.5 MW is under construction at Dundigal.</p>
<p>Bio-remediation or capping of old and abandoned dump sites.</p>	<p>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 & 1.50 Lakhs tons of legacy waste in Fathullaguda are capped. Legacy dump treatment (Bio-mining) in 52 ULBs has commenced.</p>	<p>To be completed by 31.03.2021.</p>	<p>-</p>	<p>Capping works completed at Jawaharnagar dumpsite. Legacy dump treatment (Bio-mining) in 52 ULBs has commenced.</p> <p>Total – 1,18,639 MT's of legacy waste processed till date.</p>

Item	Current Status	Desirable level of Compliance in terms of statutes	Gap between current statuses and desired levels	Proposals for attending the gaps with time lines
<p>Ensure separate storage, collection and transportation of construction and demolition wastes.</p>	<p>Action Plan has been prepared by the ULBs for C&D waste management.</p> <p>Separate site for storing C&D waste is earmarked by all 139 ULBs (excluding Kothur & Nakrekal). About 1,09,700 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 59,597 has been recycled in the quarter ending with Dec 2021.</p> <p>Two C&D recycling plants with 500 TPD capacities each at Jeedimetla and Fathullaguda are under operation.</p>	<p>As per SWM Rules Ensuring separate storage, collection and transportation of construction and demolition wastes by 08.04.2018.</p>	<p>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.</p>	<p>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. .</p>

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	<p>All 142 ULBs have identified suitable sites for setting up of suitable processing facilities.</p> <p>All the Gram Panchayats have identified lands for setting up solid waste processing facility and sanitary landfill facilities individually or on cluster basis.</p>
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	<p>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.</p> <p>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.</p>
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	2 years	<p>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.</p> <p>All the 96 identified model Gram Panchayats have identified lands for setting up solid waste processing facilities.</p> <p>12770 GPs (100 %) have completed construction of compost cum segregation shed.</p>

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
4	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source,	2 years	The % of segregation achieved from Oct' 21 –Dec' 21 is 39%. IEC activities are regularly conducted to inform, educate and 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	<p>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.</p> <p>In GHMC, Two processing plants of capacity-500 TPD each are under operation.</p> <p>About 1,09,700 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 59,597 has been recycled in the quarter ending with Dec 2021.</p>
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	2 years	2 agencies – M/s Cube Bio-Energy and M/s Sagar Motors have been shortlisted and are proposed to provide MSW processing facilities in
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 populations.	3 years	<p>52 ULBs in 4 clusters out of 9 clusters. Accordingly, fresh tender for processing of fresh waste was called on 12.10.21 and last date is 1.11.2021. In respect of Bio mining tender shall be issued within one week.</p> <p>Establishment of processing Plant in Vikarabad is under progress.</p>

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
			<p>Other 4 ULBs GWMC, Narsampet, Parakala and Wardhannapet will be floating the tenders separately.</p> <p>Siddipet Municipality has finalized agency for establishment Bio-gas plant with 10 TPD capacity.</p>
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	<p>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.</p> <p>Currently, GHMC is disposing inerts generated by processing of waste to landfill located at Integrated Municipal Solid Waste Management Plant, Jawaharnagar.</p> <p>Sanitary landfill with designed capacity of approx. 13,09,870 MT is under operation which is already filled with 12,89,870 MT inerts as on Dec 31, 2021.</p>
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	<p>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.</p>
11	Bio-remediation or capping of old and abandoned dump sites.	5 years	<p>Capping of Jawaharnagar dumpsite completed with a cost of Rs.144 Crores. Waste shifting & Profiling, Impervious soil cover, Geo-Synthetic clay liner, HDPE liner, Geo-composite drainage liner, topsoil cover, Dibbling/ green cover and Storm water drainage network are completed.</p> <p>Legacy dump treatment (Bio-mining) in 52 ULBs has commenced.</p> <p>Total – 1,18,639 MT's of Legacy waste processed.</p>
12	Legal Frame Work		SWM Policy for the State as per clause 11 (a) of the SWM Rules has been

S. No.	Activity	Time limit from the date of notification of Rules	Present status of compliance by the State of Telangana
			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	<ul style="list-style-type: none"> 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.
24	Annual Report	<ul style="list-style-type: none"> Annual Reports for the year 2020-21 submitted on 27th July, 2021.

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

- The State issued G.O.Ms.No.79, dated 30.12.2016 regarding complete ban of manufacture, stocking, sale and use of carry bags of less than 50 microns thickness and imposing penalties for non-compliance of the Rules.

➤ 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	<ul style="list-style-type: none"> ➤ 85 Dry Resource Collection Centres (DRCCs) established through two agencies namely ITC-WOW, Godrej , UNDP-HCCWBL in GHMC area. ➤ 140 ULBs are having 206 DRCCs & GHMC -85 (total 291 DRCCs). More number of DRCCs will be established as and when sites are identified. ➤ 12770 GPs (100 %) have completed construction of compost cum segregation shed. ➤ 50 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.	<ul style="list-style-type: none"> ➤ 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 19.8 MW Waste to Energy plant using incineration process and another WtE plant of 14.5 MW is under construction to utilise RDF.
6(2)b.	Ensuring that no damage caused to the environment during this process.	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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 19.8 MW capacity was commissioned in December 2020 and currently under operation. Obtained Environmental Clearance for expansion of capacity to 48 MW for utilising 3000 TPD of RDF. ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ 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 01 instance for open burning of plastic waste for this Quarter. However, GHMC registered 207 cases for using plastic carry bags

		below 75 microns thickness during this quarter and levied a penalty of Rs.2,39,000/-.
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.	<ul style="list-style-type: none"> ➤ 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.	<ul style="list-style-type: none"> ➤ GHMC prepared the draft Solid Waste Management byelaws and submitted to Govt. for approval
16	State Level Advisory Committee	<ul style="list-style-type: none"> ➤ State Level Advisory Committee constituted vide G.O. (Ms). No. 79 dated 31.12.2016 of EFS&T.
17(3)	Submission of Annual Report	<ul style="list-style-type: none"> ➤ 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 July, 2021 to September, 2021 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)	1235 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 291 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	1350 tons through DRCCs+ 686 TPD (part of RDF)

S.No.		Item	Quantity
		Report form VI pt.4)	during present quarter.
	b	Quantity of plastic Waste utilized in recycling (TPD)	2050 tons channelized for recycling during present quarter through Waste Management agencies + 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	6300 tons 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 3120 TPD of RDF out of which 686 TPD of plastic is part of RDF.
	f	Quantity of plastic waste used in production of Waste to oil	40.2 TPD during present quarter
	g	Quantity of plastic waste used in other purpose (please specify)	--
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 thickness <75 micron banned or not [Rule 4(c)]?	Completely banned plastic carry bags & plastic sheet of thickness <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 thickness <50 microns banned and recently implementing prohibition on plastic carry bags < 75 microns as as per MoEF&CC notification from 01.10.2021.
13	a	Status of action taken on non-compliance of	GHMC registered 01

S.No.		Item	Quantity
		PWM Rules (Annual Report format pt.9)	instance for open burning of plastic waste for this Quarter. However, GHMC registered 207 cases for using plastic carry bags below 50 microns thickness during this quarter and levied a penalty of Rs.2,39,000/-.
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	Confirmation that no plastic carry bags/films <50 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 1,09,700 TPD of C&D waste were collected and transported from various parts of city to recycling plants and 59,597 has been recycled in the quarter ending with December, 2021.
- GHMC registered 104 instances of illegal debris dumping during this quarter and levied penalty of Rs.1,84,000/-
- The District Collectors are in the process of identifying the suitable sites to establish the C&D Waste Processing Facilities in the ULBs on standalone basis wherever it is feasible.
- 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 2020 to Dec 2020) was submitted to CPCB on 13.07.2021, within stipulated date of 31.07.2021.

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 meeting was held on 21.09.2017 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.

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 CO₂, CO, NO, NO₂, O₂ 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 proponentes 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 banks, 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	<p>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.</p> <p>Awareness was created through the means of posters, short films, All India Radio, etc.</p>
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]	<p>Officers are designated in Regional offices for monitoring of HCFs operating in the State.</p> <p>Special Teams are constituted for surprise inspections as and when needed for regular monitoring of HCFs to ensure compliance for a specific period.</p>
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, Uddemari (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 implementation	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 implementation	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 and 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 implementation	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 firm 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 Sevalal 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
<p>Interim measures for phyto-remediation / bio-remediation etc., for 100% sewage to reduce pollution load on recipient water bodies.</p>	<p>In-Situ Remediation:</p> <p>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.</p> <p>i) Faecal Sludge Septage Management(FSSM) as interim measure:</p> <p>Existing facilities:</p> <ul style="list-style-type: none"> • 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) <p>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.</p> <ul style="list-style-type: none"> • FSTPs: 11 no. <p>One number with 40KLD capacity at Nalla Cheruvu in Priority-I stretch</p> <p>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</p> <p>Under Construction: 14 no.s as detailed below</p>

Action Points	Compliance status
	<p>a. Co-Treatment Facilities: 1 no with 10KLD facility in the Priority –I stretch at khajikunta</p> <p>b. Feecal 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</p> <p>Proposed FSTP:</p> <p>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.</p> <p>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.</p> <ul style="list-style-type: none"> ➤ 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 <ul style="list-style-type: none"> • 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.
<p>Commencement of STPs shall be taken up by 31.03.2020 and commissioned by 31.03.2021</p>	<p><u>Details of existing STP in the State:</u> Details are placed at annexure-II</p> <p><u>Details of under construction STPs in the State: 48 STPs (1458.9MLD)</u></p> <ul style="list-style-type: none"> • 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 under HAM mode.

Action Points	Compliance status
	<ul style="list-style-type: none"> • <u>Other than Polluted River Stretches:</u> 17 STPs with a capacity of 210.4 MLD are under different stages. <u>Details of proposed STPs in the State:</u> 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) <ul style="list-style-type: none"> ■ 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. Comments received from the CPCB in January 2022 and the same is circulated to Stakeholders for revised plan.
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). Till now, 6 meetings were conducted on 04-12-2018, 23-01-2019, 05-03-2019, 04-11-2019, 21-01-2020 and 27-06-2020 and the approved action plans are communicated to CPCB. 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	TSPCB is having a online complaint redressal system and toll free number (10741).

Gist of the Orders	Remarks
mechanism	
<p>Strengthening of the AAQM network</p> <p>MOEF&CC will provide the requisite funds for the purpose.</p>	<p>Proposals prepared and in the process of strengthening.</p> <p>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.</p> <p>Non-attainment cities (4 nos.):</p> <ul style="list-style-type: none"> • Hyderabad & Patancheru - 8 more CAAQMS are required and 7 CAAQMS installation is completed and 1 CAAQMS will be completed by mid of February 2022 in Hyderabad. • Nalgonda - 1 CAAQMS – yet to receive funds from CPCB and 1 Manual AAQMS. (Nalgonda additional monitoring station is commenced)
<p>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.</p>	<p>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</p>

- 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.. In default 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- 7 CAAQMS installation is completed and 1 CAAQMS will be completed by mid of February,2022 in Hyderabad. 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	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 winter sampling is under progress.

<p>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 Secretaries of SPCBs/PCCs. MoEF&CC may file compliance report before the next date.</p>	<p>A joint Source Apportionment study by CPCB along with TSPCB is finalised for Nalgonda town.</p> <p>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 it is under awarding stage to IIT, Bombay.</p>
<p>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.</p>	<p>Three new Industrial Estates developed to facilitate the shifting of the sector specific industries like steel, oil and textile industries.</p>
<p>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.</p>	<p>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.</p>
<p>Compliance may also be ensured for the remaining cities and report furnished to CPCB by the States/UTs by</p>	<p>Action plan for the additional city is submitted</p>

<p>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 the erring officers and appropriate entries may also be made in the ACRs of the Heads of the Departments concerned.</p>	<p>and approval is received for the action plan through their letter dated:26-06-2020. Quarterly progress report is being submitting regularly to CPCB.</p>
<p>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.</p>	<p>Under implementation and compliance report is being submitted</p>

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 Sangareddyis 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 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 control 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.	<p><u>IDA Bollaram:</u></p> <ol style="list-style-type: none"> 1. The status of improving infrastructure facilities in IDA Bollram was reviewed and directed to concretize to reduce air pollution. 2. No solid waste dump has happened in the area. <p><u>IDA Patancheru:</u></p> <p>All roads in the Patancheru Industrial Park are BT/CC roads and are in good condition.</p> <p><u>IDA Kukatpally:</u></p> <p>All roads in the IDA are BT/CC roads and are in good condition.</p> <p><u>IDA Kattedan:</u></p> <p>All roads in the IDA are BT/CC roads and are in good condition.</p> <p>The Board has procured 2 mechanical sweeping machines and handed over to TSIIC for deployment in IDA Patancheru and Jeedimelta.</p>
Maintain pot holes free roads for free-flow of traffic	Repair and maintenance of pot holes works done.
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.	<p>There are 5 industries (3- 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 - Patancheru) are members of CETP.</p> <p>The members of CETP are transporting the</p>

Action Points	Action taken till date
	<p>effluents to CETP using tankers fitted with GPS and online vehicle tracking and manifest system. The ZLD systems have installed camera and flow meter and connected to TSPCB and CPCB server.</p> <p>Regular monitoring of above industries are carried out.</p>
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.
Concretizing of storm water drains in the industrial area and connect to STP.	<p>Bollaram Municipality is maintaining existing storm water drains regularly and proposal for concrete storm water drains is under consideration.</p> <p>TSIIC-IALA Patancheru, Kattedan and Kukatpally are maintaining storm ware drains regularly.</p>

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 Halder" 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. The same is annexed as **Annexure-V**
- 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 where sand Lorries are passing through.
- 27 sand bearing area closed after expiry of Environmental Clearances.
- Closed Circuit cameras were installed in 43 sand reaches.
- District Survey Report (DSR) are prepared for following 9 districts where sand is available for extraction i.e., Jayashankar Bhupalpally, Mulugu, Bhadradi 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 8917 lorries installed GPS.
- 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 67 sand bearing areas and another 8 sites obtained EC & awaiting CFE/CFO. 27 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 2nd quarter of 2021-22 (July to September, 2021) 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, 2160 industries having functional ETPs and 8 industries are not having ETPs. The status of ETPs and action taken report is as follows:

1	No. of industries which require ETP	2168
2	No. Industries having functional ETP	2161
3	No. of industries complying	2112
4	No. of industries non-complying	49
5	Closure directions issued	26
	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 376 STPs (Municipal-32 nos. & Other-344 nos.) existing and 374 STPs are complying with discharge standards. 312 STPs (Municipal-111 nos. & Other-201 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	20
B	Other than municipal STPs	
1	No. of STPs	344
2	No. of STPs complying	344
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,

4/1/2018 GOVERNMENT OF TELANGANA

Chief Secretary
Govt. of Telangana
Hyderabad 500 003.

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 October, 2021 to December, 2021.

S. No.	Recommendations / Directions	Status
1.	<p>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?</p> <p>A. If yes, kindly provide details (viz., committees constituted, meetings conducted, Office memorandum issued etc.)</p> <p>B. If no, please provide the action plan with timeline.</p>	<p>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.</p>
2.	<p>Implementation of Rule 5(1)</p> <p>a) Name of the Department / Government Agency authorized for implementation of Rule 5(1).</p> <p>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.</p>	<p>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.</p> <p>b) Industrial Space for pre-processing facility at IDA, Rakamcherla was allotted by TSIC and the facility is functioning.</p> <p>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:</p> <ol style="list-style-type: none"> 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-II. The facilities proposed are secured landfill for

S. No.	Recommendations / Directions	Status
		<p>hazardous waste & sanitary, Integrated recycling facility, engineered landfills for MSW, incinerator and waste to energy plant.</p> <p>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.</p>
3.	<p>Implementation of Rule 5(2)</p> <p>a) Name of the Department / Government Agency authorized for implementation of Rule 5(2).</p> <p>b) Total No. of Workers involved in recycling, pre-processing and other utilization activities of Hazardous & other waste.</p> <p>c) No. of workers registered and recognized which are involved in recycling, pre-processing and other utilization activities.</p> <p>d) No. of groups formed of workers to facilitate setting up of recycling, pre-processing and other utilization activities.</p> <p>e) No. of skill developments activities undertaken for the workers involved in recycling, pre-processing and other utilization activities.</p> <p>f) No. of annual health monitoring check-ups/camps carried out for the workers involved in recycling, pre-processing and other utilization activities.</p> <p>g) No. of workers (involved in recycling, pre-processing and other utilization activities) monitored in the above annual health monitoring check-ups/camps.</p>	<p>a) Director of Factories (Labour Employment, Training and Factory Department)</p> <p>b) 1795 No. of workers involved in recycling, pre-processing and other utilization activities of Hazardous and Other waste.</p> <p>c) Presently, there is no system of registration of workers involved in recycling units.</p> <p>d) No groups of workers formed to facilitate setting up of facilities.</p> <p>e) 1240 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.</p> <p>f) 70 No of health monitoring check-ups/camps carried out. Conducting of Health camps are regular activities and will be carried not regularly.</p> <p>g) 1345 No. of workers are monitored in the above health camps and medical examination and health camps are organized on regular basis.</p>
4.	<p>Implementation of Rule 5(4)</p>	<p>a) Integrated plan is yet be</p>

S. No.	Recommendations / Directions (57)	Status
	<p>a) Whether integrated plan for effective implementation of Rule 5 of HOWM Rules, 2016 has been prepared by State Government.</p> <p>b) Annual report for the implementation of the Rule 5 of HOWM Rules, 2016 has been submitted to MoEF&CC.</p> <p>i. If yes, date of submission of annual report: ii. If no, provide timeline for submission of annual report.</p>	<p>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.</p> <p>b) No. However, TSPCB is submitting the annual returns to CPCB. The CPCB may prepare a standard format for providing annual report.</p>
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?	186 units verification of reconciliation and closing of manifest documents have been carried during October, 2021 to December, 2021.
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
10.	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.	Regular updation of website with respect to all enforcement actions along with details of industries and action taken thereof are being takenup.

S. No.	Recommendations / Directions	Status																					
		https://tspcb.cg.gov.in/Closure%20Orders/Closure.aspx https://tspcb.cg.gov.in/Directions%20issued/Directions.aspx .																					
11.	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	Details enclosed as Appendix-I																					
12.	<p>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.</p> <p>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”:</p>	<table border="1" data-bbox="1009 682 1407 935"> <thead> <tr> <th rowspan="2">S. No.</th> <th rowspan="2">No. of Defauling 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 Lodged</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>5*</td> <td>-</td> <td>Nil</td> <td>Nil</td> <td>Nil</td> <td>--</td> <td>--</td> </tr> </tbody> </table> <p>*The Board issued closure orders to the 5 units for causing air and water pollution under Water and Air Act and not exclusively for violation of Hazardous waste Rules during Oct, 2021 to Dec, 2021</p>	S. No.	No. of Defauling units	No. of Habitual Defaulters	No. of units against which action has been taken					Rule 23 (1) Enforced	Rule 23 (2) Enforced	Rule 23 (2) Enforced	Prosecution under E(P) A, 1986	FIR Lodged	1	5*	-	Nil	Nil	Nil	--	--
S. No.	No. of Defauling units	No. of Habitual Defaulters				No. of units against which action has been taken																	
			Rule 23 (1) Enforced	Rule 23 (2) Enforced	Rule 23 (2) Enforced	Prosecution under E(P) A, 1986	FIR Lodged																
1	5*	-	Nil	Nil	Nil	--	--																
13.	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.	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 is in process of carrying out audit.																					
14.	Board needs to take cognizance of hazardous waste accounted and managed while enforcing the other relevant rules (w.r.t. domestic hazardous waste and hazardous waste generated from e-waste rules like fluorescent lamp other mercury containing lamp) and also, in preparation of HW inventory and other interventions. Provide status in this regard.	The Board is submitting the details w.r.t domestic hazardous waste in preparation of HW inventory and other interventions.																					
15.	<p>Whether any safety protocols followed by hazardous waste generating & handing units and operator of TSDFs?</p> <p>If yes, provide details of the same.</p> <p>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.</p>	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 as Annexure-I.																					
16.	<p>Details on the audit of hazardous waste generating & handling units be provided.</p> <p>i. Number of units operating in State</p> <ul style="list-style-type: none"> • Generating units • Recyclers • Utilizers • Co-processors <p>ii. Name of the auditing agency</p> <p>iii. Frequency of audit.</p> <p>iv. Numbers of units audited during 2020-21</p> <p>v. Status on compliances and action taken (provide list and status as per table given below)</p>	<p>Number of hazardous waste generating units operating in State : 3179</p> <ul style="list-style-type: none"> • Generating units: 3072 • Recyclers: 56 • Utilizers: 36 • Co-processors: 10 • Pre-processors: 5 <p>No auditing carried out during 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.</p>																					

S. No.	Recommendations / Directions							Status
	S. No.	Name & Address of unit	Type of facility	Auditing agency	Date of audit	Status on compliance	Action taken	
17.	<p>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.</p>							<p>78 Major Accident Hazard industries are located in Telangana. All the industries have prepared on-site and off-site emergency plans to avert accidents. All the hazardous waste generating units especially chemical and Pharma units have developed safety SOPs which are being followed.</p>
Action Point 15: Clearance of Waste Oil/Sludge from Ships:								NA
18.	<p>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/CFSS.</p>							NA
Action Point 18: Collaboration between regulating authorities:								
19.	<p>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.</p>							<p>a) Nil b) Nil</p>
Action Point 26: Display of Information Outside the Factory Gate:								
19.	<p>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): 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</p>							<p>a) 3179 b) 2377 installed display Boards. c) 2377 d) Nil 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</p>

S. No.	Recommendations / Directions	Status
	Action Point 27: Institutional Reforms:	
21	<p>a) Whether, adequate manpower is available with Board:</p> <ul style="list-style-type: none"> • If no, provide the steps taken to ensure availability of adequate manpower and timeline for the same: <p>b) Steps taken to ensure regular training of the manpower of SPCB/PCC.</p> <p>c) R&D work carried out by the SPCB/PCC:</p> <ul style="list-style-type: none"> • 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: 	<p>a) No. However, 12 persons on internship were recruited.</p> <p>b) Conducted training program in collaboration with Administrative College of India on Utilization and Recovery of Spent Solvents during the month of November, 2019.</p> <p>c) No R&D activities carried out. Presently, there is no proposals to take up any R&D activities.</p>

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	: 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).												
	<table border="1"> <thead> <tr> <th>Year</th> <th>No. of parameters</th> <th>Z-score</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>Conductivity, T.Hardness, Cl⁻, F⁻, SO₄⁻², Ca⁺², Mg⁺², B, Cr⁺⁶ and TSS</td> <td>Annex-X</td> </tr> <tr> <td>2016</td> <td>Benthic macro invertebrates</td> <td>Annex-Y</td> </tr> <tr> <td>2017</td> <td>pH, EC, Zn, Fe, Cu, Mn, B</td> <td>Annex-Z</td> </tr> </tbody> </table>	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	
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												
10	Whether laboratory participated in any proficiency test (PT)? (Y/N)	: Yes												
11	Provide year-wise details of PT analysis	: 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).												
	<table border="1"> <thead> <tr> <th>Year</th> <th>No. of parameters</th> <th>Z-score</th> </tr> </thead> <tbody> <tr> <td>2020 (20E01P2P1)</td> <td>BOD, COD, DO, O&G, pH, TDS, TSS</td> <td>Annex-B</td> </tr> <tr> <td>2020 (20A01P2P1)</td> <td>PM10 & PM2.5</td> <td>Annex-C</td> </tr> <tr> <td>2020 (20A03P2P1)</td> <td>Arsenic, Lead & Nickel</td> <td>Annex-D</td> </tr> </tbody> </table>	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	
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												
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 23 rd Edition 2017 (AAS) / 3120 B, APHA 23 rd 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 23 rd Edition 2017	--
4	Bacteriological parameters (Faecal coliform, Total coliform & Faecal Streptococci)	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 23 rd Edition 2017	--
5	Biochemical Oxygen	BOD Incubator	IS 3025 (Part 44), 1993	

62

	Demand (BOD)			
6	Chemical Oxygen Demand (COD)	COD Digestion System	5220 B, APHA 23 rd Edition 2017	--
7	Ambient air parameters i.e., RSPM, SO ₂ , NO _x	Respirable Dust Sampler / PM ₁₀ Sampler, Make: Envirotech	IS:5182 methods	--
8	Emission parameters i.e., SPM, SO ₂ , NO _x	Stack Monitoring Kit, Make: Vayubodhan	IS: 11255 methods	--

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 October to December, 2021

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:

64

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 602.35MLD.**
- **Quantity of Hazardous Sludge generated from the Industries in TPD based on annual report: 3,33,334 TPA**
- **Compliance status of the ETPs: 54 industries are not complying. Closure directions issued to 5 unit and directions issued to 49 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 MLD.**

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:

65

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-Malkajigiri. 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-VI the summary of which is as follows:

Out of 4311 TPD in the 141 ULBs, a total of 856TPD is generated from 32 ULBs located within PRS, the details are placed at Annex-VII. The total waste processed is 343.05TPD and for remaining the setting up of the processing plants are under progress

Door to Door Collection	Source Segregation	Composting / Vermin-composting	Dry Resource Collection Centres	Biogas
100 %	53%	141 ULBs	141ULBs	Greater Warangal Municipal Corporation - 2 Bio-methanation 1 TPD to operate a power plant of capacity 24KW each per day Siddipet – 1 TPD (not in operation)

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.

(66)

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.
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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. 2 agencies – M/s Cube Bio-Energy and M/s Sagar Motors have been shortlisted and are proposed to provide MSW processing facilities in 52 ULBs made into 04 clusters.
- v. Balance 78 ULBs are grouped into 5 clusters and tenders were floated for processing of fresh waste on 30.9.21 and 9 bids were received. The Committee headed by the Principal Secretary to the Government, MA&UD Department met on 09.08.2021 and decided to call the tenders and call for fresh tenders. As such fresh tenders were called on 12.10.2021 and last date for receipt of the bids is on 01/11/2021.
- vi. Fresh Tender shall also be floated within a week for undertaking Biomining of legacy waste in balance 78 ULBs grouped into 5 clusters.
- vii. Further, timeline for completion of 100% MSW processing facilities in 52 ULBs(for which bidders are already selected) is 9 Months and 78 ULBs (For which Bids are under evaluation) is one year
 - **Legacy dumpsites:** No. and area (in acres) of uncontrolled garbage dumpsites.
 - i. No. of Dumpsites: 160
 - i. Total Area in Acres: 965.31Initiated 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

- o Jeedimetla in GHMC area is commissioned in the month of April, 2020.
- o Fathullaguda in GHMC area is commissioned in the month of April, 2021
- o **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 Industries 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)

68

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.

- 69
- o 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) Feecal 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 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.

- 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, Boduppall-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. **Feecal 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: -

(71)

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.

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		

74

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 (75)		
31	Nagole	320.00			
Total		480.50			

(75)

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		

76

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:25.05.20 21 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	A/S awaited		
19	Gadwal	2	12.90	3.36			16.26			
20	Kollapur	3	0.57	4.33	1.24		6.14	DPR under prep.		
21	leeja	2	4.81	2.11			6.92			
22	Alampur	2	1.60	1.5			3.10	A/S awaited		
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	DPR under prep.		
29	Kothapalli	2	1.50	1.10			2.60			
30	Sultanabad	2	3.00	1.50			4.50			
							315.02			

72

315.02

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

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	leeja	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, WTC	34.2	Work under progress for MSW processing,

(79)

S.No	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
26	Sattupalli	21	DRCC, WTC	1.47	Completion Timeline:9 Months
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	Mancherla	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	Tenders Called for MSW processing, Completion Timeline:1 year
44	Medak	29	DRCC, WTC	26.68	
45	Narsapur	11	DRCC, WTC	6.82	
46	Ramayampet	9	DRCC, WTC	6.3	
47	Thoopran	12	DRCC, WTC	6.72	Work under progress for MSW processing, Completion Timeline:9 Months
48	Boduppall	51	DRCC, WTC	51	
49	Dundigal	48	DRCC, WTC	41.28	MSW processing facility commenced
50	Kompally	28	DRCC, WTC	28	
51	Medchal	22	DRCC, WTC	22	
52	Peerzadiguda	46	DRCC,	32.2	Work under progress for

80

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
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 Months
76	Bhainsa	24	DRCC, WTC	2.4	
77	Khanapur	6	DRCC,	0.3	

81

S.No	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
			WTC		
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	Ibrahimpattanam	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, WTC	13.05	
104	Andolejogipet	11	DRCC,	9.35	

(82)

S.No	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
			WTC		
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	Wanaparth	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	
130	Narsampet	20	DRCC, WTC	3.6	Tender yet to be called
131	Parakala	13	DRCC,	4.16	

S.No	ULB	Total MSW Generation in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Timeline
			WTC		
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 Bhadrachalam)	Mancherial	21	19
	Ramagundam	115	25.7
	Dharmapuri	9	5.5

(84)

River Stretch	Name of ULB	Total quantity of waste generated in ULB (in Tonnes/Day)	Total quantity of waste Processed (in Tonnes/Day)
	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
	leeja	12	0.9
	Kollapur	8	20.4
	Makthal	11	11
	Total	856	343.05

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

River Stretch	Name of ULB	Area	No.
Musi	Miryalguda	6	1
Manjeera-nakkavagu	-		
Maneru (P-III) (Karimnagar LMD to Somanpalli)	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
	leeja	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
6.	Khanapur	Gangaipet At Maskapur Gp	58254

86

S. No	Name of city	Dumpsite Location	Quantity of waste at dumpsite (T)
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

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 ooruvu - 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	Bhadradi (Kothagudem)	Kothagudem	7
32	Bhadradi (Kothagudem)	Yellandu	21
33	Bhadradi (Kothagudem)	Manuguru	6
34	Bhadradi (Kothagudem)	Palvancha	40
	Bhadradi (Kothagudem) Total		74
35	Adilabad	Adilabad	189
	Adilabad Total		189
36	Nirmal	Nirmal	51
37	Nirmal	Bhainsa	34
38	Nirmal	Khanapur	4

Sl.No.	Name of the District	Name of the Municipality	Total No. of
	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	Ibrahimpattanam	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	Shankarpally	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	Boduppall 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
85	Kamareddy	Banswada	83
86	Kamareddy	Yellareddy	6

90

Sl.No.	Name of the District	Name of the Municipality	Total No. of
	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
130	Jogulamba Gadwal	leeja	45
131	Jogulamba Gadwal	Waddepalle	6
132	Jogulamba Gadwal	Alampur	6

(91)

Sl.No.	Name of the District	Name of the Municipality	Total No. of
	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 In progress	No of works completed	Exp endi ture	No of works sanctioned	No of works In progress	No of works completed	Exp endi ture	No of works sanctioned	No of works In progress	No of works completed	Exp endi ture	No of works sanctioned	No of works In progress	No of works completed	Exp endi ture	No of works sanctioned	No of works In progress	No of works completed	Exp endi ture	No of works sanctioned	No of works In progress	No of works completed	Exp endi ture
1	Adilabad	456	36	10	2.29	161	0	161	198.61	811	0	811	241.76	238	869	100	291	87	9	60	192.63	390	914	204	355
2	Badr adri Koth agudem	14	3	5	1.16	84	0	84	76.68	299	0	299	197.995	52	2	12	6.32	5	0	0	0	314	5	309	206
3	Jagityal	82	27	6	0.97	26	0	26	29.15	31	0	31	20.47	112	188	773	220	38	21	0	0	129	236	836	225
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	131	120	995	190
5	Jayashankar Bhu pal ally	63	0	0	0	734	0	734	129.14	68	0	68	50.59	14	0	7	4.02	4	0	0	0	883	0	809	134
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

92

7	Kam ared dy	525	258	38	7.88	262	0	261	470. 83	717	0	717	846. 45	130 2	481	389	186 6.14	2	0	0	0	280 8	739	140 5	319 1.3
8	Kari mna gar	89	18	4	0.94	18	0	18	13.7 2	9	0	9	6.7	276	23	221	227. 23	6	2	0	0	398	43	252	248. 59
9	Kha mma m	125 1	61	20	4.06	55	0	55	65.0 9	190 4	0	190 4	143 6.72	251	48	91	258. 8	81	30	14	78.0 8	354 2	139	208 4	184 2.75
10	Kum ara mbh eem Asifa bad																								578 4.33
11	Mah abub abad	3	0	0	0	647	0	647	944. 18	424	0	424	214. 45	833	152	523	676. 76					190 7	152	159 4	183 5.39
12	Mah abub naga r	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	107 9	241	615	141 3.82
13	Man cheri yal					70	0	70	67.3 2	292 6	0	292 6	149 7.09	49	5	22	84.6 5	66	29	13	131	311 1	34	303 1	178 0.06
14	Med ak	112	24	9	2.13	7	1	6	10.4 7	129	0	129	102. 17	26	11	1	0.5	260	80	5	5.47	534	116	150 74	120. 74
15	Med chal					23	0	23	0.83	1	0	1	0.07	0	0	0	0	2	1	0	0	26	1	24	0.9
16	Mul ugu					123	0	123	212. 82	588	0	588	871. 02	34	4	16	74.7 3					745	4	727	115 8.57
17	Naga rkur nool	171	4	1	0.26	97	8	89	66.3 9	138 3	1	137 9	811. 51	181	24	71	336. 38	25	5	3	12.8 7	185 7	42	154 3	122 7.41
18	Nalg onda	494	114	62	12.8 5	255	0	253	242. 04	463	0	463	278. 26	157	49	66	212. 09	120	37	33	84.3 9	148 9	200	877	829. 63

94

19	Nara yang pet	16	0	0	0	0	101	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 Sirsila	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	Waringal (Urban)	10	5	3	0.57	31	0	31	34.04	9	0	9	5.22	211	62	113	373.47									413.3		
31	Warangal	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			

32	Yada dri Bhuv anag iri	93	9	1	0.19	122	0	122	153. 32	202	0	202	158. 06	210	54	74	176. 68	23	5	8	16.5 2	650	68	407	504. 77
	Tota I	520 3	745	237	47.3	540 9	10	539 5	694 2.95	288 66	4	288 55	158 47.0 7	139 26	377 9	665 7	176 60.9 4	203 3	717	456	243 4.77	554 37	525 5	416 00	429 33.0 3

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	Maneru							Krishna	Krishna		
Number of GPs	107	40	17	124	36	23	71	117	146	135	80	14	91	93	53	152
Total Population	2569	41589	16987	222216	53934	35829	12057	23693	228984	19394	14315	26654	130759	21373	75956	247616
Solid Waste	320.0	12.16	4.97		0	0		27.57	Yes		0	27436			10.438	
Total waste generation-TPD	318.8	11.80	4.82	13.24	2.674	1.274	27.1	25.31	35.00	13485.25	17.53	12500	6.5	7.2	1.591	16.14
Total Waste Collected - TPD	317.9	11.80	4.82	12.96	2.674	1.274	25.5	25.59	41.00	13485.25	17.53	15000	5.9	6.7	1.283	16.14
SW Processing facilities capacity	114.7	10.02	4.09	12.39	26.66	5.82	25.5	25.45	32.00	874.8	Supported by ITC for recycling	665	9	9.5	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 waste generated TPD	254.7	1.83	0.75	0.40	0.094	0.184	0.78	30.52	86.04	6742.6	6.576	564	0.7	0.8	92.053	77513.71

96

Expenditure incurred in Rs 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 sewage generation - 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	Individual & Community 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

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 feet
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 n- 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

100

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	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 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	56.62	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+LWM) 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. Individual 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 remaining balance	1. Individual 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 2669 Soak Pits will be completed in the year 2021-22 under MGNREGS Scheme. Budget Rs.1.10 crores	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

October, 2021 water quality analysis reports

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

103

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

105

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	Kinneresani 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 musu 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 Musu						

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

November, 2021 analysis reports

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 KTRPP Ash Pond Joining Moranchavagu	3.8	8.03	822	2.5	2	120

110

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	Kinneresani 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

(10)

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 Pratapasaram	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 N O	River	Pri orit y	pH at 25 °C	Sp. Cond at 25° C mic sie/c m	TDS Calc ulate d mg/li t.	CO ₃ as CaC O ₃ mg/li t.	HCO 3 as CaC O ₃ mg/li t.	Chlo ride mg/li t.	Fluo ride mg/li t.	NO ₃ mg/li t.	Sulp hate mg/li t.	Sodi um mg/li t.	Potas sium mg/li t.	Calci um mg/li t.	Mag neisu m mg/li t.	T.H. as CaC O ₃ mg/li t.	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	334.0 8	0	200	50	1.65	5	17	43	3	24	34.03 4	199.9 42	1.322 17
14	Musi	I	7.79	612	391.6 8	0	170	60	0.76	51	15	42	2	24	38.89 6	219.9 34	1.231 33

15	Musi	I	8.21	1536	983.0 4	0	380	250	1.07	15	44	135	7	64	82.65 4	499.8 6	2.625 32
16	Musi	I	8.16	1230	787.2	0	260	160	0.61	153	36	117	13	40	68.06 8	379.8 85	2.609 95
20	Musi	I	8.04	1842	1178. 88	0	330	250	0.63	269	49	160	6	80	102.1 02	619.8 27	2.794 2
21	Musi	I	7.66	490	313.6	0	190	40	2.53	7	9	40	2	24	29.17 2	179.9 51	1.296 45
22	Musi	I	7.91	1466	938.2 4	0	380	170	1.18	94	42	121	3	56	87.51 6	499.8 52	2.353 08
23	Musi	I	8.3	743	475.5 2	30	210	90	0.82	8	20	62	2	32	43.75 8	259.9 26	1.672 01
24	Musi	I	8.01	1148	734.7 2	0	300	140	0.53	70	30	101	4	56	58.34 4	379.9 01	2.252 98
25	Musi	I	8.09	1030	659.2	0	300	90	1.3	99	27	102	3	40	53.48 2	319.9 1	2.479 47
26	Musi	I	8.07	1143	731.5 2	0	260	190	1.56	37	31	108	3	40	63.20 6	359.8 93	2.475 19
27	Musi	I	8.19	1237	791.6 8	0	300	160	0.69	93	36	109	3	40	72.93	399.8 77	2.369 93
28	Musi	I	8.16	1676	1072. 64	0	440	210	1.38	79	47	154	5	56	92.37 8	519.8 44	2.936 68
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	14.8 4
31	Musi	I	8.22	1763	1128	0	480	220	1.27	31	34	330	1	16	29	160	11.3 4
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	48	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

(17)

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	274 6	175 7	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

12 0	Musi	I	7.73	799	511	0	350	30	0.99	12	10	110	1	32	24	180	3.57
12 1	Musi	I	7.69	611	391	0	230	30	0.36	3	11	47	3	40	19	180	1.52
12 2	Musi	I	7.52	132 1	845	0	350	190	1.33	16	20	110	5	56	63	400	2.39
12 3	Musi	I	8.12	138 0	883	0	470	160	1.35	5	8	186	34	64	24	260	5.03
12 4	Musi	I	8.21	184 2	117 9	0	270	330	0.45	33	161	200	70	80	44	380	4.46
12 5	Musi	I	7.84	1433	917	0	250	300	1.46	0	22	220	6	40	29	220	6.45
12 6	Musi	I	7.22	1451	929	0	390	140	0.45	172	22	81	3	192	24	580	1.46
12 7	Musi	I	7.63	103 0	659	0	390	80	1.81	12	36	64	2	56	63	400	1.39
12 8	Musi	I	7.21	1805	1155	0	440	310	2.00	20	18	103	3	216	34	680	1.72
12 9	Musi	I	7.09	1635	1046	0	420	190	1.12	163	19	134	3	128	53	540	2.50
13 0	Musi	I	7.55	2278	1458	0	530	330	1.68	142	28	133	1	104	136	820	2.02
13 1	Musi	I	7.60	157 0	100 5	0	220	280	0.66	12	201	108	5	144	44	540	2.02
13 2	Musi	I	7.82	419 9	268 7	0	460	990	1.68	61	35	450	7	160	156	104 0	6.07
13 3	Musi	I	7.62	1339	857	0	460	150	1.89	20	20	118	5	64	68	440	2.45
13 4	Musi	I	7.64	296 8	190 0	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

(21)

14 6	is part of Manjeera 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
14 7	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
14 8	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
14 9	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
15 0	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
15 1	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
15 2	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
15 3	Manjeera (Nakkavagu	II	7.92	3268	2092	0	570	480	2.13	347	41	438	6	152	63	640	7.52

15 4	is part of 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
15 5	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
15 6	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
15 7	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
15 8	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
15 9	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
16 0	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
16 1	Manjeera (Nakkavagu	II	7.87	1540	986	0	230	280	0.53	171	34	235	2	32	49	280	6.09

123

16 2	is part of 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
16 3	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
16 4	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
16 5	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
16 6	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
16 7	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
16 8	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
16 9	Manjeera (Nakkavagu)	II	8.36	847	542	10	200	130	0.62	30	17	91	3	24	44	240	2.55

170	is part of 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

19 5	is part of 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
19 6	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
19 7	Manjeera (Nakkavagu is part of Manjeera)	II	7.23	142 7	913	0	410	160	1.23	12	25	162	1	56	39	300	4.07
19 8	Manjeera (Nakkavagu is part of Manjeera)	II	7.60	166 8	106 8	0	420	260	0.70	11	18	142	1	112	58	520	2.71
19 9	Manjeera (Nakkavagu is part of Manjeera)	II	7.84	157 8	101 0	0	410	220	0.71	29	31	107	1	136	49	540	2.00
20 0	Manjeera (Nakkavagu is part of Manjeera)	II	7.02	227 7	145 7	0	370	400	1.81	133	37	256	8	152	44	560	4.70
20 1	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
20 2	Manjeera (Nakkavagu)	II	6.41	176 8	113 2	0	350	310	1.81	52	30	110	2	144	68	640	1.89

203	is part of 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

21 1	is part of 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
21 2	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
21 3	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
21 4	Maner	III	8.14	910	582	0	300	60	0.76	43	50	50	5	72	43.76	360	1.15
21 5	Maner	III	7.98	540	346	0	250	30	0.34	19	32	25	6	56	34.03	280	0.65
21 6	Maner	III	7.92	616	394	0	280	30	0.68	35	5	35	2	56	34.03	280	0.91
21 7	Maner	III	8.15	817	523	0	120	180	1.04	49	57	84	11	56	34.03	280	2.18
21 8	Maner	III	7.98	642	411	0	100	120	0.83	3	49	83	4	24	19.45	140	3.05
21 9	Maner	III	7.62	1326	849	0	260	200	0.92	75	56	54	1	112	68.07	560	0.99
22 0	Maner	III	7.93	631	404	0	210	100	0.42	42	3	30	4	64	38.90	320	0.73
22 1	Maner	III	7.96	364	233	0	210	30	0.33	35	16	44	2	40	24.31	200	1.35
22 2	Maner	III	7.67	777	497	0	110	120	0.52	21	56	42	4	40	38.90	260	1.13

22 3	Maner	III	8.32	1755	1123	20	380	210	0.86	95	59	334	27	16	9.72	80	16.24
22 4	Maner	III	7.81	824	527	0	100	220	0.38	25	22	74	11	56	34.03	280	1.92
22 5	Maner	III	7.67	1910	1222	0	200	470	1.39	124	47	128	16	152	92.38	760	2.02
22 6	Maner	III	7.4	1276	816.6 4	0	300	160	0.32	34	32	108	12	40	82.65 4	439.8 6	2.238 92
22 7	Maner	III	7.6	1034	661.7 6	0	170	240	0.59	14	21	112	5	64	48.62	359.9 18	2.566 78
22 8	Maner	III	8.14	1395	893	0	500	120	1.14	78	56	65	3	120	92.38	680	1.08
22 9	Maner	III	7.99	551	353	0	110	90	0.74	38	48	35	3	48	29.17	240	0.98
23 0	Maner	III	8.30	405	259	10	190	20	0.35	35	44	26	5	48	29.17	240	0.73
23 1	Maner	III	7.7	5497	3518. 08	0	500	1340	0.13	3	150	801	225	96	189.6 18	1019. 68	10.90 62
23 2	Maner	III	8.28	892	571	0	260	100	2.08	12	36	82	4	48	38.90	280	2.13
23 3	Maner	III	8.29	1179	754.5 6	0	340	160	1.16	25	32	101	4	48	68.06 8	399.8 85	2.195 97
23 4	Maner	III	8.04	646	413.4 4	0	190	80	0.42	18	18	54	2	24	38.89 6	219.9 34	1.583 14
23 5	Maner	III	7.56	560	358	0	170	60	1.81	29	7	51	3	32	24	180	1.65
23 6	Maner	III	7.14	1821	1165	0	390	300	0.90	84	25	147	16	88	88	580	2.66
23 7	Maner	III	7.43	784	502	0	290	50	0.97	30	9	35	2	88	24	320	0.85

131

23 8	Maner	III	7.31	1361	871	0	300	220	0.80	47	18	78	5	88	68	500	1.52
23 9	Maner	III	7.77	273	175	0	120	10	0.73	2	5	17	2	32	5	100	0.74
24 0	Maner	III	6.89	1505	963	0	270	270	0.68	67	20	62	3	144	53	580	1.11
24 1	Maner	III	6.95	854	547	0	180	140	2.25	30	13	37	4	88	29	340	0.88
24 2	Maner	III	7.52	650	416	0	190	80	0.62	13	12	39	2	56	24	240	1.09
24 3	Maner	III	7.35	847	542	0	170	160	0.68	12	17	58	4	88	19	300	1.46
24 4	Maner	III	7.93	1078	690	0	210	140	1.39	65	40	106	6	48	38.90	280	2.75
24 5	Maner	III	7.87	430	275	0	120	40	0.33	21	21	44	1	24	14.59	120	1.75
24 6	Maner	III	8.18	639	409	0	180	50	0.57	48	32	66	2	32	24.31	180	2.14
24 7	Maner	III	7.88	780	499	0	180	80	1.08	51	33	70	3	40	29.17	220	2.05
24 8	Maner	III	8.17	353	226	0	110	30	0.78	3	15	34	1	16	14.59	100	1.48
24 9	Maner	III	8.45	1425	912	50	270	200	0.92	53	57	154	58	56	43.76	320	3.74
25 0	Maner	III	7.79	809	518	0	180	100	0.53	53	34	74	4	40	34.03	240	2.08
25 1	Maner	III	7.83	1010	646	0	270	130	0.52	10	39	105	5	48	38.90	280	2.73
25 2	Maner	III	7.98	688	440	0	170	70	1.58	29	30	60	2	32	29.17	200	1.84
25 3	Maner	III	7.85	425	272	0	140	40	0.29	16	15	40	1	24	19.45	140	1.47

25 4	Maner	III	7.93	894	572	0	220	100	1.89	53	37	87	4	48	34.03	260	2.35
25 5	Maner	III	8.12	774	495	0	170	80	0.55	84	29	67	3	40	34.03	240	1.88
25 6	Maner	III	8.24	381	244	0	130	30	0.74	8	13	35	1	24	14.59	120	1.39
25 7	Maner	III	8.09	690	442	0	180	60	0.71	46	32	72	2	32	24.31	180	2.33
25 8	Maner	III	8.19	2095	1341	0	310	440	1.29	19	74	234	12	88	77.79	540	4.38
25 9	Maner	III	8.39	713	456	20	100	120	0.54	49	17	38	3	64	24	260	1.02
26 0	Maner	III	7.47	729	466.5 6	0	210	90	0.94	9	29	64	2	24	43.75 8	239.9 26	1.796 44
26 1	Maner	III	8.3	1697	1086. 08	30	410	250	2.95	2	57	169	14	48	87.51 6	479.8 52	3.354 33
26 2	Maner	III	7.81	838	536.3 2	0	240	110	0.65	8	32	63	2	32	53.48 2	299.9 1	1.581 68
26 3	Maner	III	7.94	768	491.5 2	0	230	80	0.25	44	27	58	4	32	48.62	279.9 18	1.507 25
26 4	Maner	III	8.28	1493	955.5 2	0	410	180	1.5	43	52	115	11	72	82.65 4	519.8 6	2.192 94
26 5	Maner	III	7.43	885	566	0	80	150	0.41	137	27	57	5	104	10	300	1.43
26 6	Maner	III	7.49	432 4	276 7	0	510	108 0	3.00	168	69	520	14	112	190	106 0	6.95
26 7	Maner	III	8.24	107 0	685	0	330	120	1.82	38	11	116	4	32	49	280	3.01
26 8	Maner	III	7.80	806	516	0	140	140	1.04	50	18	68	6	56	24	240	1.91

133

26 9	Maner	III	6.48	942	603	0	120	180	0.72	110	20	93	10	48	39	280	2.41
27 0	Maner	III	8.21	1309	838	0	300	120	1.60	194	18	152	6	16	68	320	3.70
27 1	Maner	III	7.14	918	588	0	370	80	0.86	29	15	69	7	104	24	360	1.58
27 2	Maner	III	8.01	699	447	0	130	130	0.38	36	11	41	3	64	24	260	1.11
27 3	Maner	III	7.34	499	319	0	100	90	0.86	9	19	34	3	48	15	180	1.10
27 4	Maner	III	7.30	2218	1420	0	500	350	1.87	170	48	226	4	96	107	680	3.77
27 5	Maner	III	7.51	557	356	0	90	110	0.49	25	19	29	7	64	15	220	0.85
27 6	Maner	III	7.97	595	381	0	190	30	1.37	74	10	84	2	32	10	120	3.33
27 7	Maner	III	7.90	679	435	0	60	160	0.36	37	15	35	2	80	15	260	0.94
27 8	Maner	III	7.88	556	356	0	220	40	1.18	20	7	63	3	32	19	160	2.17
27 9	Maner	III	8.02	498	319	0	200	30	0.86	39	9	37	4.0	16	39	200	1.14
28 0	Maner	III	7.63	1430	915	0	250	280	0.69	39	25	91	3.0	104	58	500	1.77
28 1	Maner	III	7.06	1276	817	0	330	90	2.32	79	125	81	4	136	34	480	1.61
28 2	Maner	III	7.90	502	321	0	140	50	0.19	43	4	15	26	48	15	180	0.49
28 3	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

4				0	2															
28	Maner	III	7.38	123 7	792	0	380	120	1.85	77	22	189	3	24	39	220	5.54			
28	Maner	III	7.68	870	557	0	220	120	0.65	25	22	66	49	64	15	220	1.93			
28	Maner	III	7.25	881	564	0	100	210	0.75	17	17	49	2	64	39	320	1.19			
28	Maner	III	7.50	600	384	0	130	80	0.92	50	9	32	3	72	10	220	0.94			
28	Maner	III	7.74	102 6	657	0	160	230	0.49	18	10	82	12	104	15	320	1.99			
29	Maner	III	7.81	400	256	0	90	60	0.71	29	7	28	3	32	15	140	1.03			
29	Maner	III	7.42	796	509	0	320	60	0.20	2	11	27	14	88	29	340	0.64			
29	Maner	III	7.70	543	348	0	190	30	0.32	35	15	35	3	32	29	200	1.08			
29	Maner	III	7.51	979	627	0	100	180	0.48	131	17	57	8	88	29	340	1.34			
29	Maner	III	7.85	540	346	0	220	40	0.43	4	14	35	11	64	10	200	1.08			
29	Maner	III	7.75	468	300	0	150	40	1.04	50	7	33	3	24	29	180	1.07			
29	Maner	III	8.01	480	307	0	110	50	1.08	36	18	32	5	32	19	160	1.10			
29	Maner	III	7.90	361	231	0	90	30	0.81	42	8	23	3	32	10	120	0.91			
29	Maner	III	7.70	146 7	939	0	150	270	0.35	155	19	76	2	152	29	500	1.48			
29	Maner	III	7.61	894	572	0	260	90	1.59	44	16	56	5.0	72	34	320	1.36			

135

30 0	Maner	III	7.88	616	394	0	80	100	1.99	87	10	78	1.0	32	15	140	2.87
30 1	Maner	III	7.5	972	622.0 8	0	260	160	1.4	1	43	132	6	56	24.31	239.9 59	3.704 91
30 2	Maner	III	7.29	618	395.5 2	0	210	50	0.69	53	5	112	6	24	4.862	79.99 18	5.444 62
30 3	Maner	III	7.17	1056	675.8 4	0	350	140	0.58	34	46	64	5	56	82.65 4	479.8 6	1.270 27
30 4	Maner	III	7.28	796	509.4 4	0	210	100	0.92	12	26	80	14	48	19.44 8	199.9 67	2.459 7
30 5	Maner	III	7.3	604	386.5 6	0	220	20	0.28	72	21	58	3	48	19.44 8	199.9 67	1.783 29
30 6	Maner	III	7.34	1011	647.0 4	0	340	100	2.42	6	35	65	6	48	63.20 6	379.8 93	1.449 96
30 7	Maner	III	7.25	1000	640	0	260	120	0.68	44	34	123	12	48	24.31	219.9 59	3.605 84
30 8	Maner	III	7.26	1717	1098. 88	0	410	260	2.36	65	42	210	10	24	87.51 6	419.8 52	4.455 98
30 9	Maner	III	7.28	925	592	0	200	130	0.6	65	40	70	6	32	58.34 4	319.9 01	1.701 62
31 0	Maner	III	7.22	840	537.6	0	230	100	0.92	38	44	136	12	48	4.862	139.9 92	4.997 58
31 1	Maner	III	7.27	672	430.0 8	0	180	90	0.64	39	24	47	2	48	34.03 4	259.9 42	1.267 45
31 2	Maner	III	7.38	549	351.3 6	0	150	40	0.74	57	26	64	2	48	4.862	139.9 92	2.351 8
31 3	Maner	III	7.33	832	532.4 8	0	250	90	0.79	27	29	95	4	64	14.58 6	219.9 75	2.784 89
31 4	Maner	III	7.41	888	568.3	0	310	80	1.43	19	20	120	2	48	19.44	199.9	3.689

31 5	Maner	III	7.19	1199	767.3 6	0	330	170	0.81	51	23	79	4	72	68.06 8	459.8 85	1.601 68
31 6	Maner	III	7.33	1752	1121. 28	0	420	280	0.47	54	48	132	21	56	111.8 26	599.8 11	2.343 36
31 7	Maner	III	7.2	1042	666.8 8	0	340	110	0.8	15	21	160	19	48	9.724	159.9 84	5.499 9
31 8	Maner	III	7.35	961	615.0 4	0	320	100	0.96	24	41	47	5	32	82.65 4	419.8 6	0.997 28
31 9	Maner	III	7.19	1460	934.4	0	480	130	0.92	54	35	88	12	88	77.79 2	539.8 68	1.646 69
32 0	Maner	III	7.16	1202	769.2 8	0	280	170	0.54	103	38	101	21	72	53.48 2	399.9 1	2.195 9
32 1	Maner	III	7.2	846	541.4 4	0	180	120	0.55	59	36	66	10	72	24.31	279.9 59	1.715 02
32 2	Maner	III	7.24	1080	691.2	0	280	120	0.57	60	48	48	5	56	72.93	439.8 77	0.995 06
32 3	Maner	III	7.51	1464	936.9 6	0	480	100	3.59	74	37	75	21	56	97.24	539.8 36	1.403 47
32 4	Maner	III	8.19	1615	1034	0	120	520	0.25	3	11	325	66	24	9.72	100	14.13
32 5	Maner	III	7.98	873	559	0	160	180	1.13	26	47	38	4	64	58.34	400	0.83
32 6	Maner	III	7.93	1016	650	0	240	150	0.98	23	50	60	2	72	53.48	400	1.30
32 7	Maner	III	8.32	906	580	10	120	140	2.28	55	53	78	3	48	34.03	260	2.10
32 8	Maner	III	7.85	882	564	0	220	100	0.29	48	50	60	3	64	38.90	320	1.46

137

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
344	Godavari	IV	7.60	700	448	0	210	60	0.35	44	26	55	2	32	38.90	240	1.54

139

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

37 5	Godavari	IV	7.85	527	337	0	260	50	0.26	4	39	33	19	56	34.03	280	0.86
37 6	Godavari	IV	7.47	462	295.6 8	0	140	30	0.22	1	14	16	5	72	4.862	199.9 92	0.491 91
37 7	Godavari	IV	7.52	197	126	0	40	10	0.14	10	10	9	2	24	4.86	79.99 18	0.44
37 8	Godavari	IV	7.62	1530	979.2	0	200	240	0.29	80	37	146	5	104	43.75 8	439.9 26	3.026 46
37 9	Godavari	IV	7.65	1821	1165	0	160	410	0.32	65	74	252	9	80	82.65	539.8 6	4.72
38 0	Godavari	IV	7.96	2664	1705	0	300	610	0.46	177	30	101	4	160	179.8 9	1140	1.30
38 1	Godavari	IV	7.14	219	140	0	100	40	0.31	21	14	12	2	32	19.45	160	0.41
38 2	Godavari	IV	7.09	657	420	0	120	120	0.47	43	47	42	3	56	34.03	280	1.09
38 3	Godavari	IV	7.65	758	485	0	130	40	0.39	62	20	51	8	24	34.03	199.9 42	1.57
38 4	Godavari	IV	7.42	1030	659.2	0	170	200	0.57	12	45	103	21	64	58.34 4	399.9 01	2.239 41
38 5	Godavari	IV	7.45	864	553	0	160	40	0.20	154	22	75	7	64	24.31	259.9 59	2.02
38 6	Godavari	IV	7.35	678	433.9 2	0	160	40	0.14	41	21	23	4	56	34.03 4	279.9 42	0.597 68
38 7	Godavari	IV	7.60	1034	662	0	160	120	0.15	184	21	105	15	64	38.90	319.9 34	2.55
38 8	Godavari	IV	8.19	1408	901	0	350	180	0.44	20	50	130	8	64	58.34	400	2.83
38 9	Godavari	IV	7.92	1259	806	0	330	160	0.43	0	44	115	6	56	53.48	360	2.64

39 0	Godavari	IV	8.24	550	352	0	190	50	0.37	8	23	44	1	32	29.17	200	1.35
39 1	Godavari	IV	8.04	556	356	0	190	50	1.13	4	24	43	1	32	29.17	200	1.32
39 2	Godavari	IV	8.11	345	221	0	130	30	0.12	2	17	24	1	24	19.45	140	0.88
39 3	Godavari	IV	7.97	978	626	0	170	110	0.15	167	36	83	5	56	43.76	320	2.02
39 4	Godavari	IV	7.83	1250	800	0	370	150	1.41	23	42	118	6	64	58.34	400	2.57
39 5	Godavari	IV	8.18	2306	1476	0	400	440	1.60	3	72	218	10	104	97.24	660	3.69
39 6	Godavari	IV	8.23	550	352	0	160	50	0.93	18	22	43	1	32	24.31	180	1.39
39 7	Godavari	IV	8.21	552	353	0	180	50	0.28	2	21	45	1	32	24.31	180	1.46
39 8	Godavari	IV	8.12	759	486	0	190	70	0.58	29	31	68	3	32	29.17	200	2.09
39 9	Godavari	IV	7.85	972	622	0	220	100	0.42	82	35	86	5	48	38.90	280	2.23
40 0	Godavari	IV	7.94	1055	675	0	280	130	0.54	47	38	96	5	56	48.62	340	2.26
40 1	Godavari	IV	8.31	542	347	30	130	40	0.41	13	21	42	1	32	19.45	160	1.44
40 2	Godavari	IV	7.96	982	628	0	280	100	1.87	3	37	87	5	48	38.90	280	2.26
40 3	Godavari	IV	7.88	1375	880	0	330	170	1.06	45	47	124	7	64	58.34	400	2.70
40 4	Godavari	IV	8.24	783	501	0	200	90	1.05	21	31	65	3	40	34.03	240	1.82
40 5	Godavari	IV	8.30	895	573	30	220	100	0.80	24	35	79	4	48	38.90	280	2.05

(14)

142

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

143

42	Godavari	IV	7.80	765	490	0	240	90	0.76	8	29	66	2	32	43.76	260	1.78
2																	
42	Godavari	IV	7.89	1020	653	0	300	110	1.32	52	33	81	2	48	58.34	360	1.86
3																	
42	Godavari	IV	7.90	1011	647	0	300	120	1.06	50	33	88	3	48	58.34	360	2.02
4																	
42	Godavari	IV	8.30	3550	2272	30	770	630	0.97	5	101	341	11	136	179.8	1080	4.51
5																	
42	Godavari	IV	7.67	418	268	0	160	40	0.47	18	15	31	2	16	34.03	180	1.00
6																	
42	Godavari	IV	8.30	5055	3235	30	1310	730	13.90	4	151	341	25	168	369.5	1939	3.37
7																	
42	Godavari	IV	7.59	1319	844	0	390	150	2.66	11	45	122	3	56	63.21	400	2.65
8																	
42	Godavari	IV	7.72	413	264	0	180	30	0.84	1	14	36	2	16	29.17	160	1.24
9																	
43	Godavari	IV	7.90	1277	817	0	360	180	0.59	4	39	121	4	56	63.21	400	2.63
0																	
43	Godavari	IV	7.89	2000	1280	0	520	310	0.87	3	58	182	10	88	102.1	640	3.13
1																	
43	Godavari	IV	7.59	418	268	0	170	30	0.71	21	9	36	2	16	29.17	160	1.24
2																	
43	Godavari	IV	7.82	1037	664	0	300	110	1.42	50	33	79	4	24	72.93	360	1.81
3																	
43	Godavari	IV	7.69	2394	1532	0	190	550	2.77	114	91	375	2	40	68.07	380	8.37
4																	
43	Godavari	IV	7.42	741	474	0	250	60	0.71	57	15	19	1	40	63.21	360	0.44
5																	
43	Godavari	IV	7.84	1450	928	0	350	160	1.97	57	82	149	12	24	82.65	400	3.24
6																	
43	Godavari	IV	7.39	852	545	0	240	90	0.31	41	30	33	3	24	72.93	360	0.76
7																	

145

45 3	Godavari	IV	6.98	1060	678	0	360	80	0.82	48	11	57	5	48	68	400	1.24
45 4	Godavari	IV	7.16	1442	923	0	400	180	0.89	47	21	91	6	112	58	520	1.74
45 5	Godavari	IV	6.96	676	433	0	250	30	0.95	24	10	31	3	88	10	260	0.84
45 6	Godavari	IV	7.57	877	561	0	340	50	1.82	14	11	64	4	40	49	300	1.60
45 7	Godavari	IV	7.78	744	476	0	160	110	0.55	34	15	90	8	32	19	160	3.10
45 8	Godavari	IV	7.55	550	352	0	140	50	0.59	50	9	36	4	32	24	180	1.18
45 9	Godavari	IV	7.47	1134	726	0	260	160	1.86	63	23	106	2	48	53	340	2.51
46 0	Godavari	IV	7.81	603	386	0	180	70	0.48	10	11	38	1	56	19	220	1.12
46 1	Godavari	IV	8.73	916	586	30	310	70	1.19	0	19	186	5	8	10	60	10.4 2
46 2	Godavari	IV	7.11	929	595	0	270	100	1.07	17	14	68	2	56	39	300	1.71
46 3	Godavari	IV	7.57	802	513	0	250	90	1.36	0	8	73	2	48	29	240	2.06
46 4	Godavari	IV	8.09	787	504	0	280	70	1.11	3	9	62	2	24	49	260	1.68
46 5	Godavari	IV	8.00	1019	652	0	110	220	0.33	12	33	100	2	64	24	260	2.70
46 6	Godavari	IV	7.41	663	424	0	250	40	0.63	14	10	31	3	64	24	260	0.84
46 7	Godavari	IV	8.21	877	561.2 8	0	250	100	1.04	30	31	80	3	32	48.62	279.9 18	2.078 96
46	Godavari	IV	7.8	550	352	0	210	40	1.04	2	25	44	2	24	34.03	199.9	1.352

147

48 3	krishna	V	7.57	2935	1878	0	520	520	1.27	297	78	304	29	80	170	900	4.40
48 4	krishna	V	6.88	5983	3829	0	490	1500	0.66	68	200	558	4	240	277	1740	5.82
48 5	krishna	V	7.45	906	580	0	200	130	0.21	33	27	36	2	120	15	360	0.83
48 6	krishna	V	6.88	3673	2351	0	310	750	0.18	480	73	308	38	336	68	1120	4.00
48 7	krishna	V	7.77	3550	2272	0	770	610	0.80	182	24	612	9	32	88	440	12.69
48 8	krishna	V	7.63	2104	1347	0	300	380	0.63	88	112	242	6	88	73	520	4.61
48 9	krishna	V		1659	1062	0	220	360	0.16	72	21	51	4	184	53	680	0.85
49 0	krishna	V	7.64	5263	3368	0	490	1070	1.01	366	197	861	1	112	170	980	11.96
49 1	krishna	V	7.43	5092	3259	0	390	1090	0.51	160	235	500	16	192	238	1460	5.69
49 2	krishna	V	7.77	1257	804	0	200	280	0.43	3	24	103	1	40	73	400	2.24
49 3	krishna	V	7.97	865	554	0	310	70	1.34	17	8	72	3	24	53	280	1.87
49 4	krishna	V	7.85	1275	816	0	300	160	0.38	108	23	97	7	80	53	420	2.06
49 5	krishna	V	8.11	1716	1098	0	340	200	0.97	254	24	161	21	24	102	480	3.19
49 6	krishna	V	7.84	969	620	0	200	170	0.36	42	14	81	28	56	34	280	2.09
49 7	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

149

51 4	krishna	V	7.00	3528	2258	0	380	720	1.03	374	53	295	4	296	92	1120	3.83
51 5	krishna	V	7.07	1163	744	0	350	100	1.44	80	11	55	1	104	49	460	1.12
51 6	krishna	V	7.89	2152	1377	0	230	410	0.52	217	60	353	24	40	39	260	9.51
51 7	krishna	V	7.65	1798	1151	0	580	200	1.22	3	29	250	29	64	39	320	6.08
51 8	krishna	V	7.40	2374	1519	0	150	550	0.37	119	140	83	5	176	136	1000	1.14
51 9	krishna	V	7.30	545	349	0	160	50	0.70	40	9	34	4	56	15	200	1.05
52 0	krishna	V	7.39	520	333	0	160	40	0.82	52	11	22	5	40	29	220	0.64
52 1	krishna	V	8.59	1947	1246	20	770	90	4.04	14	23	400	6	24	15	120	15.8 8
52 2	krishna	V	8.03	969	620	0	320	70	1.53	53	17	104	3	40	39	260	2.80
52 3	krishna	V	7.79	899	575	0	250	50	0.89	128	16	86	4	40	39	260	2.32
52 4	krishna	V	7.75	1005	643	0	270	150	0.63	21	26	60	1	96	39	400	1.30
52 5	krishna	V	7.86	855	547	0	290	80	0.47	23	18	74	4	56	34	280	1.92
52 6	krishna	V	7.22	852	545	0	240	90	1.20	53	8	78	1	72	19	260	2.10
52 7	krishna	V	7.35	1478	946	0	170	250	0.45	214	35	32	7	152	73	680	0.53
52 8	krishna	V	7.58	1751	1121	0	200	270	0.49	335	25	82	10	136	88	700	1.34
52 9	krishna	V	7.59	3222	2062	0	560	560	3.48	209	41	394	68	80	92	580	7.11

53 0	krishna	V	7.91	1140	730	0	260	130	1.12	128	11	62	2	40	83	440	1.29
53 1	krishna	V	7.28	1080	691	0	330	80	0.72	85	11	56	3	64	58	400	1.22
53 3	krishna	V	7.19	1069	684	0	280	130	1.46	18	26	89	1	40	53	320	2.16
53 4	krishna	V	8.07	1257	804	0	180	240	0.64	54	21	86	2	40	73	400	1.87
53 5	krishna	V	7.27	618	396	0	160	70	0.80	44	13	42	2	32	34	220	1.23
53 6	krishna	V	7.62	1088	696	0	280	130	1.68	91	21	106	3	64	44	340	2.50
53 7	krishna	V	8.43	3645	2333	20	710	520	2.42	340	103	701	63	32	63	340	16.5 3
53 8	krishna	V	8.67	2289	1465	30	880	150	3.35	13	17	501	4	32	19	160	17.2 2
53 9	krishna	V	7.75	1673	1071	0	200	340	1.32	153	33	94	3	120	92	680	1.56
54 0	krishna	V	7.29	798	511	0	280	70	0.39	0	18	53	2	56	34	280	1.38
54 1	krishna	V	7.95	789	505	0	230	100	0.44	0	14	77	3	32	34	220	2.25
54 2	krishna	V	7.26	1701	1089	0	340	170	0.53	217	60	115	10	104	73	560	2.11
54 3	krishna	V	7.63	2341	1498	0	450	310	0.74	260	35	219	112	120	68	580	3.95
54 4	krishna	V	7.95	568	364	0	200	50	0.32	6	12	32	3	32	34	220	0.94
54 5	krishna	V	7.06	2511	1607	0	220	690	0.36	25	29	119	6	240	97	1000	1.64
54 6	krishna	V	7.08	2489	1593	0	360	480	1.28	42	45	300	4	104	63	520	5.72

151

54 7	krishna	V	7.85	2283	1461	0	460	350	1.50	49	49	304	79	80	34	340	7.17
54 8	krishna	V	7.65	989	633	0	260	130	1.34	17	22	105	4	40	39	260	2.83
54 9	krishna	V	7.70	556	356	0	130	90	0.19	5	15	62	3	32	15	140	2.26
55 0	krishna	V	8.00	579	371	0	160	90	0.35	1	12	64	3	48	10	160	2.20
55 1	krishna	V	8.05	1490	954	0	540	90	2.69	131	18	309	3	24	19	140	11.36
55 2	krishna	V	7.04	1609	1030	0	280	250	0.58	177	25	219	8	120	10	340	5.16
55 3	krishna	V	7.33	739	473	0	160	100	0.54	28	35	67	1	64	15	220	1.97
55 4	krishna	V	7.20	1945	1245	0	350	420	0.89	29	25	236	6	88	68	500	4.59
55 5	krishna	V	7.46	590	378	0	170	90	0.41	3	17	53	2	40	24	200	1.64
55 6	krishna	V	7.64	676	433	0	180	90	0.32	2	17	50	1	48	24	220	1.47
55 7	krishna	V	8.28	786	503	0	290	60	0.79	19	14	112	5	32	19	160	3.85
55 8	krishna	V	8.26	1419	908	0	210	290	0.39	50	26	54	3	104	78	580	0.97
55 9	krishna	V	7.69	1112	712	0	190	220	0.53	34	18	68	4	96	39	400	1.47
56 0	krishna	V	8.21	1521	973	0	260	280	0.97	57	25	110	3	112	53	500	2.14
56 1	krishna	V	8.14	3235	2070	0	370	720	2.58	5	102	403	7	64	126	680	6.72
56 2	krishna	V	7.37	887	568	0	300	60	2.88	45	14	44	8	64	44	340	1.04

56 3	krishna	V	7.70	1159	742	0	180	180	1.20	136	21	63	27	80	49	400	1.37
56 4	krishna	V	7.64	1515	970	0	170	150	1.02	356	27	81	2	1.2	126	523	1.54
56 5	krishna	V	7.64	2075	1328	0	450	290	1.36	35	85	200	64	88	73	520	3.81
56 6	krishna	V	8.16	1820	1165	0	400	310	1.78	31	22	257	1	40	58	340	6.06
56 7	krishna	V	7.05	1050	672	0	200	150	0.59	43	22	70	1	80	29	320	1.70
56 8	krishna	V	8.50	1652	1057	30	560	140	3.97	19	30	301	6	32	29	200	9.26
56 9	krishna	V	8.63	1223	783	30	340	150	0.75	4	19	109	28	40	58	340	2.57
57 0	krishna	V	7.39	469	300	0	110	50	0.34	34	14	38	3	40	10	140	1.40
57 1	krishna	V	8.56	759	486	30	260	70	2.27	4	16	147	3	24	10	100	6.39
57 2	krishna	V	7.68	1397	894	0	320	220	1.27	24	47	165	29	48	49	320	4.01
57 3	krishna	V	8.09	2313	1480	0	250	420	1.30	76	140	235	3	200	15	560	4.32
57 4	krishna	V	7.69	1339	857	0	440	130	1.15	7	14	170	11	56	34	280	4.42
57 5	krishna	V	8.41	555	355	20	140	70	0.46	2	16	46	2	48	15	180	1.49
57 6	krishna	V	6.55	1882	1204	0	150	280	0.46	376	120	111	115	112	78	600	1.96
57 7	krishna	V	7.85	1780	1139	0	440	240	0.57	140	24	113	2	152	68	660	1.91
57 8	krishna	V	7.25	494	316	0	210	20	0.79	16	7	23	0.3	24	39	220	0.68

153

57 9	krishna	V	7.70	952	609	0	270	140	0.38	43	10	52	13	104	29	380	1.17
58 0	krishna	V	7.86	848	543	0	360	20	1.13	58	7	72	1	64	29	280	1.88
58 1	krishna	V	7.30	831	532	0	70	230	0.08	11	6	46	71	24	39	220	1.36
58 2	krishna	V	6.97	1616	1034	0	310	230	0.51	140	32	160	2	96	49	440	3.32
58 3	krishna	V	7.02	1702	1089	0	330	280	0.47	96	28	178	6	72	63	440	3.69
58 4	krishna	V	7.71	2471	1581	0	660	380	2.62	48	27	378	48	32	68	360	8.66
58 5	krishna	V	7.62	2861	1831	0	750	400	1.42	152	48	250	1	32	209	940	3.54
58 6	krishna	V	7.12	1740	1114	0	310	270	0.31	148	33	152	2	112	53	500	2.95
58 7	krishna	V	6.92	1508	965	0	390	240	0.49	61	15	46	1	144	78	680	0.77
58 8	krishna	V	7.70	864	553	0	350	40	0.81	18	6	24	1	80	44	380	0.54
58 9	krishna	V	7.21	857	548	0	130	110	1.19	168	10	65	2	72	29	300	1.63
59 0	krishna	V	7.78	922	590	0	250	100	0.76	43	22	45	1	112	19	360	1.03
59 1	krishna	V	7.51	1813	1160	0	310	320	0.74	6	106	145	2	168	39	580	2.62
59 2	krishna	V	7.64	736	471	0	300	80	1.06	6	13	108	1	48	19	200	3.32
59 3	krishna	V	7.70	2681	1716	0	720	330	0.21	177	32	356	2	184	53	680	2.40
59 4	krishna	V	6.92	1027	657	0	210	220	0.87	9	13	106	2	88	24	320	2.58

154

59	krishna	V	7.26	1147	734	0	220	170	0.69	80	18	60	3	104	39	420	1.27
59	krishna	V	7.09	1494	956	0	300	210	1.77	159	20	60	2	152	58	620	1.05
59	krishna	V	7.45	1192	763	0	180	180	0.16	62	28	26	1	152	34	520	0.50
59	krishna	V	7.60	1801	1153	0	430	280	1.28	7	53	206	3	48	83	460	4.18
59	krishna	V	7.38	2491	1594	0	390	440	1.03	171	59	277	3	80	102	620	4.83
60	krishna	V	7.33	836	535	0	190	150	0.55	1	24	67	4	56	34	280	1.74
60	krishna	V	7.26	2457	1572	0	350	430	1.03	216	50	273	3	80	102	620	4.76
60	krishna	V	7.61	846	541	0	210	140	0.55	0	23	70	5	56	34	280	1.82
60	krishna	V	7.38	1147	734	0	230	200	0.48	16	33	83	3	80	44	380	1.86
60	krishna	V	7.07	824	527	0	230	110	0.46	4	28	73	2	56	29	260	1.97
60	krishna	V	7.33	2997	1918	0	400	380	0.80	680	55	201	2	240	117	1080	2.66
60	krishna	V	8.14	284 5	182 1	0	380	570	1.01	149	120	430	6	72	92	560	7.90

“Quarterly Progress Report for the Implementation of National Clean Air Programme in Hyderabad & Patancheru

Basic Information	
Name of Non Attainment City	Hyderabad & Pancheruvu
Sate/ Union Territory	Telangana
Name of Nodal Officer at PCB/ PCC	D.Narender-SEE
Email Id	esci1-tspcb@telangana.gov.in
Contact Number	9177303212
Date till which progress is submitted	QPR(Oct,2021-Dec,2021)

Action Point Code	Sector	Total Number of Actions As per CAP	Number of Actions Completed	Number of Actions Under Progress
CB	CAPACITY BUILDING, MONITORING NETWORK AND SOURCE APPORTIONMENT	CB5	3	2
PO	PUBLIC OUTREACH	PO2	2	0
RD/ C&D	ROAD DUST AND CONTRUCTION & DEMOLITION	RD2&CD1	2	1
VE	VEHICLES	VE13	9	4
IP	INDUSTRIES	IP13	8	5
BB/DF	WASTE AND BIOMASS- DUMPING AND BURNING	BB11 & DF1	9	2
AQ	AIR QUALITY DATA	AQ 1	1	0

* 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

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
CB 1.1	TSPCB Strengthening of Ambient Air Quality Management Additional stations proposed to CPCB	i. Existing 6 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,2022. iv. Instruments supplied and installation under progress	12 as per CPCB norms 6 existing and 8 to be installed and is in progress	24 months	Deviation due to Covid pandemic. 7 COQAMMS installation completed & remaining 1 CAAQMS will be completed in February, 2022	Installation of additional 8 CAAQMS to meet CPCB criteria To Be completed by Feb, 22	Rs. 800 lakhs (NCAP)	Rs. 800 lakhs (NCAP)	Nil 80% release d in Dec, 21 & remain ing in March, 22	Nil	Number	Annexur e-CB1.1 List of existing and propose d locations for CAAQMS
CB3.1	TSPCB Emission Inventory	i. Work awarded to IIT Kanpur for an amount of Rs.100.3 Lakhs for SAS, EI & CC ii. Work has been initiated by IIT Kanpur in March, 2021.	EI & SA Study should be completed	24 months	Deviation due to Covid pandemic	timelines as per the contract signed, June, 2022	Rs. 80 lakhs (for SAS, EI & CC) under NCAP	80 lakhs	Rs. 30.9 Lakh	Rs. 20.3 lakhs	text	CB 3.1 SA/CC & EI timelines

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
CB 3.3	TSPCB Source Apportionment Study	Emission Inventory preliminary assessment is completed. iii. Winter sampling is under progress. i. Work awarded to IIT Kanpur for an amount of Rs.100.3 Lakhs. for SAS, EI & CC iv. Work has been initiated by IIT Kanpur in March, 2021. Emission Inventory preliminary assessment is completed. ii. Winter sampling is under progress.	EI & SA Study should be completed	24 months	Deviation due to Covid pandemic	timelines as per the contract signed, June, 2022	Rs. 80 lakhs (for SAS, EI & CC) under NCAP	80 lakhs	Rs. 30.9 Lakh	Rs. 20.3 lakhs	Yes	CB 3.1 SA/CC & EI timelines
CB 4.2	TSPCB Establish an air quality management division at	AQM Cell is constituted at TSPCB, Head office.	Already established	Completed and to Continue the	No deviation	completed	Nil	Nil	Not applicable	-	Yes	TSPCB funds

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	SPCB Head quarters to oversee air quality management activities in the state and interact with CPCB			activity								
PO1.1	TSPCB Air quality index to be calculated and disseminated to the people through website and other media	i) Disseminated through TSPCB portal and Electronic Display Boards at 4 places in the City.	Implemented and Continuing as a regular activity	Completed & to continue the activity	No Deviation	Regular activity	19.0	19.0	19.0	Nil	Yes	Annexure-P01.1 TSPCB

158

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	(maximum weekly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)											
PO2.1	TSPCB App Based System	Complaints received through TSAIR app are communicated to the concern departments for initiating actions.	Regular activity	Completed and regular implementation	No Deviation	Continuing activity	-	-	-	Nil	Number	TSPCB funds
PO2.2	TSPCB Set-up and publicize	TSPCB: Toll Free Number for grievances: 10741	Operational	Completed and	No Deviation	Continuing activity	Nil	Not applicable	Not applicable	Not required	Number	TSPCB funds

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021 - Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	helpline in Hyderabad City for complaints against reported non-compliance.	Online through Website and TSAIR app		regular implementation								
		GHMC <ul style="list-style-type: none"> Toll free number for grievances : 040-21111111 'MYGHMC' mobile application for relevant action points to report Public may also report their grievance directly through letters (or) bring in attention of officers through PRAJAVANI. 	NIL grievance	Regular Activity	No	Continuing activity	Nil	Not applicable	Not applicable	Not required	Number	GHMC funds
RD	Maintain	Pot holes are being filled on	-	Regular	No	It is a	-	-	-	-	-	-

091

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
1.2	pot holes free roads for free-flow of traffic	priority basis. • Pot holes filled from 01.04.2021 to 27.01.2022 - 17247 nos		Activity		continuous activity						
RD 1.4	Blacktopping of metalled roads, including pavement of road shoulders.	193 No. of BT road works with an amount of Rs.61.02 Cr. have been sanctioned. 65 works with an amount of Rs. 19.51 Cr are completed and the remaining works are under various stages.	193	31.03.2022	-	250	61.02	61.02	19.51	-	-	-

(161)

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Requi red	Field type	Attachm ent Contents
		Further Government sanctioned an amount of Rs. 1839.00 Cr. under Comprehensive Road Maintenance Programme(CRMP) for maintenance of 709.49 km 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 Km	30.12.2021	Nil	209 Km	1189	602.10	602.10	586.9	Number	-

162

(All funds details in INR Crore)												
1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
RD 1.6	Regular cleaning of the roads with mechanised sweepers and removing the silt from the roads	GHMC: Total Serviceable Length (km): 2530km Road length under mechanized sweeping (km): 2530km (Transport: 1820km+CRMP:710km) Number of mechanical sweepers deployed: 18Nos. (Hired)+17Nos. (Owned)+7Nos. (CRMP)operating at 43 Nos. of road stretches.	Number Mechanical sweepers required for daily cleaning of all serviceable roads to be provided: 40Nos. (18+17+7), 17 machines are to be condemned, hence new procurement of 15 nos. mechanized sweeping machines is proposed.	-	-	Number of Mechanical sweepers to be deployed in FY 2021-22: 15	80.85	80.85	50.75	18.0	-	-

163

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
RD 1.9	Introduce water fountains at major traffic intersection, wherever feasible	No. of fountains constructed at major traffic intersection: 55 nos.	No. of fountains at junction: 05 Nos.	March, 2022	Nil	No. of fountains at junction: 05 Nos.	0.75	-	-	1.00	Num ber	
RD 1.11	Prepare plan for widening of road and improve ment of infrastru ctu re for decongestio n of road.	SRDP Project is taken up for development of Infrastructure such as Flyovers/Underpasses/ROBs and RUBs for decongestion of roads. Out of 8 works, 1 work completed and 7 works shown in Annexure "RD 1.11" are in brisk progress.	8 Works	2 years from date of groundi ng of work	-	8 Works	708.92	708.92	59.09	-	Num ber	Annexur e- RD 1.11
RD 2.2	Prepare plan for	GHMC 1. Steps Taken:	Target for plantation:22	Annual	Nil	Target for plantation:	20.00	12.00	0.26	8.00	Num bers	

164

(All funds details in INR Crore)												
1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	creation of green buffers along the traffic corridors	Under TKHH Plantation Programme plantations has been taken up under Avenue Plantation component in GHMC area. 2. No. of plantation took up: 22.38 Lakhs	38 Lakhs			22.38 Lakhs					(2) & text	
		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	Nil	Target for plantation: 62.18 Lakhs	27.00	27.00	3.29	23.71	Number & Text	
RD 2.4	Greening of open areas, gardens,	No. of vertical gardens in Hyderabad: 08 Nos.	No. of vertical gardens to	March, 2022	No	No. of vertical gardens to	1.00	0.30	0	1.00	Number	

165

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	community places, schools and housing societies.		be developed: 03 Nos.			be developed: 03Nos.						
		Under TKHH Plantation programme, plantations have been taken under different components, Open Spaces, Lake, Nala, Colony, Yadadri Forest Model etc.	No. of trees to be planted: 80.00 Lakhs	March, 2022	No	No. of trees to be planted: 80.00 Lakhs	20.00	13.00	1.77	10.00		
		No. of plantation took place: 41.36 Lakhs										
		HMDA No. Of vertical gardens in HMDA - 04 Nos	No. of vertical gardens to be developed: 02 No.	March, 2022	Nil	No. of vertical gardens to be developed: 02 Nos	1.14	1.14	1	2.00	Num ber	
		Under TKHH Plantation programme, plantations have	No. of trees to be	Regular activity	No	No. of trees to be	67.29	67.29	3.29	64.00	-	-

166

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
CD 1.1	Ensure carriage of construction material in closed / covered vessels.	been taken under different components, Open spaces, Lake, Nala, Colony, yadadri forest Model etc. Number of plantations took place: 62.18 Lakhs Nos.	planted: 120.00 Lakhs	Regular activity	No	planted: 120.00 Lakhs	Nil	-	-	-	yes	GO Copy Attached in annexure CD 1.1
C&D 1.2	Strict enforcement of CPCB	Condition is incorporated in the Building Permit Order for strict compliance of the	Regular Activity	Regular activity	No	Regulatory activity	Nil with GHMC funds	-	-	-		Annexure CD 1.2

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	guidelines for construction (use of green screens, side covering of digging sites, etc.)	conditions as specified in the NOC issued by the SEIAA Viz., enforcement of CPCB guidelines (Use of green Screens, side covering of digging sites, etc.), covering of construction sites.										
C&D 1.4	Covering of construction site.	Condition is incorporated in the Building Permit Order for strict compliance of the conditions as specified in the NOC issued by the SEIAA Viz., enforcement of CPCB guidelines (Use of green Screens, side covering of digging sites, etc.), covering	Regular Activity	Regular activity	No	Regulatory activity	Nil with GHMC funds	-	-			Annexure CD 1.2

168

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
CD 1.8	Enforcement of Construction and Demolition Waste Rules	of construction sites. 1. Mode of C&D waste collection, transportation & recycling: Taken up in PPP mode through open competitive bidding process. 2. Number of operational C&D plant: 02 Nos. 3. Recycling capacity of each plant: 500 TPD 4. A total of about 18.45 lakh MT (I.e. 1290 TPD) of C&D waste both claimed (9%) and unclaimed (91%) is collected till Nov 2021. Engagement of consultant to improve the effectiveness of C&D Waste Management	Regular Activity	Regular Activity	No	Regular Activity	12.00	-	-	12.00	Text & Number	
			Regular Activity	Regular Activity	Nil	Regular Activity)	1.20	1.20	0.22	-	Text	

169

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Requi red	Field type	Attachm ent Contents
CD 1.9	Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression	Both the C&D processing facilities are equipped with the control equipments at locations to mitigate the fugitive emission sources.	Regular Activity	Regular Activity	Nil	Regular Activity)	-	-	-			Annexur e CD 1.2
		project										

170

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
VE 1.1	units. Number of PUC centers in the city	There are 21 Fixed PUC centres and 122 Mobile PUC centres with valid license in the Hyderabad City till date. 05 PUC centres in Patancheru are in operation till date.	It is a regular activity	It is a regular activity	No deviation as It is a regular activity	-	-	-	-	-	-	-
VE 1.2	Regular checking of Vehicular emission and issue of Pollution under Control Certificate (PUC)	<ul style="list-style-type: none"> Hyderabad: M/s Smart Chip Pvt. Ltd., has been identified as the service provider for design, development, network, & commission Maintenance of online issuing & monitoring of pollution under control (PUC) certificate for a period of (5) years by the Transport Department. 	It is a regular activity	It is a regular activity	No deviation as It is a regular activity	-	-	-	-	-	-	-

171

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
VE1.4	Installation of remote sensor based PUC system, regular calibration of the	<ul style="list-style-type: none"> As part of the development, the device integration all models of Pollution Testing Devices available in the State of Telangana is completed. Out of 177380 tests conducted ,1732125 vehicles have passed the test and 4168 were failed the PUC test. 	Connecting remaining PUC centres	March, 2022	Yes due to COVID	130 nos to be connected	-	-	-	-	Number	RTA internal funds

172

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
VE 4.1	checking instruments and online integration of the vehicle details with PUC Prepare action plan to check fuel adulteration and random monitoring of fuel quality data.	Number of inspections conducted for assessing fuel quality is 61 Nos.	Number of inspections for assessing fuel quality per month: 58 Nos.	Regular Activity	No	Number of inspections for assessing fuel quality: 696 Nos.	-	-	-	-	Number	
VE 4.2	Alternative	Alternate clean fuel policy yet to be notified	CNG policy to be	March 2022	Yes due to COVID	Additional 10 stations	Nil	-	-	-	-	

123

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Requi red	Field type	Attachm ent Contents
VE5.1	Prevent parking of vehicles in the non-designated areas	Cyberabad Commissionerate All the commuters are educated not to park their vehicles haphazardly on the road and also not to disrupt the free flow of the vehicles. 1. No. of challans issued for parking at non-parking areas: 614 Nos.	Regular Activity.	As Regular Activity	No	Regular Activity	- Gas Distribut ion suppliers	-	-	-	Num ber	-
		Hyderabad Commissionerate No parking boards are erected by GHMC. Cases were registered against vehicles which were found in the non-designated areas:	Regular Activity.	As Regular Activity	No	Regular Activity	5.01	2.52	2.52	-	Num ber	-

174

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
		1. No. of challans issued for parking at non-parking areas: 690822 Nos.(January,2021 to Dec,2021)										
		Rachakonda Commissionerate All the commuters are educated not to park their vehicles haphazardly on the road and also not to disrupt the free flow of the vehicles.	Regular Activity.	As Regular Activity	No	Target for procurement/ hiring of towing trucks: 08 Nos	1.44	0.64	0.64	-	Number	-
VE5.2	Development of Multi-layer	1.The work for MLP at Nampally is in progress. 2.Tenders for construction of	No. of multilevel parking	2 years	Yes due to covid as the MLP is linked	-	-	-	-	-	-	-
		1. No. of challans issued for parking at non-parking areas: 46396 Nos.										

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	parking	the MLP at Khilawath under DBFOT has been called. 3.Proposal for construction of (20) nos. of MLPs is submitted to Govt for approval.	proposed to be constructed: 23 Nos.		with the metro rail and the operations are stalled due to COVID							
VE 5.3	Penalize parking of vehicles in non-designated areas	Cyberabad Commissionerate Amount of penalty imposed: Rs 80.52 Lakhs Hyderabad Commissionerate Amount of penalty imposed in FY 2021-22:Rs.260.73 Lakh Rachakonda Commissionerate Amount of penalty imposed in FY 2021-22: Rs 94.51 Lakh	Regular Activity. Regular Activity. Regular Activity.	As Regular Activity As Regular Activity As Regular Activity	No No No	Regular Activity Regular Activity Regular Activity	- - -	- - -	- - -	- - -	Num ber Num ber Num ber	- - -
VE6.2	Assess and introduce a city bus	Small Buses Introduced 08 Minibuses were introduced from Gachibowli to	Regular Activity	Regular Activity	Regular Activity	Regular Activity	0.09	0.09	0.09	0	Num ber	-

176

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	system of appropriate fleet size of small buses and desirable bus type replete with GPS tracking, ETVMs for fare collection and Passenger Information Systems.	Tondupalli. 1. No. of Employees deployed in the year 2021-2022:-21	1201 Buses are planned for GPS tracking	-	-	Installation of GPS tracking system - 1201	12.97	0	0	12.97	Number	-
VE 6.6	CNG infrastru	1. Number of CNG stations: 84 Nos	Regular Activity.	As Regular	No	Regular Activity	-	-	-	-	Numbers	-

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	re 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	2. % of public transport vehicles running on CNG and electric with respect to total public transport: 6%		Activity							(2)	
VE6.7	Steps for promoting battery operated vehicles	1. Framed guidelines in 2017 for registration of E-rickshaw / e-Cart. As per G.O.MS.49, Tr.R&B (Tr.I) Dpt., Dt.07-07-2017, e-	Regular Activity.	As Regular Activity	No	Regular Activity	-	-	-	-	Number	Copy of Govt. order enclosed Annexur

(178)

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	(like e-rickshaw, e-cart etc.)	rickshaws and e-carts are restricted to ply on National Highways and GHMC limits. 2. No. of battery-operated vehicles (under various category) registered in FY 2021-22: 1231 Nos.										e VE 6.7
		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	No. of total EV Charging station: 25 Nos.	Regular Activity	No		Nil	Nil	Nil	31.00 ((@ .25 /EVC S for a & b) + (1.00 forc))		

179

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021 - Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		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.					Nil	Nil	Nil	25.00 (@ .50 /EVC S)		
		2. Installation of 50 No's of EVCS in GHMC Limits by TSREDCO along with Web link and App development					Nil	Nil	Nil			
		3. Installation of 25 No's of Charging cum Battery Swapping Stations along with retrofitment of 250 No.s 3-Wheelers autos in GHMC					Nil	Nil	Nil	10.00		

180

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
VE 7.1	Conducting audit of Traffic intersections and install functional traffic signal at all major intersections	Limits GHMC 1) Operation & Maintenance of 232 Nos. Existing Traffic Signals for a period of 3 years 2) Installed 26 Nos. ATSC Traffic Signals and 24 Nos. Pelican Signals at locations identified by the Traffic Police (User Department). Installation of Balance 124 Nos. ATSC Traffic Signals and 70 Nos. Pelican Signals is under progress.	1) O&M of 232 Nos. Existing Signals will be upto 19.11.2024 2) Installation of 150 Nos. ATSC Traffic Signals and 94 Pelican Signals will be	Oct 2024	Installation of 150 Nos. ATSC Traffic Signals and 94 Nos. Pelican Signals has to be completed by 30.10.2021 as per agreement	1. Completion of requirement study for ATSC & PSS. 2. Submission of project inception report for	1) 2 Cr (as per Proc.No. 382/FC-XV/SW M/GHM C/2020, Dated:27.01.2021) 2) 12 Cr (as per Proc.No. 382/FC-XV/SW	2 Cr + 12 Cr	2 Cr	47.46 Cr	Numbers (2)	Milestones for installment of ATSC and PSS
VE 7.2	Synchronizing traffic movements											

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	/ introduce intelligent traffic systems for lane driving.		completed by 31.07.2022			HTRIMS S	M/GHM C/2020, Dated:28.12.2021)					
	Cyberabad 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)	Police	Based on regular interval assessment	As Regular Activity	No	-	-	-	-	-	Text	-

182

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		<p>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,</p>										

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		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.										
		Hyderabad Police Commissionerate 1. Hyderabad City-wide Integrated & Intelligent Traffic Management System (ITMS) is aimed at providing a universal view of traffic flows; modelling traffic flow optimization; best possible traffic routing; optimizing traffic	Based on regular interval assessment Rachakonda Police Commission erate:	As Regular Activity	No	Procurement of (10) VHF Man pack sets	0.013	0.013	0.013	0.013	Text	-

184

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		<p>junction signals and disseminating the traffic information, guidance, and awareness to the citizens and road users.</p> <p>2. Traffic policemen at signal and bottleneck spots coordinate with the help of VHF man pack to synchronize traffic movements. 05 Nos. of VHF man pack were procured.</p>										

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		Rachakonda Police Commissionerate: The Traffic Signals in GHMC limits of Rachakonda Commissionerate are synchronized under ATSC (Unified Adaptive Traffic Signal Control) including Hyderabad and Cyberabad Commissionerates. ITMS project has been extended in Rachakonda Commissionerate in (4) stretches with (24) locations and (09) VMBS.	Based on regular interval assessment	As Regular Activity	No	Regular Activity VHF Manpack: 100 Nos	-	-	-	0.08	Text	-
VE7.3	Prepare plan for construction of	Nehru Outer Ring Road of 168 km, 8 Lane expressways encircling the city is constructed to bypass the non-	Regular Activity.	As Regular Activity	No	Regular Activity	-	-	-	-	Number	

88

(All funds details in INR Crore)												
1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	diversion ways/ bypasses to avoid congestion due to non-destined vehicles.	destined vehicles										
VE 8	Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing	TS RTC Public awareness campaigns are being conducted during Road Safety Programmes by Transport Department and by all stake holder departments.	Regular Activity	Regular Activity	No	Regular Activity	-	-	-	-	Text	-
		Cyberabad Commissionerate: 1. Launch awareness campaign at the following	Sound Level Meters are	Regular Activity	No						Text	-

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
	use of personal vehicle, lane discipline, etc.	place in entire Cyberabad commissionerate viz., Pozozolana machinery fabrication, jeedimella, chegur T-Junction and Korthur Y junction on NH-44 road, Shankarpally, Chevella, Shamshabad Bus stand and educate them over pollution control, vehicle maintenance and lane discipline. In order to promote and improve air quality.	procured based on regular interval assessment									

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(All funds details in INR Crore)												
1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
		<p>Hyderabad Police Commissionerate</p> <p>2. Enforcement on air pollution are being implemented and during the year 2021 total (22038) cases were registered against Air/sound pollution.</p> <p>1. Hyderabad traffic police procured 6 sound level meters from M/s Praxis i-Technologies Pvt.Ltd, Begumpet, Hyderabad. These sound level meters were purchased to scientifically measure the decibel level of the noise making vehicle and book</p>	Sound Level Meters are procured based on regular interval assessment	Regular Activity	No	Installation of VMS Boards: 5 Nos.	-	-	-	0.62	Text	-
						Procurement of items for lane discipline: <ul style="list-style-type: none"> • Ropes: 150 Nos., • Bollards: 200 Nos., • Cones:1300 Nos. 	0.10	0.10	0.10	0.05		

189

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
		cases against the vehicles which are emitting more noise levels creating noise pollution in Hyderabad City. These sound level meters are used in Saifabad, SR nagar, Banjarahills, Mahankali, Abids and Begumpet traffic Police Stations.										
		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	Equipment are procured based on regular interval assessment	Regular Activity	No	Target for procurement of bollards: 300 Nos Target for procurement of ropes: 8Nos	-	-	-	0.015	Text	-

190

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
VE11.2	Restriction on plying of 15 years old vehicles	<p>is also creating awareness among the commuters at Traffic Training Institutes and through our social media platforms viz., Twitterhandle ,Facebook page</p> <p>3. 09 Nos. of VMS board erected for dissemination of information to public</p>	Regular Activity.	As Regular Activity	No	Target for procurement of Cones:400 Nos Target for procurement of warning tapes:100 Nos Regular Activity	-	-	-	0.03 0.05	Numbers (2) & Text	-

(91)

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		Hyderabad, w.e.f. 1-11-2006. 2. Total no. of 15-year-old Diesel Vehicles: 96,067Nos. Total No. of 15-year-old Diesel Vehicles Impounded / Scrapped: 05 Nos.										
VE 11.3	Launch extensive drive against polluting vehicles for ensuring strict compliance	Cyberabad Commissionerate: Smoke Pollution Cases: i. Conducted special drive against polluting vehicles and booked 23 cases (Oct-Nov,2021). Hyderabad Commissionerate: Smoke Pollution Cases: i. Total no. of cases Registered in FY 2021-22	Regular Activity	Regular Activity	No	Regular Activity	-	-	-	-	Num bers (2)	As given in Present Status

192

(All funds details in INR Crore)												
1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		:3297 Nos. efforts are on foot to curb the emitting of smoke pollution. Rachakonda Commissionerate: i. Conducted special drive against polluting vehicles and booked 134cases under relevant sections of Motor Vehicle Act in entire Rachakonda.										
VE11.4	Initiate steps for retrofitting of particulate filters in diesel vehicles,	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 retrofitment	-	Based on availability of approved technology	-	-	-	-	-	-		

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Requi red	Field type	Attachm ent Contents
VE 11.5	To increase fine on vehicle owners (not drivers) where the visible smoke is emitted and noticed.	<u>Cyberabad</u> <u>Police</u> <u>Commissionerate:</u> 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						Text	
	when BS-VI fuels are available.											
		<u>Hyderabad</u> <u>Police</u> <u>Commissionerate:</u> Efforts are being made to impose penalty on owner rather than driver.	Regular Activity	Regular Activity	No	Purchase of Iron Barricades: 100 Nos.	-	-	-	0.1 (@ Rs.10, 000)	Text	

79

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
		<ul style="list-style-type: none"> 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 										
		<p><u>Rachakonda Police Commissionerate:</u> Efforts are being made to impose penalty on owner rather than driver.</p> <ul style="list-style-type: none"> Images are being captured 	Regular Activity	Regular Activity	No	Target for procurement of Digital Cameras: 50 Nos.	-	-	-	0.08	Text	

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
		through digital cameras and e-challan is generated against the violators and communicated to vehicle's owner.				Target for procurement of Barricades: 100 Nos.	-	-	-	0.06		
			2. Installation of 50 No's of EVCS in GHMC Limits by TSREDDCO along with Web link and App development				Nil	Nil	Nil	25.00 (@ .50 /EVC S)		
			3. Installation				Nil	Nil	Nil	10.00		

961

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
			of 25 No's of Charging cum Battery Swapping Stations along with retrofitment of 250 No.s of 3-Wheelers in autos in GHMC Limits									
			Total for 1,2,3				Nil	Nil	Nil	61.00		
IP1.2	Action against non-complying industrial	TSPCB Number of show cause notices and closure notices issued per quarter	Regular activity	Regular Activity	No	Regulatory activity	-	-	-	-	-	Annexure IP1.2

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	units	Closure orders issued to 8 industries and directions to 16 units										
IP1.3	Shifting of Polluting Industries	Industries dept <ul style="list-style-type: none"> Number of industries shifted: NIL Number of polluting industries identified: 1670 Nos. 	Number of industries to be shifted: 1670 Nos.	33 Months	Yes Covid situation	The modalities for shifting are under process and is subject to approvals.	-	-	-	6,000	-	Annexure IP 1.3 Industries identified
IP	Ban on Polluting Industries	No polluting industry is being permitted	G.O.MS.No. 111 dated 8th March, 1996 prohibits polluting industries. Ban is under	Already under implementation and continuing	No deviation	Regular activity	As part of dept activity					

198

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target implementation since 1998	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
IP5.2	Identification of brick kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.	Revenue department No units exist within the Greater Hyderabad Municipal Corporation. The units that are in the air shed outside the GHMC area are monitored by the Revenue departments and directions for renewal of licence with cleaner fuel and Zigzag technology were issued.	No units	Nil	Nil							
IP5.3	Conversion of natural draft brick	Revenue department • The licensing authority for brick kilns is Revenue	No units exist within the									

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	kilns to Force/ induced draft.	department. AQMC has directed to keep a condition of adopting the forced draft in place of natural draft.	corporation limits									
IP5.4	Closure of unauthorized units by seeking the possibility for shifting of kilns outside corporation limits	<ul style="list-style-type: none"> No Brick kilns within corporation limits, all are relocated to outside the Corporation limits 										
IP11.1	Monitoring of DG sets and action against	TSPCB Continuous Power supply is ensured in Telangana thus minimizing the usage of the	Monitoring of the DG sets	Continues as regular activity	No Deviation	Continue as regular activity	As part of dept activity					

200

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	violations	DG sets. The adherence to the standards are monitored for the DG sets at the industries. The DG sets installed in industries are monitored meet the prescribed norms. The units have provided acoustic enclosures with chimneys/exhaust to the DG Set for control emissions.										
BB1.1	Regular check and control of burning of municipal solid wastes	Government issued GO.Rt.no.27 dated 10-07-2017 prohibiting open burning. Regular inspections are being conducted by sanitation cum enforcement team within their jurisdictional area.	Regular Activity	Regular Activity	No	Regular Activity	-	-	-	-	-	-
BB1.2	Defaulters	Penalty imposed for open	Regular	Regular	No	Regular	-	-	-	-	-	-

201

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Requi red	Field type	Attachm ent Contents
	for open burning to be imposed fines	burning in FY 2021-22: Rs.	Activity	Activity		Activity						
BB1.3	Identify Garbage burning locations and	No permanent locations for garbage burning however incident occurs spatially for which enforcement is being regularly carried out.	Regular Activity	Regular Activity	No	Regular Activity	-	-	-	-	-	-
BB1.4	Prohibition /complete ban on garbage burning.	Whether notification issued: YES	-	-	-	-	-	-	-	-	Yes/ No	Copy Attached - Annexur e BB1.4
BB1.5	Launch extensive drive against open	All the garbage and leaves from horticulture waste is collected regularly and transported to various transfer stations for further	Regular Activity	Regular Activity	No	Regular Activity	0.1	-	-	-	-	Awarene ss activities attached Annexur

202

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	burning of biomass, crop residue, garbage, leaves, etc.	transportation to treat and disposal facility. Though 100% happens in city in very few instances of waste burning is observed out of negligence of citizen and even by sanitation workers. Hence GHMC conducting awareness meetings with workers and citizen on waste burning along other items like Clearing of garbage heaps in open areas, green waste, sand silica, de-weeding of the road margins, cleaning of drains and construction and demolition waste removal from the roadside for prevention of air pollution and										e BB 1.5

203

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
		spreading of communicable diseases in the Pattana Pragathi programme for a period of 10 days, once in three months. However penalties are imposed on violators.										
BB3	Proper collection of Horticulture waste and its disposal following composting -cum gardening approach	Number of composting cum gardening sites developed: 482 Nos.	Number of composting cum gardening sites to be developed: 8 Nos.	Mar-23	0	Number of composting cum gardening sites to be developed: 163Nos.	0.20	-	-	1.00	Number	
BB4	Ensure ban on burning	Burning of the agriculture waste is not a common practice in the state. Hence	Regular activity	180 days continue	No Deviation	Regular activity	-	-	-	-	-	-

(204)

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachm ent Contents
DF1.1	Engage with concerned authorities for continual basis for maximising coverage of LPG / PNG for domestic and commercial cooking with	<p>this action point may be considered as implemented and closed.</p> <p>• LPG penetration in GHMC in FY 2021-22:173%</p> <p>• No. of domestic LPG Connection to low income strata in FY 2021-22: 01 Nos. Deepam connection</p>	<p>• LPG penetration in GHMC by FY_21-22 :174%</p> <p>• No. of LPG Connection to low income strata by FY 21-22:1500 Nos.</p>	as regular activity.	-	-	-	-	-	-	Number	-

(All funds details in INR Crore)

1	2	3	4	5	6	7	8	9	10	11	12	13
Action Code	Action Point	Present Status (Oct'2021- Dec'2021)	Target	Target Date AS per CAP	Deviation from target	Annual Target	Total Funds Allocated	Funds released	Funds Utilized	Add. Funds Required	Field type	Attachment Contents
	target of 100% coverage											
DF 1.2	Hotels, restaurants and dhabas to use cleaner fuels	<ul style="list-style-type: none"> Continuously LPG Non-Domestic Connections released to Commercial establishments with 100% coverage. 	<ul style="list-style-type: none"> Under implementation & to be continued To enhance the coverage of connections 	Regular activity	No Deviation	Under implementation & to be continued	-	-	-	-	Number	

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 December'2021 the monthly average PM2.5 sheet attached.
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 the monthly average PM10 sheet attached.
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 the monthly average SO2 sheet attached.
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 average NO2 sheet attached.
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	Yes	32
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	Yes	85
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	4.7
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	29.7
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	-
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 the monthly average PM10 sheet attached.
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 the monthly average SO2 sheet attached.
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April'2021 to December'2021 the monthly average NO2 sheet attached.
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	Yes	35
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	Yes	74
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	6.5
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	26.7
AQ1.9	Monthly Meterological Data		Yes	Monthly averages of Meterological parameters

807

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	Attachment Contents
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	44	24	19	15	18	17	40	47	64	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	130	69	61	57	61	52	99	101	134	
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	
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	
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	32									
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	85									
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	4.7									
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	29.7									
AQ1.9	Monthly Meteorological Data											Monthly averages of Meteorological parameters

R.C.Puram		AIR QUALITY DATA												Attachment Contents
Action Code	Action Point	Field type	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21			
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	-	-	-	-	-	-	37	36	31			
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	93	56	60	67	64	64	83	92	83			
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			
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			
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	35											
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	74											
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	6.5											
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	26.7											
AQ1.9	Monthly Meteorological Data												Monthly averages of Meteorological parameters	

Existing Continuous Ambient Air Quality Monitoring Station (CAAQMS)

S.No	Location	Specification
1	University of Hyderabad – Gachibowli, Hyderabad	Residential
2	Nehru Zoological Park - Bahadurpura, Hyderabad	Sensitive (under NAMP)
3	TSPCB, Sanathnagar, Hyderabad	Industrial
4	Pashamylaram, Fire Department, Industrial park, Sangareddy	Industrial (under NAMP)
5	Bollaram, Kennedy school, Medchal	Industrial
6	ICRISAT, Patancheru, Sangareddy	Sensitive

Proposed Continuous Ambient Air Quality Monitoring Station (CAAQMS)

S.No	Location	Specification
1	Kompally Municipal Office Multipurpose community Hall, Kompally,	Residential
2	Kokapet Community Hall	Residential
3	Symphony Park Homes	Residential
4	IIT, Hyderabad, Kandhi	Residential
5	IALA office, Nacharam	Commercial
6	Louise Braille Park, Malakpet	Traffic
7	ECIL X roads, GHMC office Kapra	Traffic
8	Khairatabad RTA, Khairatabad Rd	Traffic

Timelines of the project source apportionment, Emission Inventory & Carrying Capacity (SA,EI&CC) study for Hyderabad and Patancheru :

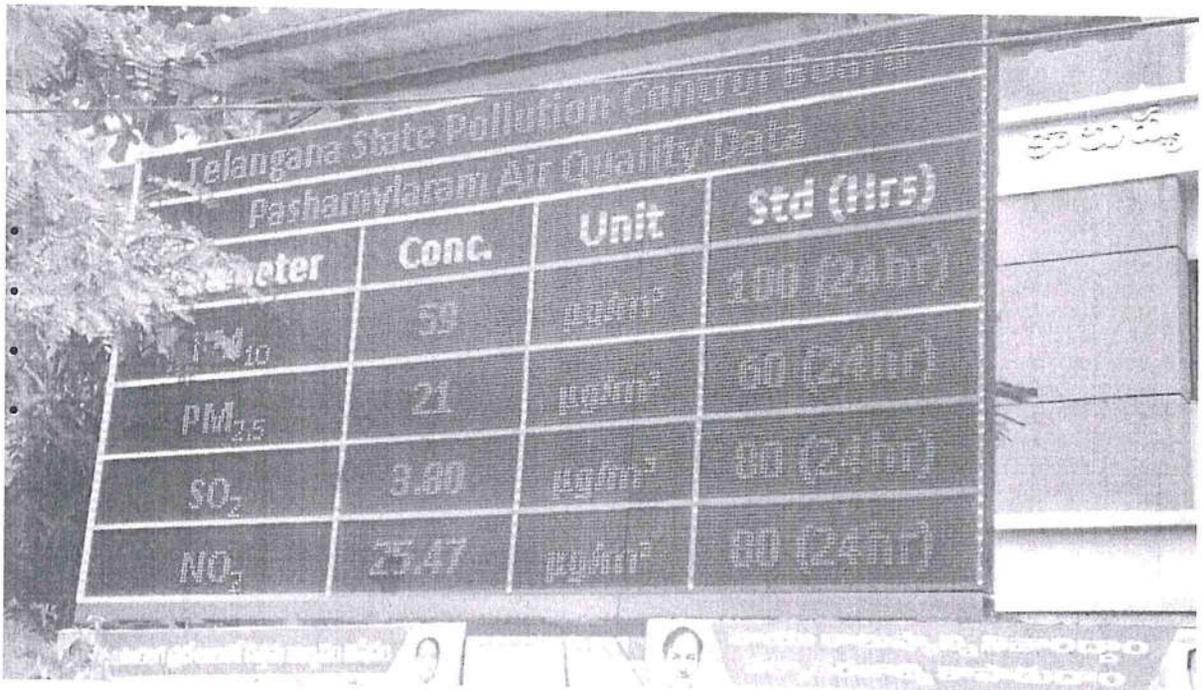
Table 2: Activity Chart

S.No	Activities	1 st quarter			2 nd quarter			3 rd quarter			4 th quarter			5 th quarter		
		April	May	June	July	August	September	October	November	December	January	February	March	April	May	June
1	Detailed project planning															
2	Emission inventory															
3	Air Quality Sampling (1st Season)															
4	Analysis, Data Interpretation															
5	Receptor Modeling															
6	Air Quality Sampling (2st Season)															
7	Analysis, Data Interpretation															
8	Receptor Modeling															
9	PM Management Control Plan															
10	Carrying Capacity Assessment															
11	Interpretation and Reporting															
12	Presentation: Discussions															

TSPCB website:



AAQ Electronic Display Board



- Carbon monoxide and Noise live display at three traffic junctions along with audio message at 3 locations namely i. Public gardens signal, ECIL cross roads , High-tech city.



Details of the 43 Nos. of road stretches being catered by the Mechanical Sweeping Machine			
S.No.	Road Stretch		Length of Road Stretch (in km)
	From	To	
1	Kapra circle office	Water Tank Nacharam	65
2	Pillar No. 102 to Jiyaguda 100 feet Road	Langer House to Golconda fort to fateh Darwaja	64
3	Quthubullarpur circle office	Suchithra Road	58
4	Moosapet	Motinagar to e-Seva road	70
5	BHEL circle	MMTS railway station	96.42
6	BHEL Bheramguda	Lingampally bus stop to market road to BHEL gate	60
7	Circle 2, Church colony kaman	GHMC circle office Berrapagada Road	67.5
8	Yapral Junction to KV school ending	Uttamnagar main road to Jythinagar 2 SIDE	75
9	Circle 12, Pillar no 68 to Tallagadda bus stop	Gudimalkapur mandi	63
10	Tank bund	Vinayak nagar X RD	59
11	Circle 20, Zonal office	Gachibowli beside bajaj electronics	75
12	Musheerabad X road	Sangeeth Junction	61
13	LB nagar ring road	Saheb nagar Basti Hospital	64.5
14	Circle,4, BDL gate	Telephone colony road 1 to 4	63
15	Circle 15, Bapujinagar X road	Lower tank bund	67
16	Circle14, Yousofiandarga	Tank bund Ambedhkar statue	57
17	Kundanbagh to methodist colony	Industrial estate Sanathnagar	62
18	Circle 18, Road no 7 to KBR park	Passport office to Dargh	75
19	Charminar	Salarjanga Museum	22
20	Madina	National Police Academy	22
21	Faluknuma BUS DEPOT	Aragrah X Road	22
22	Moosarambagh T.V. Tower	Shalinivahana Nagar	22
23	Rajendranagar office	Durga Nagar Colony	22
24	Rajendranagar office	Ragavendra Colony	22
25	Rajendranagar office	Huda Colony	22
26	shatamari	Shamshabad	22
27	Khairtabad 'X' road	Shashikala theater	22
28	road no 12	road no 45	22
29	NFCL junction	Check post TP road no.2	22
30	K.C.B. Guest house	Basavataraka hospital	22
31	Satyam Theatre	Balkampet Temple	22
32	Srinagar Colony X Road	Krishna Nagar X Road	22
33	Tankbund	Hari Hara Kala bhavan	24
34	Bombay Hotel	RTC X Roads	22
35	Sangeeth Theatre	Habisguda X Road	20
36	Adikmet Fly Over	Lalapet Fly Over	20
37	Parking yard	Domalguda Ward Office	22
38	Attapur	Aramgrah X Road	65
39	P.V Narsimharao Express Way (Sarojini Devi Hospital)	Aramgrah X Road	66
40	Ravindrabharathi	Nampally	62
41	Abids GPO	Koti	65
42	Khairtabad Circle Office	Lakdikapul	64
43	IS Sadan	IDI Bazar water bank	63

ANNEXURE RD 1.6 - B

Details of expenditure estimate for Mechanical Road Sweeper by HMDA									
Sl. No.	Packages	Length Covered	Description	No. of Machines	Rate Per Month in Rs.	Amount Per Month in Rs.	Amount Required in Rs. for 2021-22	Remarks	
1	2	3	4	5	6	7=5 x 6	9=7 x No. of Months	10	
1	Non BOT Packages Operation & Maintenance Cost per Month with Hired Vehicle for	100 KM	Operation & Maintenance for Sweeping Operations O&M Cost per Month with Hired Vehicle for	4	1,200,000	4,800,000	4,800,000	Rs. 0.48 Cr. Incurred by HGCL Funds from April 2021 to May 2021 Rs. 4.80 Cr. From June 2021 to March 2022 Package 1: KM 23 to KM 46 Package 2: KM 46 to KM 72 Package 3: KM 72 to KM 95 Package 4: KM 1333 to KM 158	
2	BOT Packages	60 KM	Operation & Maintenance Cost per Month for BOT Packages		1,750,000		8,750,000	Rs. 0.875 Cr. Incurred by HGCL Funds	
3	Non BOT Packages	100 KM	Operation & Maintenance Cost per Month for BOT Packages after Procurement of Mechanised Sweeping Machines	4	1,200,000	4,800,000	33,600,000	Package 1: KM 23 to KM 46 Package 2: KM 46 to KM 72 Package 3: KM 72 to KM 95 Package 4: KM 1333 to KM 158	
				A. Total Amount Required for O&M				145,150,000	
				B. Amount Received under 15th Finance Commission Grant				-	
				Balance Amount Required (A-B)				145,150,000	Total Grant Proposed for Cleaning Operations with Mechanised Sweeping Machines is Rs. 14.52 Cr. Say Rs. 15.00
				Say Rs.				15,00,00,000	

215

Details of the work for Improvement of infrastructure for decongestion of road in FY 2021-22			
S.No	Name of the Work	Cost (Rs. In Crores)	Date of Completion / Target Date
1	Construction of RUB at Hi-tech city Railway station near existing bridge no.215	59.09	05.04.2021
2	Construction of four lane RUB at Thukaram Gate in lieu of existing level crossing Gate at L.C.No.256/E at Km.618/0-100 in Lallaguda halt station yard between Malkajgiri&Secunderabad station on Secunderabad - Manmad section	70.71	31.10.2021
3	Construction of ROB including approaches at Km 170/40-42 between Hi-tech city and Borabanda stations for 4 lane carriage way (Khaitalapur)	83.06	30.11.2021
4	Flyovers / Grade Separators at Owaisi Hospital Junction	63.00	31.12.2021
5	Construction of 6 lane two way flyover crossing 7 Tombs Junction and Whisper valley Junction	333.55	31.01.2022
6	LB Nagar RHS Underpass	45.51	31.03.2022
7	Extension of existing Grade Separator at Chandrayanagutta Junction	37.00	31.03.2022
8	Construction of Steel Bridge for development of access road in to Panjagutta Grave yard opp. Chutneys and development of exit road for grave yard from road no.1, Banjara Hills	17.00	31.08.2021
	Total	708.92	

Cr. for FY 2021-22

217

TIMELINES TO INSTALL ATSC TRAFFIC SIGNALS & PELICAN SIGNALS FOR SYNCHRONIZING TRAFFIC MOVEMENT TO AVOID DECONGESTION

1.1 Project Deliverables and Timeline for new ATSC System

The following table gives the details of the phases, timelines and deliverables that M/s. IBI shall adhere:

#	ATSC Deliverable Phase	ATSC Milestone Deliverables	ATSC Timelines as per the agreement	Remarks (as per Actuals)
A1	Start of Project Implementation Phase for New Adaptive Traffic Control Signal System		T _A =04.03.2021	T _A =15 Days from Effective Date (17.02.2021) (T _A =04.03.2021)
A1.1	Project Inception Report	<ul style="list-style-type: none"> Detailed Site Survey Report including infrastructure requirement analysis, hardware deployment plan, recommended action plan to address the gaps, budget estimates for addressing the gaps uncovered during the survey, phase-wise location distribution etc., Detailed phase-wise project plan including resource & material deployment plan, risk & mitigation plan, Information Security and Business continuity, communication plan, Sensitization and training plan, operations management plan etc., Approved Site survey report and Project plan by the Authority Deployment of Project Personnel 	T _A + 10 days (14.03.2021)	ATSC Project Inception Report Submitted on 18.02.2021, Requirement Study Report Submitted on 05.03.2021 (Released amount of Rs. 5.28 Cr,
A1.2	Requirement Study	<ul style="list-style-type: none"> System Architecture & Design for ATSC & PSS including Integrations with other applications Network & Security Architecture 	T _A + 25 days (29.03.2021)	

219

#	ATSC Deliverable Phase	ATSC Milestone Deliverables	ATSC Timelines as per the agreement	Remarks(as per Actuals)
		<ul style="list-style-type: none"> FRS & SRS including Solution Architecture Application Design Document (HLD & LLD) of the proposed system Integration design report for external apps System Training Plan & Content readiness O&M Training plan & Content readiness Test and Use cases readiness 		
A1.3	Commissioning of ATSC & PSS scope for all locations	<ul style="list-style-type: none"> Design, installation, commissioning including system software & operationalization software at TCCC. 100% Material delivery including software and Acceptance report Traffic & pelican signal sites completion / readiness report TCCC site completion / readiness report including software licenses details Integration with HTRIMS completed on single platform. Project Commission Report including Design, Supply, Installation, testing & commissioning of ATSC& PSS report Test Report submission to the Authority with all the test and use cases testing status. Test environment ready for start of UAT System trainings for Technical Committee Help Desk (Ticketing) system deployment done 	T _A + 210 days (30.09.2021)	<p><u>As Per Agreement:-</u>The Total Installation of the Project is Scheduled in 3 phases.</p> <p>a) PHASE-I-25 ATSC + 25 PSS</p> <p>b) PHASE-II -75 ATSC + 50 PSS</p> <p>c) PHASE-III -50 ATSC + 29 PSS</p> <p>Along with completion of Commissioning, Integration & Testing of complete scope of new ATSC system.</p> <p><u>Present Status:-</u></p>
A1.4	Use Acceptance Test for complete	<ul style="list-style-type: none"> Successful User Acceptance Test (UAT) certified by the Authority Resolution of Issues resulted from UAT Successful completion of training for first batch of end users and O&M staff SLA Report from the Ticketing system for the Stabilisation period done 	T _A + 220 days (10.10.2021)	

#	ATSC Deliverable Phase	ATSC Milestone Deliverables	ATSC Timelines as per the agreement	Remarks (as per Actuals)
	ATSC& PSS system	<ul style="list-style-type: none"> Go / No-Go for ATSC& PSS stabilization period Stabilization Period for ATSC& PSS Resolution of all issues Completion of Project and System Documentation Final Project Report Submission Project Go-Live certification from the Authority Security Audit certification from Cert-in / STQC for entire ATSC& PSS components & applications. O&M Readiness including Performance indicators, SOPs, GoodPractices, Incidence process etc O&M staff readiness 		1) The Installation & Commissioning of 2 Nos. Model Junctions at megha Hills, Madhapur (ATSC)and Sarojini Devi Hospital (PSS) are completed.
A1.5	Stabilization of ATSC& PSS System	<ul style="list-style-type: none"> Formal Go-Live of ATSC& PSS system Project closure documentation Final Handover of the project including Assets O&M Readiness 	T _A + 235 days (25.10.2021)	2) The Foundation works of 380 Nos.(40Nos. Junctions ATSC) and (1 No. PSS) is completed. 3) The Phase-I & Phase-II Junctions have to be completed by this date.
A1.6	Go-Live of ATSC System	<ul style="list-style-type: none"> Formal Go-Live of ATSC& PSS system Project closure documentation Final Handover of the project including Assets O&M Readiness 	T _A + 240 days (30.10.2021)	
A2	Project Operations & Maintenance (O&M) phase start for complete ATSC& PSS System - [T _{A1} = T _A + 240 days (8 months)]	<ul style="list-style-type: none"> O&M of ATSC& PSS system Monthly / Quarterly / Periodic SLA reports Ad-hoc reports on demand / need basis Annual Security and Operational audit report by third party at the beginning of 2nd& 3rd year of O&M phase. 	T _{A1} =30.10.2021	
A2.1	O&M	<ul style="list-style-type: none"> O&M of ATSC& PSS system Monthly / Quarterly / Periodic SLA reports Ad-hoc reports on demand / need basis Annual Security and Operational audit report by third party at the beginning of 2nd& 3rd year of O&M phase. 	T _{A1} + 36 months (29.10.2024)	

220

Where T_A = 15 Days from Effective Date

1.2 Project Timeline For O&M of Existing (HTRIMS) Traffic Signal System

The following table gives the details of the HTRIMS System phases, timelines and deliverables that the Implementation Agency shall adhere:

#	HTRIMS Milestone Phase	HTRIMS Milestone Deliverables	HTRIMS Timelines	Remarks
H1	Start of Project Implementation Phase for Existing (HTRIMS) Traffic Signal System		T _H =04.03.2021	T _H =15 Days from Effective Date(17.02.2021) (T _H =04.03.2021)
H1.1	Project Inception Report	<ul style="list-style-type: none"> Detailed Status Report on functioning of Traffic Signals including timers, Pelican Signals and Variable message boards Detailed project plan for making 100% system operational of project scope components • Approved Detailed status report & project plan by the Authority O&M resources deployed 	T _H + 15 days (19.03.2021)	Submitted on 18.02.2021 (Released amount of Rs. 5.28 Cr)
H1.2	HTRIMS Readiness	<ul style="list-style-type: none"> All repairs and reworks performed on HTRIMS scope 100% Traffic signals and other components operational and in working condition 100 % TCC operational Help Desk & Ticketing System deployed Training on O&M Process and SOPs done 	T _H + 60 days (03.05.2021)	1) The O&M works has been taken by IBI since 01.12.2020. 2) Till 09.07.2021, 1484 tickets are received and 1464 are attended and 20 are pending.
H1.3	User Acceptance Test – HTRIMS	<ul style="list-style-type: none"> Successful User Acceptance Test (UAT) and certified by the Authority represented by the Technical Committee 	T _H + 75 days (18.05.2021)	3) The 17 Nos. VMBs out of

221

223

#	HTRIMs Milestone Phase	HTRIMs Milestone Deliverables	HTRIMs Timelines	Remarks
		<ul style="list-style-type: none"> Resolution of Issues resulted from UAT Successful completion of training for first batch of end users and O&M staff SLA Report from the Ticketing system for the Stabilisation period done 		17 Nos. were commissioned. 4) The Repairs & Replacements of Non working existing HTRIMs signals is under progress.
H1.4	Stabilization of the HTRIMs	<ul style="list-style-type: none"> HTRIMs System stabilization Resolution of issues O&M staff Readiness Project and System documentation 	$T_H + 90$ days (02.06.2021)	5) The stabilisation of HTRIMs has to be completed by this date.
H1.5	O&M Readiness Phase	<ul style="list-style-type: none"> Start of O&M Phase post completion of H 1.4 Stabilisation of HTRIMs 	$T_H 1 = 02.06.2021$	
H1.6	HTRIMs O&M	<ul style="list-style-type: none"> Uptime of HTRIMs systems meeting SLAs Periodic (Monthly & Quarterly) SLA Report Approved Periodic SLA report 	$T_H 1 + 36$ Months (01.06.2024)	

Where $T_H = 15$ days from Effective Date.

Industries identified

		<u>April to June, 2021 -</u> <u>Hyderabad, Patancheru, Sangareddy & Nalgonda</u>		
HO	Closures	1	M/s. R.R Metal Industries, Plot No CDL -3, IDA Kothur, Rangareddy District	29.05.2021
		2	M/s Shama Metal Supply, Sy.No.7 & 20 of DarghaKhaleej Khan Village, Gandipet(M), Rangareddy District	17.06.2021
		3	Un named unit (M/s. Shah Batteries, Unit-II) operated by Sri Jahangir at Sy.No. 977, 986, Kanukunta Village, Gummadidala Mandal, Sangareddy District	12.05.2021
		4	M/s. Shah Batteries, Unit-I, Sy.No. 248 , Nawabpet Village, Shivampet Mandal, Medak District	12.05.2021
		5	M/s. Nippon Pipes Pvt. Ltd., Sy.No. 3(part), Kothur (V & M), Rangreddy District	10.05.2021
		6	M/s. Sangov Pvt. Ltd., Sy.No. 3(part), Kothur (V & M), Rangreddy District	10.05.2021
		7	M/s. Mega City Service Centre, #16-11-16/18/A, West Prashanth Nagar, Teegala Guda, Moosarambagh, Malakpet, Hyderabad	26.06.2021
		8	M/s. Sri Kasinayana Constructions, Plot No.10 X - A, Penjerla (V), Kothur (M), Rangareddy District	26.06.2021
		9	M/s. Lakshmi Sahasra Rice Industries, Sy.No.583, 584, 584/AA1, 584/EE1, Mukundapuram (V), Kallur Revenue Village, Nereducherla (M), Suryapet District	29.04.2021
		10	M/s. Nutan Plastic, Wadiaram (V), Chegunta (M), Medak District	29.04.2021
HO	Directions	1	M/s. Synthokem Labs (P) Ltd., B-5, I.E., Sanathnagar, Hyderabad	08.04.2021
		2	Nizampet Municipal Corporation, Pragathinagar, Nizampet	17.05.2021
		3	M/s. Sahitya Metals (P) Ltd., Sy No. 40, Muneerabad (V), Medchal - Malkajgiri District	18.05.2021
		4	M/s Sunder Ispat Limited (Sponge Iron Division), Sy.No.268/A/276, 277, Ippalpally Village, Keshampet Mandal, Rangareddy District	26.05.2021
		5	M/s. Avra Laboratories Pvt. Ltd. (Unit-II), Plot No. A-21, Road No. 18, IDA Nacharam, Medchal - Malkajgiri District	02.06.2021
		6	M/s. Eggway International Asia Pvt. Ltd., Sy.No.515, Aspallyguda (V), Shabad (M), Rangareddy District	05.06.2021
		7	M/s. GVK Bio Sciences Pvt. Ltd., Manufacturing Unit - 1, (Formerly M/s. Inogent Laboratories Pvt. Ltd.), Plot No.28/A, IDA Nacharam, Medchal District	05.06.2021
		8	M/s. Manney Engineers, Sy. No.87, Dayara (V), Keesara (M), Medchal-Malkajgiri District	25.06.2021
		9	M/s. Vishnu Chemicals Ltd., Sy.No.15, Gaddapotharam (V), Jinnaram (M), Sangareddy District	08.04.2021
		10	M/s. Nosch Labs Pvt. Ltd., Sy.No. 14, Gaddapotharam Village, Jinnaram Mandal, Sangareddy District.	19.04.2021
		11	M/s. Magus Metals (P) Ltd., Unit-II, Lingo jigudem (V), Choutuppal (M), Yadadri Bhuvanagiri District	19.04.2021
		12	M/s. Dr. Reddy's Laboratories Ltd., CTO-5, Peddadevulapally (V), Tripuraram (M), Nalgonda District	19.04.2021
		13	M/s. Srimi Pharmaceuticals Ltd, Choutuppal (V&M), Yadadri Bhuvanagiri District	19.04.2021
		14	M/s. Optimus Drugs (P) Ltd. Sy.No. 238, 239, 240 & 248, Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District	29.05.2021
		15	M/s. MPL Steel Industries Private Limited (Formerly M/s. Ashirwad Steels & Industries Ltd.), Sy.No. 295, 299 & 300, Veliminedu (V), Chityal (M), Nalgonda District	03.06.2021
		16	M/s. Therapiva Private Limited (Formerly M/s. Ogene Systems India Pvt. Ltd.), Plot No. 218 & 219, Phase - II, IDA Pashamailaram, Patancheru (M), Sangareddy District	10.06.2021
		17	M/s. Binrajka Industries (P) Ltd., Sy.No. 3, Kothur (V & M), Rangreddy District	10.05.2021

	18	M/s. Binrajka Value Steel Pvt. Ltd., Sy.No. 3, Kothur (V & M), Rangreddy District	13.05.2021
	19	M/s. MSN Laboratories Pvt. Ltd., (Formulation Unit-II), Sy.No. 1277 & 1324, Nandigaon (V), Kothur (M), Rangareddy District	06.05.2021
	20	M/s. V J Constructions, Sy.No. 547, 548, 549, Rachloor (V), Kandukur (M), Rangareddy District	10.05.2021
	21	M/s. Gokul Food Products, H.No. 4-55/11, Sri Sai Mitra Enclave, Nagaram (V), Keesara (M), Medchal-Malkajgiri District	10.05.2021
	22	M/s. Gokul Food Products, Plot No. 39, Sri Sai Mitra Enclave, Nagaram (V), Keesara (M), Medchal-Malkajgiri District	10.05.2021
	23	M/s. Pavan Food Products, Plot No. 44, Sri Sai Mitra Enclave, Nagaram (V), Keesara (M), Medchal-Malkajgiri District	10.05.2021
	24	M/s. Shree Jyothirling Bullion Assasyers Mr. Tukaram Gidde, #7-2-422, pot market, Secunderabad	16.06.2021
	25	M/s. Lara Drugs (P) Ltd., Sy.No.6/E, Lakkaram (V), H/o Dharmojigudem, Choutuppal (M), Yadadri Bhuvanagiri District	29.04.2021
	26	M/s. Sri Gopikrishna Paraboiled Modern Rice Mill, Near Municif Court, Miryalaguda (V&M), Nalgonda District	29.04.2021
	27	M/s. Satyanarayana Parboiled Modern Rice and Ground Nut Oil Mill, Near Municif Court, Miryalaguda (V&M), Nalgonda District	29.04.2021

ANNEXURE IP 1.3

Polluting industries identified within GHMC area and shifting plan thereof.

Details of Industries based on line of activity

S. No.	Sector	No. of. Units	Details
1	Pharma and Related Chemical Industries Location: TSIIC Pharmacy, Mucherla, Rangareddy District. Area: 10,102.25 Acres EC Issued on 06.09.2018. CFE issued on 26.06.2020.	542	I. Category of industries covered under G.O.Ms.No.4, dt.20.08.2018 : 418 <ul style="list-style-type: none"> • Bulk drug and Intermediates - 100 • R&D - 170 • Formulations -140 • Bio-Technology - 8 II. Category of industries not covered under G.O.Ms.No.4, dt.20.08.2018 : 124 <ul style="list-style-type: none"> • Animal Extraction - 2 • Chemical - 69 • Bio-Fertilizer and Bio-Pesticides using solvents - 11 • Dye intermediate - 3 • Solvents recovery unit -21 • Synthetic resins - 5 • Biomedical (IV sets) - 1 • Disinfectants & Antiseptic cakes / liquids -3 • Unani Medicine -2 • Herbal Extracts - 4 • Fertilizer Formulation - 1 • Pesticide Formulation - 2
2	Textile Industries Location: Indrakaran, Kandi, Sangareddy District Area: 20 Acres EC issued on 09.01.2013 CFE issued on 12.03.2015	17	<ul style="list-style-type: none"> • Textile - 12 • Synthetic fibers including rayon, tyre cord, polyester filament yarn - 4 • Jute Processing: 1
3	Edible Oil Industries Location: Buchinelly, Zaheerabad,	21	<ul style="list-style-type: none"> • Edible oil - 21.

S. No.	Sector	No. of. Units	Details
	Sangareddy District Area: 42 Acres EC issued on 19.05.2016 CFE issued on 03.10.2019		
4	Steel & Re-Rolling Industries Location: Rakamcherala, Pudur, Vikarabad District Area: 38 Acres	335	<ul style="list-style-type: none"> • Ferrous and Non-ferrous extraction- 139 • Wire Drawing - 18 • Forging - 19 • Casting - 67 • Foundry - 9 • Aluminum smelter - 3 • Aluminum Die Casting - 3 • Electroplating - 77
5	Food Processing	113	<p>I. Category of industries covered under G.O.Ms.No.4, dt.20.08.2018 : 75</p> <ul style="list-style-type: none"> • Milk Processes and dairy products (small scale - capacity not exceeding 1000 ltrs/day - 1 • Confectionary - 53 • Food processing- 21 <p>II. Category of industries not covered under G.O.Ms.No.4, dt.20.08.2018 : 38</p> <ul style="list-style-type: none"> • Milk Processes and dairy products (small scale - capacity exceeding 1000 ltrs/day - 7 • Non-alcoholic beverages (soft drink) - 4 • Confectionary - 16 • Bottling of alcohol products - 11
6	Paints & Varnishes	36	<ul style="list-style-type: none"> • Manufacturing of Paints - 3 • Paints & Varnishes (mixing and blending) - 32 • Putty (Lappam) and Paints (Texture) - 1
7	Engineering Fabrication with painting / coating	261	<p>I. Category of industries covered under G.O.Ms.No.4, dt.20.08.2018 : 261</p> <ul style="list-style-type: none"> • Engineering Fabrication with painting / coating - 85 • Engineering with Sand blasting - 1 • Engineering with Surface Treatment - 127 • R&D in Engineering & Defence - 1 • Automobile services - 45 • Electrodes - 2
8	Stone Crushers	26	<ul style="list-style-type: none"> • Stone Crushers - 17 • Hot mix plant - 2 • Activated fullers earth - 6 • Mineral processing - 1

S. No.	Sector	No. of. Units	Details
9	Paper cardboard or corrugated box and paper products (excluding paper or pulp manufacturing and without using boilers)	16	<ul style="list-style-type: none"> • Cardboard or corrugated box and paper products- 3 • Pulp & Paper - 6 • Paper Products - 2 • Laminated Ply Board -1 • Ply-board manufacturing (including Veneer and laminate) with oil fired boiler/ thermic fluid heater(without resin plant)- 4
10	Glass ceramics	7	<ul style="list-style-type: none"> • Glass ceramics, earthen potteries and tile manufacturing - 2 • Ceramics - 1 • manufacturing of glass -2 • Refractory Bricks - 1 • Glass marble - 1
11	Plastic & Rubber Products	120	<ul style="list-style-type: none"> • Waste plastic recycling unit - 64 • Plastic products using recycled granules -4 • HDPE/PP Woven Fabric and sacks with painting -10 • Tyres and tubes vulcanization / hot retreating - 26 • Synthetic Rubber - 15 • Pyrolysis -1
12	Others	176	<p>I. Category of industries covered under G.O.Ms.No.4, dt.20.08.2018 : 64</p> <ul style="list-style-type: none"> • Printing Press - 55 • Isolated Storage -5 • Slaughter house - 4 <p>II. Category of industries not covered under G.O.Ms.No.4, dt.20.08.2018 : 112</p> <ul style="list-style-type: none"> • Asbestos& Asbestos based industries - 2 • Manufacturing of lubricating oils, grease and petroleum based products -3 • Industrial Gases -9 • E-Waste Recycling and Dismantling - 3 • Printed Circuit Board - 5 • CETP - 4 • Fish feed, poultry feed and cattle feed - 9 • Foam Manufacturing - 9 • Fertilizer (granulation /formulation /blending only) - 9 • Manufacturing of mosquito repellent coil - 3 • Manufacturing of Adhesives - 4

(229)

S. No.	Sector	No. of Units	Details
			<ul style="list-style-type: none"> • Seed processing -1 • Manufacturing of Transformers - 4 • Tobacco processing including packing of cigarette - 3 • Mechanized Laundry with boiler - 3 • Manufacturing of explosives - 1 • Aviation Turbine Fuel - 1 • Printing & Ink manufactures- 21 • Timber Depot (Saw Mill) - 4 • Cables -3 • Blending & Mixing - 3 • Dry cell Batteries - 1 • Industrial carbon -1 • Isolated Storage -1 • Nuclear fuel -1 • Transportation & Distribution of LPG - 1 • Cold storage / warehouse -1 • Battery Assembly - 1 • Airport -1
	Total	1670	

•	Total No. of industries under Red and Orange category within ORR	1670
•	No of industries under Pharma and Pharma related category covered under located within ORR and covered under G.O.Ms No.4, dt.20.01.2018	418
•	No of industries other than Pharma and Pharma related category covered under located within ORR and covered under G.O.Ms No.4, dt.20.01.2018	401
•	No. of Industries Red and orange category other than those covered under G.O.Ms No.4, dt.20.01.2018	851

Basic Information	
Name of Non Attainment City	Nalgonda
Sate/ Union Territory	Telangana
Name of Nodal Officer at PCB/ PCC	Sri B.Rajender, EE, RO,
Email Id	ee-nlg-tspcb@telangana.gov.in
Contact Number	9177303253
Date till which progress is submitted	Oct,21-Dec21

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	RD2&CD1	2	1
VE	VEHICLES	VE15	7	8
IP	INDUSTRIES	IP3	3	1
BB/DF	WASTE AND BIOMASS- DUMPING AND BURNING	BB4 & DF2	4	2
AQ	AIR QUALITY DATA	AQ 1	1	0

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

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

CAPACITY BUILDING, MONITORING NETWORK AND SOURCE APPORTIONMENT

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 (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Additional Funds Required (Lakhs)
CB1	Insatiation & Commissioning of Monitoring Stations												
CB1.1	TSPCB Strengthening of Ambient Air Quality Management Additional stations proposed to CPCB CAACQMS	1CAAQMS allotted under CPCB fund and tendering process has to be initiated	1 as per CPCB norms	24 months As per CAP	deviation and EC funds yet to be released from CPCB	1 as per CPCB norms	number	CB1.1	Signed copy of T&C submitted to CPCB	100 (yet to receive from CPCB)	0	0	Nil
CB1.2	Manual Stations	In the Nalgonda town 2 No's AAQM monitoring stations are operating under NAMP of CPCB programme.	2 stations established under NAMP	Completed	No deviation	Regular monitoring of air pollution and submitting data to CPCB	Number	No	-	3.2	3.2	3.2	Not required
CB3	Assessment of sources												
CB3.1	Emission Inventory	Bids received from IIT Kanpur, Bombay and Teri and financial bid opened for technically qualified bidders (IIT Kanpur, Bombay). Award of work is under process	Completion of EI study within the RFP issued timelines	12 months as per CAP	Deviation due to Covid pandemic	invitation letter	Yes	CB3.1	CPCB estimation for SAS,CC	70	Nil (estimation letter submitted to CPCB)	-	Not required
CB3.3	Source Apportionment Study	Bids received from IIT Kanpur, Bombay and Teri and financial bid opened for technically qualified bidders (IIT Kanpur, Bombay). Award of work is under process	Completion of EI study within the RFP issued timelines	24 months As per CAP	Deviation due to Covid pandemic	invitation letter	Yes	CB3.1	CPCB estimation for SAS,CC	70	Nil (estimation letter submitted to CPCB)	-	Not required
CB4	Training & Capacity Building												
CB4.2	TSPCB 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	No	-	-	Nil	Nil	Not applicable	5 % of funds released in NCAP may be allowed

PUBLIC OUTREACH

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 (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Addition al Funds Required (Lakhs)
PO1 PO1.1	Public Outreach TSPCB Air quality index to be calculated and disseminated to the people through website and other media (maximum weekly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)	i. Disseminated through TSPCB portal and through the Electronic Display System at 1 place in the City.	Displayed daily data in public domain.	Completed & to continue as a regular activity	No Deviation	Daily data dissemination	Yes	No	-	6.4 Lakhs	6.4 Lakhs	6.4 Lakhs	not required
PO2 PO2.1	Public Grievance Redressal System App Based System	i. Complaints have been receiving via TSAIR app and same is regularly forwarding to concern departments. ii. The Nalgonda Municipality has launched 'Nalgonda citizen buddy app' to better responding of citizen on garbage and other issues	Receiving the complaints and forwarding to concern departments.	Completed and regular implementation	No Deviation	Operational	Number	NA	-	-	-	-	-
PO2.2	TSPCB Set-up and publicize helpline in Hyderabad City for complaints against reported	TSPCB: Toll Free Number for grievances: 10741 Online through Website and TSAIR app	Operational	Completed and regular implementation	No Deviation	Continuing activity	Number	-	-	Nil	Not applicable	Not applicable	Not required

Fund allotted Under NCAP

ROAD DUST AND CONSTRUCTION & DEMOLITION

RD1	Road dust	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Additional Funds Required (Lakhs)	remarks
D1.2	Maintain pot holes free roads for free-flow of traffic	150 Numbers of potholes closed in FY 20-21 for this Quarter with 3 km of road covered	5 kms roads repaired	Regular Activity	No Deviation	200 Numbers of potholes will be closed in FY 21-22 with 5 km of road covered	Number	-	-	5	-	-	15	funds allotted under NCAP
D1.4	Black-topping of unpaved road	1.5 kms length of road black topped in this Quarter July-21 to September-21	2 km roads length of road will be black topped	Regular Activity	No Deviation	4.5 kms length of road black topped in FY 21-22	Number	-	-	Not allocated	-	-	15	funds given as per financial report submitted by dept
D1.6	Regular cleaning of the roads with mechanised sweepers and removing the silt from the roads	Every day sweeping activity is carrying with 1No Mechanical Road sweeper and 200 No's manual sweeping workers	10km/day, 300kms/month	Regular Activity	No Deviation	1800 kms/year	Number	-	-	As part of departmental activity	-	-	-	
D1.9	Introduce water fountains at major traffic intersection, wherever feasible	Nalgonda Municipality has installed 3No's water fountains in Nalgonda Town. One at Clock Tower centre, One at YSR park, Near Kendriya Vidyalayam, Nalgonda and One at Marriguda By pass junction.	1	1.03.2023	No Deviation	1	Number	-	-	-	Nil	Nil	10	ITDS
D1.10	Prepare plan for widening of road and improvement of infrastructure for decongestion of road.	1.5 kms of road widened	12 km of road proposed to be widened	30.6.2022	No Deviation	5.5 km of work to be completed and other Road widening proposals are being prepared depends on the necessary	Text	-	-	3059	940	940	2119	
D1.11		No steps taken	No steps taken		No Deviation	New Master Plan is under Draft stage	Text	-	-					
D1.17	Paving of Foot paths	No steps taken	No steps taken	180 days	No Deviation	No steps taken	Text/number	-	-	Not allocated	-	-	-	
D2	Creation of green cover													
D2.2	Prepare plan for creation of green buffers along the traffic corridors	1) Central Medians of length 1 km developed with Avenue Plantation 2) Multi Layer Avenue Plantation of length 6 km developed 3) Avenue Plantation of length 4 km developed	4 no of traffic corridors covered	mid term & Continue as regular activity	No Deviation	5 no of traffic corridors covered (annually)	Text	Yes	-	125	100	-	50	funds allotted under NCAP 25L and municipal Green Budget
D2.3	Greening of open areas, gardens, community places, schools and housing societies	Under Pattana Pragathi, 5 No. of pattana prakruthi vanams, 1 No. of BPPV are developed and 5 No. PPV's have been developed	Already under implementation and will be continued	Continue as regular activity	No Deviation	as per requirement	Number	-	-					
D1	Construction Activities													
D1.1	Ensure transportation of construction materials in covered vehicles	A condition also insisted that, the building owner shall not dump the building material on footpath/road side and the same shall be dumped inside the compound premises without creating nuisance and air pollution and to this effect an undertaking is being obtained before release of permission. Necessary instructions are issued to builders in the town that covering must be provide by the builders at construction side.	Regular activity	to be continued as regular activity	No Deviation	Initiatives are taken up to recover the material from the C&D waste of about 20 MTs Annually	Text	No	-	-	-	-	50	To establish Shed, for segregation of material needed machinery and manpower
D1.8	Enforcement of Construction and Demolition Waste Rules	Enforcement team established in the Municipality to implement construction and demolition waste rules. As per rule 2016	Regular activity	to be continued as regular activity	No Deviation	Enforcement team has been established	Text	No	-	-	-	-	Not required	nil
D1.9	Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.	A Condition stipulated in the building sanction plan that, the applicant should erect temporary screen (blue tin sheet) around the construction area to avoid spilling of building materials outside the plot/site during the construction to stop environmental pollution and to ensure safety and security to the neighboring/ surrounding areas.	Regular activity	to be continued as regular activity	No Deviation	instructions were issued and following	No	No	-	-	-	-	10	To regularly monitor the team accommodating with vehicle

VEHICLES														
VE1	Improve and strengthen PUC programme	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Attachment	Attachment Contents	Total Funds Allocated (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Addition al Funds Required (Lakhs)	Remarks
VE1.1	Number of PUC centers in the city	8no of puc centers. year wise 2014-01puc center, 2015-02 puc centers ,2016-01 puc center,2020-03 puc centers, 2021-01 puc center	It is a regular activity	It is a regular activity	No deviation as It is a regular activity	-	-	-	-	-	-	-	-	
VE1.2	Regular checking of Vehicular emission and issue of Pollution under Control Certificate (PUC)	During the period from 01.01.2020 to 31-12.2020, (364) cases have been booked for not having the PUC certifications and an amount of Rs. 2,95,300/- was collected as fine. During the period from 01.01.2021 to 31-03.2021, (143) cases have been booked for not having the PUC certifications and an amount of Rs. 1,33,230/- was collected as fine. Yet to initiate the activity	It is a regular activity	It is a regular activity	No deviation as It is a regular activity	-	-	-	-	-	-	-	-	
VE1.4	Installation of remote sensor based PUC system, regular calibration of the checking instruments and online integration of the vehicle details with PUC	All the PUC centers	All the PUC centers	180 daysas per cap	deviation	to be initiated the activity	Number (2)	-	-	nil	-	-	30	As per financial report submitted by dept
VE4	Clean fuel and fuel Quality	Overall Grade (VE4.1+VE4.2.../Total points)												
VE4.1	Prepare action plan to check fuel adulteration and random monitoring of fuel quality data	Fuel adulteration random inspections (41) conducted from April-2020 to March-2021 and 11 inspections conducted last quarter i.e., July-2021 to September-2021	Periodic inspection programme is conducted	30 days and continue as regular activity	No deviation	monthly Checkings are being carried out on the fuel quality in the fuel dispensing stations available in the	Number	-	-	No funds allotted from govt and NCAP till date	-	-	7.5	funds given as per financial report submitted by dept
VE5	Parking Management	Overall Grade (VE5.1+VE5.2.../Total points)												
VE5.1	Prevent parking of vehicles in the non-designated areas	Under implementation, Non Designated Parking fines for the year 2020-2021 Total 7449 fines Rs.756800 amount . And This Quarter July-2021 to 30th Sep - 07 fines 1300/- amount	Regular Activity.	As Regular Activity	No	Regular Activity	Number (2)	-	-	8	-	-	-	funds allotted under NCAP
VE6	Strengthening of the public transport -Increasing awareness on usage of public transport available	As the town is a small area the public transport system operation covers the connecting of the neighbouring villages with the town. The para transit mode(3 & 4 wheeler Autos) cater the needs for the town	Implementing the regular accessibility	90days as per CAP and under implementation	No deviation	Implementing the regular accessibility	Text	-	-	-	-	-	-	

INDUSTRIES

	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	IP1.2	Action against non-complying industrial units existing in Nalgonda.	Regular activity	Regular Activity	No	Regulatory activity	Number	-	-	-	-	-	-
IP5	IP5.2	Control of air pollution from Brick kilns Revenue department No brick kilns in the city boundary. The units that are in the air shed outside the city boundary area are monitored by the concern departments	No units exist within the city limits	Nil	Nil	-	Yes	-	-	-	-	-	-
IP5.3		Conversion of natural draft brick kilns to Force/ induced draft. • The licensing authority for brick kilns is Revenue department. AQMC has directed to keep a condition of adopting the forced draft in place of natural draft.	No units exist within the city limits	Nil	Nil	-	Yes	-	-	-	-	-	-
IP11	IP11.6	Control of air pollution from generator sets Monitoring of DG sets and action against violations Condition is being incorporated in the consent orders of the industries for implementation. The units have provided acoustic enclosures with chimneys/exhaust to the DG Set for control emissions	Monitoring of the DG sets	Continue as regular activity	No Deviation	Continue as regular activity	As part of dept activity	-	-	As part of dept activity	-	-	-

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	Remarks
BB1.1	Regular check and control of burning of municipal solid wastes	2 no of inspections conducted. Regular monitoring and awareness programmes have been conducting on burning of waste. The Municipality is inspecting regularly in and around the town for control of open burning of municipal solid waste.	Regular inspection to ensure zero burning	continue as regular activity.	No deviation	12no of inspections planned	Number	-	-	1	0.4	0.4	5 Lakhs	To inspecting regularly in and around the town for control of open burning of municipal solid waste.
BB1.5	Launch extensive drive against open burning of bio-mass, crop residue, garbage, leaves etc.,	There is no open burning of Garbage, Bio-mass, Crop residue and leaves etc, in the Nalgonda Municipality area and taking all precautionary measures.	Regular Activity	one/quarter 1.3.2023	No deviation	regular check	Yes	-	-	Not allocated	-	-	-	-
BB3	Proper collection of Horticulture waste and its disposal following composting-cumgardening approach	Yes, There is Proper collection of Horticulture waste and its disposal happening with process of windro composting done in the nalgonda municipality area in our municipal dumpyard at sheshammagudem with garbage collection vehicles	avg 2tonnes/quarter of waste collected and laying of beds for composting at dumpsite	2tonnes/quarter 1.3.2023	No deviation	avg 8tonnes/yr	Number	-	-	as part of the departmental activity	-	-	5 Lakhs	For monitoring to regularly check and take action , if any incident happens
BB4	Ensure ban on burning of agriculture waste and crop residues and its implementation.	There is no open burning of Garbage, Bio-mass, Crop residue and leaves etc, in the Nalgonda Municipality area and taking all precautionary measures.	Regular Activity	180 days continue as regular activity.	No deviation	being implemented	Text	-	-	Not allocated	-	-	-	-
DF1.1	Engage with concerned authorities for continual basis for maximising coverage of LPG / PNG for domestic and commercial cooking with target of 100% coverage	LPG Penetration in the State of Telangana is 116%. 109 Lakh LPG connections which includes Deepam & PMUY connections to almost all BPL families. Schemes for providing subsidized LPG Connections under DEEPAM Scheme through MEPMA SHG groups	-	-	-	-	Number(2)	-	-	-	-	-	-	-
DF1.2	Hotels, restaurants and dhabas to use cleaner fuels	In Nalgonda District there are (35) Hotels and Restaurants and Dhabas are using commercial LPG connections for cooking purpose	<ul style="list-style-type: none"> Under implementation & to be continued To enhance the coverage of connections 	Regular activity	No Deviation	Under implementation & to be continued	Text	-	-	-	-	-	-	-

AIR QUALITY DATA					
Action Code	Action Point	Field type	Attachment	Attachment Contents	
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	Yes	From April & December ' 2021	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April & December ' 2021 the monthly average PM10 value sheet attached.	
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April & December ' 2021 the monthly average SO2 value sheet attached.	
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April & December ' 2021 the monthly average NOX value sheet attached.	
AQ1.5	Annual averages for PM2.5 (In µg/m3)	Number (1)	Yes	29	
AQ1.6	Annual averages for PM10 (In µg/m3)	Number (1)	Yes	60	
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	5.7	
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	24.4	
AQ1.9	Monthly Meteorological Data		Yes	-	

AIR QUALITY DATA												
Nalgonda												
Action Code	Action Point	Field type	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Attachment Contents
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	34	20	-	-	-	-	33	29	27	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	60	46	52	58	52	55	74	79	66	
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	5.6	4.5	5.7	5.2	5.6	5.4	6.3	6.9	6.5	
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	24.1	20.1	23.6	23.5	22.4	25.9	27.9	26.5	25.4	

Basic Information	
Name of Non Attainment City	Sangareddy
Sate/ Union Territory	Telangana
Name of Nodal Officer at PCB/ PCC	Sri P. Suresh, EE, RO,
Email Id	ee-mdk1-tspcb@telangana.gov.in
Contact Number	9177303259
Date till which progress is submitted	Oct,21-Dec21

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	RD2&CD1	2	1
VE	VEHICLES	VE15	7	8
IP	INDUSTRIES	IP3	3	1
BB/DF	WASTE AND BIOMASS- DUMPING AND BURNING	BB4 & DF2	4	2
AQ	AIR QUALITY DATA	AQ 1	1	0

* some of the sub action points execution is continuous and its difficult to segregate as completed and in progress
 ** if maximum subactions in the main action point are completed and are already under implementation they are shown as completed

CAPACITY BUILDING, MONITORING NETWORK AND SOURCE APPORTIONMENT

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 (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Additional Funds Required(Lakhs)	Remarks
CB1	Insatllation & Commissioning of Monitoring Stations													
CB1.2	Strengthening of Ambient Air Quality management: Additional stations proposed to CPCB	In the Sangareddy town 1 No's AAQM monitoring stations are operating under NAMP of CPCB programme.	target Completed as per CPCB criteria & regular monitoring will be conducted	Completed	No Deviation	regular monitoring will be conducted	Number	No	-	Not required	-	-	-	
CB3	Assessment of sources													
CB3.1	Emission Inventory	Bids received from IIT Kanpur, Bombay and Teri and financial bid opened for technically qualified bidders (IIT Kanpur, Bombay). Award of work is <u>under process</u>	Completion of EI study within the RFP issued timelines	24 months as per CAP	No Deviation	completion of activities as per RFP issued	Yes	Annexure CB3.1	Steps taken invitation letter	30	30	Nil	Nil	Fund allotted Under NCAP
CB3.3	Source Apportionment Study	Bids received from IIT Kanpur, Bombay and Teri and financial bid opened for technically qualified bidders (IIT Kanpur, Bombay). Award of work is <u>under process</u>	Completion of SAS study within the RFP issued timelines	24 months as per CAP	No Deviation	completion of activities as per RFP issued	Yes	Annexure CB3.1	invitation letter	30	30	Nil	Nil	Fund allotted Under NCAP
CB4	Training & Capacity Building													
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.	Completed	Completed and to Continue the activity	No deviation	Operational	No	-	Steps taken	Nil	Nil	Not applicable	5 % of funds released under NCAP may be allowed	
CB5	Emergency Response System													
		GRAP is proposed in the action plan which has approved by CPCB and the air pollution is mostly in satisfactory range	Notified plan	26.6.2020	Approved and in place	completed	No	Annexure CB 5	ERS copy	Nil	Nil	Nil	Nil	

PUBLIC OUTREACH

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 (Lakhs)	Funds released (Lakhs)	Funds Utilized (Lakhs)	Addition al Funds Required (Lakhs)
PO1	Public Outreach												
PO1.1	Air quality index to be calculated and disseminated to the people through website and other media (maximum weekly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)	i. Disseminated through TSPCB portal and through the Electronic Display System at 1 place in the City.	Displayed daily data in public domain & Continuing as a regular activity	Completed & to continue the activity	No Deviation	Daily data dissemination	Yes	No	-	-	-	-	-
PO2	Public Grievance Redressal System												
PO2.1	App Based System	i.Complaints have been receiving via TSAIR app and same is regularly forwarding to concern departments. ii.The Sangareddy Municipality has launched 'Sangareddy citizen buddy app' to better responding of citizen on garbaare and other issue	Regular activity	Completed and regular implementation	No Deviation	Continuing activity	Number	NA	-	-	-	-	-
PO2.2	TSPCB Set-up and publicize helpline in Hyderabad City for complaints against reported	TSPCB: Toll Free Number for grievances: 10741 Online through Website and TSAIR	Operational	Completed and regular implementation	No Deviation	Continuing activity	Number	-	-	Nil	Not applicable	Not applicable	Not required

RD2.2	Creation of green buffers along the traffic corridors and their maintenance	1) Central Medians of length 5 km developed with Avenue Plantation 2) Multi Layer Avenue Plantation of length 6.3 km developed 3) Avenue Plantation of length 8 km developed under TKHH plantation programme open areas converted into tree parks, present 16	completed, traffic corridors with green buffers identified and plantation has been carried out under harithe haram and	completed	No Deviation	completed	No of new tree parks are to be developed 15 nos	30	40	-	50	20L allotted under NCAP
RD2.3	Greening of open areas, gardens, community places, schools and housing societies		completed and continue as a Regular activity.	completed	No Deviation							
C&D1	Construction											
C&D1.1	Ensure transportation of construction materials in covered vehicles	A condition also insisted that, the building owner shall not dump the building material on footpath/ road side and the same shall be dumped inside	Regular activity	Short term activity as per CAP & continue as regular activity.	No Deviation	Initiatives are taken up to recover the material from the C&D waste of about 20 MTs Annually		-	-	-	50	To establish Shed, for segregation of material needed machinery and manpower
C&D1.8	Enforcement of Construction and Demolition Waste Rules	Enforcement team established in the Municipality to implement construction and demolition waste	Regular activity	Short term activity as per CAP & continue as regular	No Deviation	Enforcement team has been established and ensure continues monitoring		-	-	-	Not required	4L Allotted under NCAP
C&D1.9	Control measures for fugitive emissions from material handling- conveying and screening operations	Enforcement team established for regular monitoring. As per the strict enforcement of CPCB guidelines for construction is being implemented by using green squens site covering of digging sites etc., A Condition stipulated in the building sanction plan that, the applicant should erect temporary	Regular activity	Short term activity as per CAP and to be continued as regular activity	No Deviation	Instructions were issued and following	4L		-	-	10	To regularly monitor the team accommodating with vehicle

VEHICLES

VE1	Improve and strengthen PUC programme	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Total Funds Allocated (Lakh)	Funds Released (Lakh)	Funds Utilized (Lakh)	Additional Funds Required (Lakh)	Remarks
VE1.1	Number of PUC centers in the city	4 no of puc centers are available in Sangareddy, 35065no. Of vehicles are registered in the city. By extensive enforcement through our available enforcement team we are booking cases against the vehicles, which are playing without pollution under control certificate. From 1.01.20 to 31.12.20 (404no.) of cases booked and an amount of Rs. 3.08,900/- has been collected. From 1.1.21 During the period from 01.01.2021 to 31-09-2021, (220) cases have been booked for not having the PUC certifications and an amount of Rs. 217930/- was collected as	Action Completed however, It is continue as a regular activity	It is a regular activity	No deviation	-	-	-	-	-	
VE1.2	Regular checking of Vehicular emission and issue of Pollution under Control Certificate (PUC)		Periodic inspection programme	regular activity	No deviation	regular field inspections carriedout	-	-	-	-	
VE1.3	Auditing and reform of Pollution Under Control (PUC) certification	A system has been developed to check the Calibration and other details remotely. This year(01-01-2021 to 31-09-2021) 3 PUC Centers were seized in the District as they were not complying the Norms and Fine of	System for issuing timely alerts using SMS operational	Regular activity	No deviation	Regular activity	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	A system has been developed to link all PUC Centers in the district to central server at head office at Hyderabad and to update the data on real time basis. All (5) PTCs in Sangareddy city are enrolled in the system and they are issuing PUCs through web	All the PUC centers linking to the remote server	6months as per CAP	deviation	to be initiated the 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	Fuel adulteration random inspections (12) conducted from April-2020 to March-2021	it is a periodic inspection program	30 days as per CAP and continue as a	No deviation	108	-	-	-	-	
VE5	Parking Management	Overall Grade (VE5.1+VE5.2.../Total									
VE5.1	Prevent parking of vehicles in the non-designated areas	Wrong/Unauthorized parking cases for the Quarterly 711, imposed amount of Rs.1,42,200/-	Parking policy notified Sign boards will implementing the adequate accessibility to	Continue as regular activity	No deviation	Regular activity	As part of the dept	nil	nil	nil	
VE6	Strengthening of the public transport -Increasing awareness on usage of public transport available	Public Transport covering the surrounding villages is operated at regular intervals.	Implementing the adequate accessibility to	Regular activity	No deviation	Regular activity					

VE6.7	Steps for promoting battery operated vehicles like Ericsshaw/ECart	Public Transport covering the surrounding villages is operated at regular intervals.	initiate steps as per government policy matter	Long term activity	No deviation	initiate steps as per government policy matter	Nil	-	-	-	-	-	-
VE7.	Traffic Congestion	Overall Grade VE7.1+VE7.2./total	-	-	-	-	-	-	-	-	-	-	-
VE7.2	Synchronize traffic movements/Introduce intelligent traffic system for lane-driving	All the traffic personnels have been directed to ensure lane-driving. The traffic signals installed in four points in the city 1) Clock tower, center 2) R&B Signal 3) Infront of DEO office 4) Subash statue. E corridors are developed by traffic department and all	4	Short term Continue as regular activity	deviation observed	2	10	-	-	-	-	-	funds allotted under NCAP
VE7.3	Prepare plan for construction of diversion ways/ bypasses to avoid congestion due to nondesired vehicles.	Bypass road to sangareddy town is being taken up NHAI Dept as a part of road widening. The heavy vehicles into cities during no	Urban mobility plan notified including diversions for non-	2 year as per CAP	No deviation	Under Implementation	-	-	-	-	-	-	Funds Allotted under NCAP
VE8	Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Included as a part of Road safety awareness programmes. Road safety awareness programme being conducted regularly for the drivers and general public in the district. Following points also covered in the meetings. 1. effects of the vehicular pollution 2. contribution of vehicular pollution to the overall pollution. 3. measures to be taken to reduce the vehicular pollution. 4. use of	Number of advisory/ awareness campaigns	Long term action plan Continue as regular activity	No deviation	Number of advisory/ awareness campaigns	6L	-	-	-	-	-	-
VE11	Phase out old vehicles and vehicle scrappage policy	The executive officers of the department are inspecting the vehicles thoroughly whenever the vehicles come for renewal of registration and renewal of fitness certificates. Not in a single case vehicles which are not fit to ply on the roads are being allowed to ply on the roads. In some of the cases the registered owners											
VE11.2	Restriction on plying and phasing out of 15 years old commercial diesel driven vehicles.	As per the regulations in MV act. More than 15years age schools buses are not being allowed to ply. Also national permits are not being issued to goods carriage of age above 15 years	Notification issued	Continuing as regular Activity	No deviation	Stakeholderd consultation, Notification review. Approved							

VE11.3	Launch extensive drive against polluting vehicles for ensuring strict compliance	Under Implementation During the period from 01.01.2020 to 31-12.2020, (364) cases have been booked for not having the PUC certifications and an amount of Rs. 2,95,300/- was collected as fine. During the period from 01.01.2021 to 31-03.2021, (143) cases have been booked for not having the PUC certifications and an amount of Rs. 2,95,300/- was collected as fine. During the period from 01.01.2021 to 31-03.2021, (143) cases have been booked for not having the PUC certifications and an amount of Rs. 2,95,300/- was collected as fine.	Regular activity	Short term activity	No deviation	continue as a regular activity	-	-	-	-	-	
VE11.4	Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-VI fuels are available.	Retrofitting policy notified. Action plan as per the availability of BS-VI fuels	Under implementation	Long term activity	No deviation	Number of vehicles with particulate filter (guidance)	-	-	-	-	-	
VE11.8	Disincentivising the growth of Vehicles	Government issued G.O disincentivising the purchase of second vehicle by way of 2%	Under implementation	continue as regular activity	No deviation	Being implemented	-	-	-	-	-	

INDUSTRIES									
IP1	Industrial air pollution control	Present Status	Target	Target Date	Deviation	Annual Number of inspections	Field type	Funds	Additional
IP1.2	Action against non-complying industrial units	1 number of show cause notice issued	Regular activity	Regular Activity	No deviation	Number of inspections	Number	-	-
IP1.3	Shifting of polluting industries	Govt has issued GO Ms. No. 20, DT 01.03.2013 and is in the process identifying alternate site for shifting industries located within ring road.	most polluting industries	2 years as per CAP	No deviation	Actions will be initiated	Number (2)	-	-
IP1.4	Ban on Polluting Industries	No polluting industry is being permitted	G.O.MS.No.111 dated 8th March, 1996 prohibits polluting industries. Ban is under implementation since 1998	Already under implementation and continuing	No deviation	Regular activity	As part of dept activity	-	-
IP5	Control of air pollution from Brick kilns				No deviation			-	-
IP5.2	Identification of brick kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.	Revenue department No brick kilns existed in the city boundary. The units that are in the air shed outside the city boundary area are monitored by the concern departments	Regular inspection	Short term period as per CAP	No deviation	Regular inspection	Yes	-	-
IP5.3	Conversion of natural draft brick kilns to Force/ induced draft.	Revenue department • The licensing authority for brick kilns is Revenue department. AQMC has directed to keep a condition of adopting the forced draft in place of natural draft.	Regular inspection	2 years as per CAP	No deviation	Number of natural draft brick kilns	Yes	-	-
IP11	Control of air pollution from generator sets				No Deviation			-	-
IP11.6	Monitoring of DG sets and action against violations	Condition is being incorporated in the consent orders of the industries for implementation. The units have provided acoustic enclosures with chimneys/exhaust to the DG Set for control emissions	Monitoring of the DG sets	Continue as regular activity	No Deviation	Continue as regular activity	As part of dept activity	-	-

WASTE AND BIOMASS- DUMPING AND BURNING

BB1	Biomass Burning	Present Status	Target	Target Date	Deviation from Approved Action Plan Target	Annual Target	Field type	Total Funds Allocated	Funds released Lakhs	Funds Utilized Lakhs	Additional Funds Required Lakhs	Remarks
BB1.1	Regular check and control of burning of municipal solid wastes	2 no of inspections conducted. Regular monitoring and awareness programmes have been conducting on burning of waste. The Municipality is inspecting regularly in and around the town for control of open burning of municipal solid waste.	Regular inspection to ensure zero burning	Continue as a regular activity	No deviation	number of inspections planned	Number	As part of departmental activity	-	-	-	
BB1.5	Launch extensive drive against open burning of bio-mass, crop residue, garbage, leaves, etc.	All the garbage and leaves from horticulture waste is collected regularly and transported to various transfer stations for further transportation to treat and disposal facility. Though 100% happens in city in very few instances of waste burning is observed out of negligence of citizen and even by sanitation workers. Hence sangareddy municipality conducting awareness meetings with workers and citizen on waste burning along other items like Clearing of garbage heaps in open areas, green waste, sand silica, de-weeding of the road margins, cleaning of drains and construction and demolition waste removal from the roadside for prevention of air pollution and spreading of communicable diseases in the PattanaPragathi programme for a period of 10 days, once in three months. However, penalties are imposed on violators.	regular awareness programmes will be carriedout	90days as per CAP	No deviation	Number of drives planned.	Yes	5	-	-	-	5L allotted under NCAP
BB3	Proper collection of Horticulture waste and its disposal following composting-cumgardening approach	Number of composting cum gardening sites developed: 1200 Nos.	proper management of the waste and implementing the site	Continues regular activity	No deviation	capacity of waste composed	Number	20	-	-	allotted under NCAP Recycling plants for dry waste & organic waste contact	
DF1.1	Increasing the LPG connections in low income strata.	LPG Penetration in the State of Telangana is 116%. 109 Lakh LPG connections which includes Deepam & PMUY connections to almost all BPL families	number of free LPG connections Schemes for providing subsidized LPG Connections under DEEPAM Scheme through MEPMA SHG groups	Long term	No deviation	Implementing by state and central govt	Number (2)	-	-	-	-	
DF1.2	Hotels, restaurants and dhabas to use cleaner fuels	In Sangareddy District most of the Hotels and Restaurants and Dhabas are using commercial LPG connections for cooking purpose	• Under implementation & to be continued • To enhance the coverage of connections	Regular activity	No Deviation	Under implementation & to be continued	Text	-	-	-	-	

AIR QUALITY DATA				
Action Code	Action Point	Field type	Attachment	Attachment Contents
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	Yes	-
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	Yes	From April' 2020 to December' 2021 the monthly average PM10 value sheet attached.
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	Yes	From April' 2020 to December'the monthly average SO2 value sheet attached.
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	Yes	From April' 2020 to December' the monthly average NOX value 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	76
AQ1.7	Annual averages for SO2 (In µg/m3)	Number (1)	Yes	5.4
AQ1.8	Annual averages for NO2 (In µg/m3)	Number (1)	Yes	40.9
AQ1.9	Monthly Meteorological Data		Yes	-

AIR QUALITY DATA												
Sangareddy												
Action Code	Action Point	Field type	Apr -21	May -21	Jun -21	Jul-21	Aug -21	Sep -21	Oct -21	Nov -21	Dec -21	Attachment Contents
AQ1.1	Monthly averages for PM2.5 (In µg/m3)	Number (12)	48	25	18	12	18	15	55	58	86	
AQ1.2	Monthly averages for PM10 (In µg/m3)	Number (12)	100	58	56	53	59	58	98	95	110	
AQ1.3	Monthly averages for SO2 (In µg/m3)	Number (12)	4.7	4.1	4.7	4.8	5.2	6.2	5.9	6.2	7.0	
AQ1.4	Monthly averages for NO2 (In µg/m3)	Number (12)	36.1	33.1	37.2	36.5	42.9	40.6	47.0	47.6	47.2	

**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**

S. No	Content																					
1	Name of the State/UT	: Telangana State																				
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2	Information on water bodies such as Lakes & Ponds	: <table border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </table>	Type of Water Body	Total No. of Water Bodies Identified	Ownership of Identified Water Bodies (Indicate No. Of Water Bodies)		Status On-going Restoration of Water Bodies with Financial Support from NRCD/MoJS/with own resources of the State/UT			Government	Private/ Individual	Total No. of Water Bodies Selected for Restoration	Total No. of Water Bodies restored so far	Total No. Of Water Bodies presently under restoration	Lakes / Ponds	46,697	46,697	--	30,297	23,735	6562	
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Lakes / Ponds	46,697	46,697	--	30,297	23,735	6562																
3	Whether water bodies are geo-tagged/ provided with Unique Identification Number (UIN)	: Yes, the Geotagging of 44,672 water bodies has been completed.																				
4	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)	: <ul style="list-style-type: none"> Improper disposal of Sewage (√) Waste like Municipal Solid Waste (√) Plastic waste (√) Construction & Demolition Waste (√) 																				
5	Other Problems Associated with the Identified Water Bodies (Siltng/Weeding/Encroachments/No Provision of inflow or outflow control measures/ Poor Embankment/Poor Watershed Management in Catchment/No Adequate Buffer Zone / any other)	: <ul style="list-style-type: none"> Siltng (√) Poor Embankment (√) 																				
6	Water Quality Compliance Status of Identified lakes, and ponds in the State/UT	: <table border="1"> <thead> <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> </thead> <tbody> <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> </tbody> </table>	Type of Water body	No. of identified water bodies	No. of Water Quality Monitoring Stations	No. of Water Bodies complying to			Primary Water Quality Criteria for Bathing	Drinking Water Quality Criteria after Conventional Treatment	Water Quality Criteria for Agriculture/ Fishing/Any other criteria	Lakes / Ponds	235	235	13 (Class B)	Nil (Class C)	43 (Class D) 128 (Class E) 51 (Dry) (Annexure-A)					
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Lakes / Ponds	235	235	13 (Class B)	Nil (Class C)	43 (Class D) 128 (Class E) 51 (Dry) (Annexure-A)																	

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

(Pl. Provide Following Details Water Body-Wise)

1	Location details of the Water Body (Address with GPS location)	:						
2	Details of Area and Dimensions of the Water Body	:	<ul style="list-style-type: none"> • 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. 					
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					

256

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: tsmcdcltd@gmail.com; mdcltd@telangana.gov.in
www.tsmdc.telangana.gov.in
The CIN of the Company is U14220TG2014SGC095923

Ref: TSMDC/GM (Sand)/140/2019/1006

Date: 18.01.2022

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, BMW Rules, 2016- submission of 3rd quarterly report on sand mining- Reg.

Ref: 1. Mail received from TSPCB on 18.01.2022

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 3rd quarterly status from October-2021 to December-2021.

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)

	<p>sand is available for extraction.</p> <ul style="list-style-type: none"> i. Jayashankar Bhupalpally ii. Mulugu iii. Bhadradi Kothugudem iv. Karimnagar v. Peddapalli vi. Suryapet vii. Rajanna Sircilla viii. Gadwal ix. Mancherial 			
<p>II) Extraction from sand bearing areas.</p> <p>a) Total sand bearing areas received EC/CFO/CFE</p> <p>b) Total Sand bearing area received ECs and waiting for CFO/CFE</p> <p>c) EC/CFE/CFO is yet to be receive</p>	<p>EC,CFE & CFO required to operate sand bearing areas .</p> <p>67</p> <p>8</p> <p>27</p> <p>(4 sand reaches are not feasible)</p>	<p>The sand bearing areas with EC/CFE/CFO only will be operated</p>	<p>27 reaches required EC, and will be obtained by Feb-2022</p>	
<p>III) de-casting pattalands No. 51</p>	<p>De-casting of pattalands abutting to river does not require EC as per sustainable Sand Mining Guidelines.</p>	<p>No gap</p>	<p>-----</p>	
<p>IV) Compliance to other issues</p> <p>a) Issuing waybills with security stationary & barcode.</p>	<p>Complied</p>	<p>No gap</p>		
<p>b) issuing way bills through online portal (SSMMS)</p>	<p>Complied</p>	<p>No gap</p>		
<p>c) Daily quantities keeping in the online to enable the customers to book sand.</p>	<p>Complied</p>	<p>No gap</p>		
<p>d) Daily reports about sand extraction and dispatches</p>	<p>Complied</p>	<p>No gap</p>		

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 8917 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 53 sand reaches.		As and when new reaches start CC cameras will be installed accordingly	

Thanking you,

Yours faithfully

Maly. G.

(Dr. G. MALSUR)

Vice Chairman & Managing Director

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

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)	<p>100% coverage in GHMC area.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Sewerage service area</td> <td style="width: 50%;">169.19 sq.km</td> </tr> <tr> <td>No of sewerage connections</td> <td>491989 nos.</td> </tr> <tr> <td>Population 2018</td> <td>47.67 lakhs</td> </tr> <tr> <td>Population 2021</td> <td>50.44 lakhs</td> </tr> <tr> <td>Length of sewer main</td> <td>5767.05 km</td> </tr> <tr> <td>Length of 600 mm dia &</td> <td>612 kms</td> </tr> </table>	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.
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																
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		above			
		Trunk mains	172.0 5 kms		
		Lateral & sub mains	4958 / 6083. 41 kms		
		No of manholes	27421 9 / 23517 3		
		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/HMD A 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		

(264)

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			

265

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	DPR under prep.	
22	Alampur	2	1.60	1.5			3.10		
23	Makthal	2	2.60	2.6			5.20	A/S awaited	
24	Palwancha	4	2.00	2.8	9.3	2.00	16.10		
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		