

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL NEW DELHI.

O. A. No. 606 of 2018.

IN THE MATTER OF :-

Compliance of Municipal Solid  
Waste Managent Rulke 2016.

....PETITIONER.

VERSUS.

State of Karnataka. & ORS.

....RESPONDENTS.

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Next Date. 28 / 07/2021.

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THROUGH

  
MR.DARPAN K.M.

Date:-03/06/2021  
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**IN THE HON'BLE NATIONAL GREEN TRIBUNAL AT NEW DELHI**  
**Original Application No.606 of 2018**

BETWEEN:

.... PETITIONERS

AND:

CPCB & OTHERS

.... RESPONDENTS

**AFFIDAVIT FILED BY THE CHIEF SECRETARY TO GOVERNMENT OF KARNATAKA – RESPONDENT**

I, P.Ravi Kumar S/o. P Gopal Reddy aged about 58 years, presently, working as Chief Secretary, Government of Karnataka, Bengaluru do hereby solemnly affirm and State on oath as follows:

1. I submit that I have been working as Chief Secretary, GOVERNMENT OF KARNATAKA since **January 2021** and in my official capacity and as verifiable from official records maintained with Government of Karnataka, I am familiar with the facts of the case and hence I am swearing this affidavit.
2. I respectfully submit that based on the directions of this Hon'ble Tribunal, I ensured coordination with various departments of Government of Karnataka and based on the information provided by such departments, I depose the present affidavit.
3. I respectfully submit that, directions of the Hon'ble Tribunal with respect to OA 606/2018 are being adopted in both Urban and Rural areas of the State.
4. I respectfully submit the abstract of implementation status of Solid Waste Management(SWM), Plastic Waste Management (PWM), Biomedical waste Management (BWM) Rules-2016 in 293 Urban Local Bodies (in 6832 wards), 6,002 Gram Panchayats and 23,259 Health Care facilities along with implementation status of other issues mentioned in Hon'ble NGT order dated:24-4-2019 (page 13 and 14, para 20 [a – h] are detailed below;



A handwritten signature in blue ink, likely of the Chief Secretary, P. Ravi Kumar.

5. **Para 20(a):**

- I. Compliance to SWM Rules 2016 in **urban areas** (excluding Bengaluru) is enclosed herewith and marked as Annexure-R1.
- II. Compliance to SWM Rules 2016 in **Bruhat Bangalore Mahanagara Palike (BBMP)** is enclosed herewith and marked as Annexure-R2.
- III. Compliance to SWM Rules 2016 in **Rural areas** is enclosed herewith and marked as Annexure-R3.
- IV. Compliance to SWM Rules 2016, BWM Rules 2016, C&D waste Management Rules-2016, Hazardous and another Wastes (Management and Transboundary Movement) Rules, 2016, E-Waste Management Rules-2016, Status of STPs & re-use of treated water, status of CETPs / ETPs, air pollution and noise pollution status by **Karnataka State Pollution Control Board** is enclosed here with and marked as Annexure-R4.
- V. Compliance to Status of STPs and re-use of treated wastewater by Bangalore Water Supply and Sewage Board (**BWSSB**) and Karnataka Urban Water Supply and Drainage Board (**KUWS&DB** for cities other than Bangalore) is enclosed herewith and marked as Annexure-R5.
- VI. Compliance to Rejuvenation of water bodies by Urban Development Department is enclosed herewith and marked as Annexure-R6.
- VII. Compliance on illegal sand mining by the Department of Mining and Geology is enclosed herewith and marked as Annexure-R7.
- VIII. Compliance to ground water extraction /Contamination and recharge by Directorate of Groundwater department enclosed herewith and marked as Annexure-R8.

6. **Para 20(b):** State level/District level NGT SLC meetings were conducted on 5-1-2021, 20-1-2021, 8-2-2021, 12-2-2021, & 20-2-2021. Proceedings of the meetings are available at <https://kspcb.karnataka.gov.in/proceedings-ngt-slc-meetings>

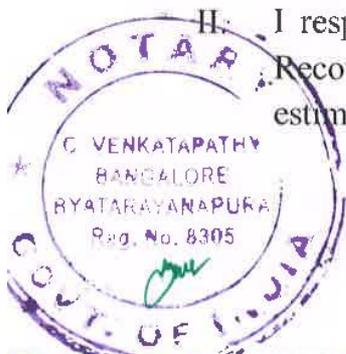
1. **Para 20(c):** Compliance to Hon'ble NGT order dated 20.09.2018 in the News Item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are critically polluted (OA No. 673/2018) is enclosed herewith and marked as Annexure-R9.



2. **Para 20(d):** Compliance to Status of functioning of the Committees constituted in News Item published in "Times of India" Authored by Shri Vishwa Mohan Titled "NCAP with multiple timelines to clear Air in 102 cities released around Aug 15" dated 08.10.2018 is enclosed herewith and marked as Annexure-R10.
3. **Para 20(e):** Compliance to Status of Action Plan with regard to identification of polluted industrial clusters in O.A.No.1038/2018, news item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" dated 13.12.2018 is enclosed here with and marked as Annexure-R11.
4. **Para 20(h):**
  - I. Performance of **6 Model towns in Karnataka** is as below,
  - II. 90 Gram Panchayat's have been proposed for developing as model GPs as per the list enclosed herewith and marked as **Annexure-R12**.
7. I respectfully submit that, several significant achievements have been made by the State of Karnataka in the field of solid, plastic and biomedical waste management as detailed below:

**URBAN DEVELOPMENT DEPARTMENT:** 313 Urban Local Bodies (6932 Wards) of Karnataka with **2,36,25,962** population generates approximately **11,085** tonnes of Municipal Solid Waste per day.

- I. I respectfully submit that, 2021-22 State budget has proposed 31 '**Swachh Gruha Kalika**' in all district head quarters with an estimated cost of Rs.9 Crs. **SwachaGruha Kalika Kendras** will act as a practical interface and showcase live demonstrations of various types of composting and bio gas methods and other waste management practices and encourages citizen participation in solid waste management systems including changing and sustaining behavioral change towards waste practices, create awareness about the responsibility of citizens, institutions and community to manage the waste generated by them. Directions have been issued in this regard to all districts.
- II. I respectfully submit that, 2021-22 State budget has proposed 5 Material Recovery Facilities (MRF) centres in 5 selected city corporations with an estimated cost of Rs. 11.5 Cr is proposed. MRFs will ensure aggregation and



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further sorting of non-bio-degradable waste which can thereafter be channelized to recycling facilities, co-processing units and other processing destinations.

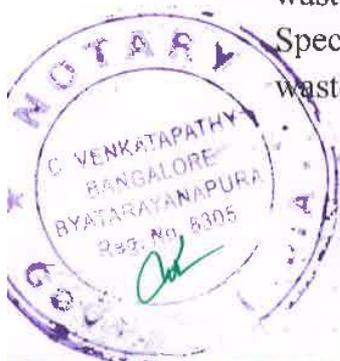
- III. I respectfully submit that, 2021-22 State budget has proposed 89 community compost facilities in 10 city corporations (3 each) and 59 City Municipal Councils (1 each) with an estimated cost of Rs. 2.38 Crs is proposed under Swachh Bharat Mission. This will reduce burden on centralised processing facility & ensure community participation in waste management.
- IV. I respectfully submit that, draft C&D waste management State policy & strategy has been prepared & is being scrutinised.
- V. I respectfully submit that, 28 draft FSSM DPRs are being approved by the State and same will be implemented within stipulated timelines.
- VI. I respectfully submit that, **6739(97.21%)**wards have achieved 100% Door to Door waste collection, **4865(70.18%)** wards have achieved 100% source segregation
- VII. I respectfully submit that, waste generation in the State is about 11085 TPD comprising 5972 tonnes of wet waste, 3782 tonne of dry waste, 77 tonnes of sanitary waste, 1254 tonnes of street sweeping waste out of which 10,123 tonnes of MSW is collected every day.
- VIII. I respectfully submit that, 5838 tonnes of waste is processed generating 672 tonnes of city compost and 158.16 cum bio gas is generated.
- IX. I respectfully submit that, 724 tonnes of dry waste is recycled in this year, 592 tonnes is converted into RDF/baled, 2.4 tonnes of plastic waste used in roads, 254 tonnes disposed through co-processing in cement kilns.
- X. I respectfully submit that, as per the Rule 12 of SWM Rules 2016 implementation status of Solid Waste Management Rules is reviewed on monthly basis.
- XI. I respectfully submit that, 267 ULBs have appointed nodal officers for implementations of SWM Rules 2016 & PWM Rules 2016 as per the directions of Hon'ble Tribunal. Instructions have been issued to 49 newly upgraded ULBs to appoint the nodal officer.
- XII. I respectfully submit that, all ULBs in the State have taken measures to implement Model-SWM bye-law published by the Government.
- XIII. Nine (09) ULB have prepared DPRs for bio remediation with an estimated amount of Rs 597.26 Crs & 5 ULBs have invited tender for legacy waste management.



- XIV. I respectfully submit that, District Environment Plan is finalised in all 30 Districts.
- XV. I respectfully submit that, care has been taken by the State towards safety of Pourakarmikas and safe disposal of waste from quarantine/isolation households.
- XVI. I respectfully submit that, 72 ULBs have been declared as ODF+ and 2 ULBs as ODF++ by third party agency appointed by Ministry of Housing & Urban Affairs, GOI.

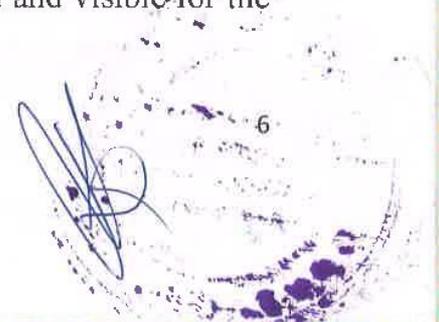
**BRUHATH BENGALURU MAHANAGARAPALIKE (BBMP):-**

- I. **Live Vehicle Tracking System:** The live vehicle tracking system (LTS) include all the auto tippers, compactors, mechanical sweeper truck and zonta bins. D2D collection of waste, compactors going to waste to compost plants and landfill, mechanical sweeping of the roads around the BBMP Jurisdiction and zonta bins established at the commercial area with filled or half-filled capacity is monitored from the centralized control room. The system integration of all the vehicles has brought the transparency and accountability in the system and it has helped in streamlining the SWM department of BBMP.
- II. **Black Spot Monitoring & Elimination Process:** Black spot monitoring is done with the help of Marshals team of BBMP. First the survey is done with the handholding device and the Geo tagged image is uploaded on the portal. Once the form is uploaded, then the notification goes to Junior Health Inspector with the mapped location. JHI will clean and beautify the spot and upload the photograph through the mobile application. After the completion of the process the dashboard will show the eliminated and beautified GVP or Black spot, also the picture of before and after could be viewed on the dashboard.
- III. **Waste to Compost Plant Dashboard:** Waste to compost plant and landfill waste mapping was one of the most challenging tasks of all the required indicators. A centralized database of wet waste processed, and the mixed waste dumped at the landfill was not tracked by the BBMP office. The Special Commissioner took the initiative to the micro level detailing of waste, coming from the source to the plant and landfill.



After the rigorous process and brainstorming session with all the 27 AEEs, 8SE's and 8 Joint commissioners, and doing on-ground visits of several plant, all the details were captured regarding the waste going to the plant and landfill. The ward wise waste details and mapping of vehicles sent on daily basis to the plants and give the final output. With the help of output data, it was easy in forming the new policy and action plan for segregation, D2D collection and processing of waste. The gap of 32.7% was cover up within the span of 3 months.

- IV. **Sahaaya App:** The initiative taken by the Special Commissioner to recreate the Sahaaya app was well appreciated by the DMA and the BBMP Commissioner. Earlier the complaint tracking and other monitoring method was not available due to the lack of base level application development resources. After having the brainstorming sessions with all the officials and trying to identify the problems and indicators for which complains was registered on daily basis. The BBMP implementation team drilled down and formulated the 24 indicators based on sanitation and SWM parameters. The complete end to end process was made streamlined and robust, so that all the complaints are tracked and closed within the given timeline. In case any other complains is registered from other government departments then the complaint is transferred to the same database. All the complaints are made sure to be resolved under the SLA time period without any delay. Everyday a report along with the status is checked by the Special Commissioner.
- V. **Fine Mechanism:** The fine mechanism is based on the violation of any activity under SWM & Sanitation. Marshals and JHI of BBMP are authorized to collect the fines from defaulter violating the SWM bye laws. Initially the fine collection method was done through fine slips and no evidence was captured. So sometimes the official faced the issues while collecting the fine from the defaulters. By incorporation the POS machine and make it more functional and robust so that it can capture the evidence of defaulter and fine the amount of relative complaints. Also, several functions were improved after the continuous feedback of the system. The daily data of fine along with the transaction is visible on the dashboard. Even the fine collected by single JHI or Marshal is also being recorded and visible for the



BBMP officials. Based on all records the JHI and Marshals gets best employee appreciation letter and the reward.

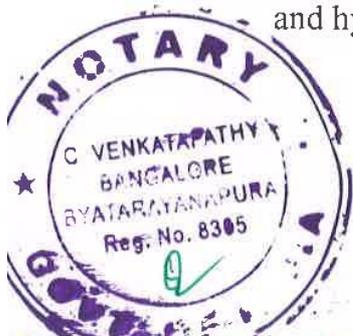
**VI. Ranking of Wards based on segregation levels and fines levied by JHIs**

The SWM department assess the performance of all the zone, division, and ward of BBMP based on the SWM indicators. The rank is assigned to each ward based on their performance on waste segregation, waste collection, processing of wet waste and fine levied by the JHIs in each ward. The ward level score is accumulated and consolidate to calculate the divisional and zonal performance. Awards and Recognition is also given to the best performing officers for their effort to increase the segregation at ward level and impose fine for not following the BBMP rule and regulations.

**RURAL DRINKING WATER and SANITATION DEPARTMENT (RDW&SD):-**

Key achievements /major steps taken up by the Rural Drinking Water and Sanitation Department is detailed below;

- Out of **6002**GPs, Detailed Project Reports (DPR) to set up Solid Waste management (SWM) units at **3457** GPs are approved, out of which **961** units are operational. **Out of 6002 GPs**, suitable land for processing & disposal of solid waste is available, in most of the GPs and SWM DPRs are being prepared.
- The Department has accorded approval for **2545** GPs and funds of Rs. 74.01 Crores have been disbursed to districts to take up Solid Waste Management activities in all Gram Panchayats in Karnataka vide GO No: RDWS&SD/03/SBM-G PH-II / SWM / 2021dated 15-01-2021.
- In few GPs, we identified land constraints for establishing and implementation of SWM Unit, it is planned to establish Multi GPs SWM Unit. An Memorandum of Understanding (MoU) document is finalized in English in consultation with few CEOs and technical Experts and Legal experts opinion is obtained and finalized and the same has been shared with all 30 Districts
- A unique branding logo “Swachh Sankeerna” for Solid Waste management has been launched on October 2<sup>nd</sup> 2020 to create awareness about sanitation and hygienic among rural areas of Karnataka.



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- Technical assistance is being provided to Endowment department for management of solid waste across all the temples.
- Rural Drinking Water and Sanitation Department has taken initiative for safe disposal of sanitary waste as a part of Solid Waste Management under Swachh Bharat Mission objective by facilitating installation of sanitary napkin disposal incinerators as pilot projects in few hostels and Gram Panchayats.
- Various IEC activities are conducted across rural Karnataka to promote safe and hygiene practices, to control entry of waste into drains, not to litter and segregation of waste as per the guidelines of Swachh Bharat Mission(Gramin)
- Rural Drinking Water and Sanitation Department is proposed taking support from professional agencies / NGOs for capacity building and to provide technical handholding support at the implementation stage for Solid Waste Management initiatives specially in creating Material Recovery facility. This creates end to end solution of dry waste management.
- It is targeted to establish 60 GOBARDHAN projects across 30 districts.
- It is targeted to establish 100 Material Recovery Facility units (MRF) across 30 districts, which receives and separates the non-biodegradable waste and recyclables will be sorted, baled and sent to appropriate recycling facilities and cement kilns for co-processing.
- In addition, Rural Drinking Water and Sanitation Department has taken the following IEC (Information Education And Communication) Initiatives:-

- VII. Social Media Special Campaign
- VIII. Samudayik Shouchalaya Abhiyan
- IX. Swachh Grama-Swachh Parisara
- X. Drinking Water and Sanitation Special Campaign
- XI. Swachotsava-Nityotsava
- XII. Gandagi Mukta Bharath
- XIII. Swachhatha Pakhwada
- XIV. Established Parihara Call centre for addressing the grievances

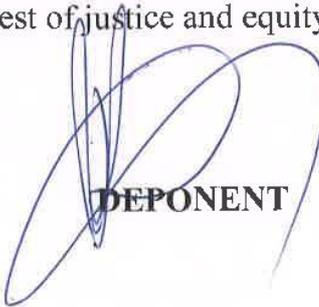
**Information Education And Communication Initiatives by Rural Water Supply and Sanitation Department:-**

- XV. Social Media Special Campaign



<b><u>SOCIAL MEDIA ACTIVITIES</u></b>	
<b><u>SWACHOTSAVA-NITYOTSAVA – SLWM BRANDING</u></b>	
<b><u>PARIHARA CALL CENTRE</u></b>	
<ul style="list-style-type: none"> <li>▪ <b>Phone: 94809 85555</b></li> <li>▪ <b>Email: parihara.rdwsd@gmail.com</b></li> <li>▪ <b>Website: http://parihara.swachhamevajayate.org/parihara/</b></li> <li>▪ <b>Complaints through : Direct call, Social Media (WhatsApp, Twitter, Facebook) Email &amp; Letter</b></li> </ul>	

WHEREFORE, I respectfully pray that this Hon'ble Tribunal may be pleased to accept the above information in the interest of justice and equity.

  
**DEPONENT**

**VERIFICATION**

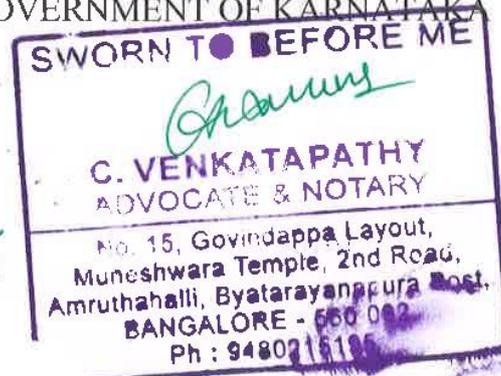
I, the above named Deponent do hereby verify that all the facts stated in the affidavit are true to my knowledge and that no part thereof is false and nothing material is concealed there from.

Verified at Bangalore on  
6<sup>th</sup> day of June 2021



Identified by me

  
**DEPONENT**  
**CHIEF SECRETARY**  
**GOVERNMENT OF KARNATAKA**



8/NO 759  
21/02/6/2021

## Annexure-1

## Compliance to Solid Waste Management Rules 2016

Time lines have been slightly extended because of covid pandemic, SWM developmental activities are slowed down

Sl. No	SWM Rule Clause	Provisions of SWM Rules 2016	Implementation status of all Districts (All ULBs)				
1	2	3	4				
			Current Status	Desirable Level of Compliance in terms of statutes	Gap Between current status and desired levels	Proposal of attending the gap with time lines	Name and designation of designated officer for ensuring compliance to provisions under statute (Deputy Commissioner/ Project Director)
1	4(a)& 15 (g)	<p>Segregate and store the waste generated by them in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes</p> <p>Direct waste generators not to litter and to segregate the waste at source as prescribed under these rules</p>	<p>The ULBs are practicing source segregation of MSW into three streams.</p> <p>Littering is being tackled through IEC component under Swachh Bharat Mission followed by penal action.</p>	100%	29%	December -2021	Project Directors DUDCs All Districts

2	4(2)	No waste generator shall throw, burn or burry the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.	General public & all waste generators are practicing not to throw burn or bury the MSW.	100%	15%	December -2021
3	4(3)& 15 (f)	All waste generators shall pay such user fee for solid waste management, as specified in the bye-laws of the local bodies	SWM cess is being collected along with property tax. Collection of SWM User fee will be implemented as per Karnataka Municipalities SWM Bye Laws 2019.	100%	60%	December -2021
4	4 (8)	All Bulk waste generator (resident welfare and market associations, gated communities and institutions with more than 5,000 Sq.m area & all hotels and restaurants) shall process and disposed off the bio-degradable waste through composting or bio-methanation within the premises as far as possible	The ULBs are insisting bulk waste generators to practice on-site composting. Levying penalty on violators as per the bye lawsis being implemented.	100%	60%	December 2021(for above 1lakh population)
5	12(a)	Facilitate identification and allocation of suitable land for Processing & Disposal of MSW	Lands identified for MSW processing facility	100%	27%	Dec-2021
6	12(b)	Review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with UDD	The DCs are reviewing the progress of implementation of SWM Rules-2016 regularly.	100%	-	-

7	15(a)	Prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification (DPR under SBM can be considered as Action Plan)	The State SWM Policy & strategy is finalized  DPRs for the newly upgraded ULBs are yet to be approved. <b>Instructions have been given to all newly upgraded ULBs to prepare DPR at earliest.</b>	100%	25%	Oct-2021
8	15(b)	Arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises	Door to door collection of waste is being carried out in all the areas including slums and informal, settlements, commercial, institutional and other non-residential premises.	100%	3%	Dec-2021
9	15(c)	Establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste pickers and waste collectors to facilitate their participation in solid waste management	Waste Pickers are identified in all ULBs. The integration is under process. SWM policy has given specific directions for integration of waste pickers.	100%	29.28%	October-2021
10	15(d)& 15(h)	Facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management.  Setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials	30 Material Recovery Facilities at districts Headquarters steps will be taken to formation of waste pickers, Self Help Groups to an extent possible.	100%	90%	Dec-2021- DWCCs  March-2022- MRF (in CCs & CMCs)

11	15(e)	frame bye-laws incorporating the provisions of these rules within one year from the date of notification of these rules	Bye laws have been framed& notified	100%	Nil	Complied
12	15(i)	Establish waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal	A facility at Dabaspete is setup to process the same, however practicing separate collection of domestic hazardous waste is under process.	100%	57.16%	Dec-2021
13	15(k)	direct street sweepers not to burn tree leaves collected from street sweeping	Tree leaves are being collected separately to process in the parks.	100%	-	-
14	15(l)	Provide training on solid waste management workers& waste pickers.	Regular trainings are being conducted	100%	-	-
15	15(m)	Collect waste from vegetable, fruit, flower, meat, poultry and fish market on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations in the markets	SWM bye law has mandated in-situ processing for bulk generators including market in SWM bye law	100%	50%	Dec-2021
16	15(p)	Collect horticulture, parks and garden waste separately and process in the parks and gardens, as far as possible	ULBs are practicing to process the waste by adopting decentralized method.	100%	50%	Dec-2021
17	15(t)	Involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing	Regular awareness is being carried out for promotion of home composting. Non-government organizations, college students are also being involved for awareness on home composting. SWM policy & Bye law envisages the concept of	100%	50%	Dec-2021

C			home/lane/ward/community composting			
18	15(v)	Construction, operation and maintenance of solid waste processing & disposal facilities	Civil works for solid waste processing & disposal facility are under construction as well as procurement process of vehicles and machineries will be completed soon.	100%	47%	Dec-2021
19	15(x)	Make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget	Sufficient funds are being allocated for SWM activities	100%	-	
20	15(za)	Prepare and submit annual report in Form IV on or before the 30th April of the succeeding year	ULBs are submitting before prescribed timelines.	100%	-	-
21	15(zf)	Frame bye-laws and prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules	Bye-Laws have been framed and notified. ULBs are in the process of adopting the same for implementing SWM Rules-2016.	100%	-	-
22	15(zg)	Create public awareness through information, education and communication campaign and educate the waste generators	IEC programs are being conducted regularly to educate the public.	100%	-	-
23	15 (zj)	Investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio mining and bio-remediation/scientificallly capped	A Committee is being constituted by Government to guide the ULBs on eradication of legacy waste. Also all open dump sites have been identified by ULBs and appropriate action will be taken to reclaim the land.	100%	90%	26 cities with above 1 lakh population in the State which has got large quantity

						legacy waste will be cleared by 2022.
24	19, 20 & 21	Criteria for Duties regarding setting-up solid waste processing and treatment facility Criteria and actions to be taken for solid waste management in hilly areas Criteria for waste to energy process	It is ensured that the CPCB guidelines & CPHEEO manuals are referred for fixing all the criteria and incorporated in the DPRs prepared	100%	Nil	Complied
25	22	Time frame for implementation	The civil works for processing facilities are under progress whereas; the vehicles & machineries required for SWM activity will be bought from GEM portal. The ULBs were directed to ensure all obligations under SWM Rules-2016 are implemented adhering to timelines. But due to covid situation tendering process was halted for 6 monthsh and State requires some additional time to ensure 100% compliance	100%	25%	December-2021
26	23	State Level Advisory Body (SLAB)	Meeting are being held regularly	100%	Nil	Complied
27	24	Annual report.	Submitted	100%	Nil	Complied

Sl. No.	Proposed activity as per SWM Rules 2016	Time frame for achieving
1	Identification of suitable sites for setting up solid waste processing facilities	Complied
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 stand-alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more .	NA
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	2021
4	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source	Complied through SWM bye law
5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	October -2021
6	Ensure separate storage, collection and transportation of construction and demolition wastes	December-2021
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	December -2021
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 populations.	December-2021
9	Setting up common or stand-alone 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	NA
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	NA
11	Bio-remediation or capping of old and abandoned dump sites	2022- above 1 lakh population 2023- other ULBs

Annexure.....R-1.....in the Affidavit  
Mr./Mrs.....sworn to before me  
on this..... day of .....

  
NOTARY PUBLIC BANGALORE

  
Executive Engineer  
Directorate of Municipal Administration  
Bangalore.

## Compliance to Solid Waste Management Rules 2016

Sl. No	SWM Rule Clause	Provisions of SWM Rules 2016	Implementation status of Bruhat Bengaluru Mahanagara Palike.				
1	2	3	4				
<b>Compliance to duties of waste generators</b>							
			<b>Current Status</b>	<b>Desirable Level of Compliance in terms of statutes</b>	<b>Gap Between current status and desired levels</b>	<b>Proposal of attending the gap with time lines</b>	<b>Name and designation of designated officer for ensuring compliance to provisions under statute (Deputy Commissioner/ Project Director) with Mobile No.</b>
1	4(a)& 15 (g)	Segregate and store the waste generated by them in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes  Direct waste generators not to litter and to segregate the waste at source as prescribed	Strict directions have been issued to all Wards to ensure source segregation of waste in three streams and implement SWM Rules-2016.  BBMP has started collecting wet / sanitary waste and dry waste separately and has directed its service agencies not to collect mixed waste from waste generators.  Littering is being tackled through IEC component under Swachh Bharat Mission followed by penal action.	100%	65%	More enforcement and levy of penalties along with IEC will help reach target by June 2021	SWM Cell officials and Zonal Joint Commissioners / CEs of all 8 zones of BBMP

		under these rules				
2	4(2)	No waste generator shall throw, burn or bury the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.	Strict directions have been issued to all zonal Joint commissioners and their swm officials to ensure no waste is burn or buried. Fines for burning are being levied..	100%	10%	More enforcement and levy of penalties along with IEC will help reach target by June 2021
3	4(3)& 15 (f)	All waste generators shall pay such user fee for solid waste management, as specified in the bye-laws of the local bodies	SWM cess is being collected along with property tax. Collection of SWM User fee will be implemented as per SWM Bye Laws 2020 from next calendar year latest soon after the Covid19 pandemic is stablised.	100%	100%	Users fees will be levied starting from June 2021
4	4 (8)	All Bulk waste generator (resident welfare and market associations, gated communities and institutions with more than 5,000 Sq.m area & all hotels and restaurants) shall process and disposed off the bio-degradable waste through composting or bio-methanation within the premises as far as possible	Circulars have been issued to ensure on-site composting is being adopted by all the bulk waste generators and to levy penalty as per the bye laws for Violators of this circular.  This needs to be enforced now through Public Health and SWM Depts in BBMP.	100%	70%	BBMP had made this mandatory through its SWM Byelaws and ensure compliance by March-2021 but due to Covid 19 2 <sup>nd</sup> wave, will be complied by June 2021

5	12(a)	Facilitate identification and allocation of suitable land for Processing & Disposal of MSW	Lands identified for MSW processing facility	100%	50%	Additional sites for processing unsegregated and segregated waste have been identified. Land Allocation process is underway by June 2021	
6	12(b)	Review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with UDD	Zonal Joint commissioners are conducting regular review of implementation of SWM Rules-2016 in there zones.	100%	15%	Almost all JCs are reviewing. Special Commissioner SWM is also reviewing on a 15 day basis.	
7	15(a)	Prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification (DPR under SBM	BBMP is awaiting State's notification of SWM Policy .	100%	100%	Unless State Policy is notified, the solid waste management plan cannot	

		can be considered as Action Plan)				be prepared.
8	15(b)	Arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises	Door to door collection of waste is done in all the wards including slums and informal settlements, commercial, institutional and other non-residential premises.  Wet, Sanitary and Dry Waste are collected separately.	100%	10%	With new tenders for collection and transportation in place, 100% coverage will be achieved by -June 2021
9	15(c)	Establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste pickers and waste collectors to facilitate their participation in solid waste management	Waste Pickers are identified in all wards. Integration of them is under process.  Some of them are integrated into Maintenance and operation of Dry Waste Collection Centres.  Govt has mandated that those running Dry Waste Collection Centres (ie Waste pickers & Women SHGs) shall also go in for collection of Dry Waste.	100%	30%	By June - 2021
10	15(d) & 15 (h)	Facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management.  setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable	Self Help Groups were utilized for collection & transportation of Household waste generated in Residential area.  For material recovery, facilities are being established at 10 different locations.	100%	70%	June-2021

		materials				
11	15(e)	Frame bye-laws incorporating the provisions of these rules within one year from the date of notification of these rules	SWM Bye laws have been framed and BBMP council has approved. SWM Byelaws of BBMP stands Notified.	100%	100%	Complied
12	15(i)	Establish waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal	Directions have been issued. However, a facility at Dabaspete is setup to process the same. In BBMP, Tenders are invited to collect and transport to disposal location scientifically.	100%	100%	June 2021
13	15(k)	Direct street sweepers not to burn tree leaves collected from street sweeping	Monitoring is being done at ward level, by strict supervision of Block Supervisors and also by JHIs and Marshals who can fine.	100%	40%	June-2021
14	15(l)	Provide training on solid waste management workers & waste pickers.	Regular trainings are being conducted by reputed agencies like EMPRI and CSD who impart good training with regular followup.	100%	30%	June-2021
15	15(m)	Collect waste from vegetable, fruit, flower, meat, poultry and fish market on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations in the markets	Decentralised processing plants, like Bio-methanisation plants, Lane composting, Tender Coconut processing plant would be set up. Tenders are afloat and are under process. As soon as the agency is fixed, plants will be established.	100%	65%	July-2021
16	15(p)	Collect horticulture, parks and garden waste separately and process in the parks and gardens, as far as possible	Directions have been issued to all Horticulture Superintendents and also to process the same in decentralized method, by digging pits for leaf litter, lane composting, Shredder and chopper machines.	100%	30%	July-2021

17	15(t)	involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing	Regular awareness is being carried out for promotion of home composting. Non-government organizations, college students are also being involved for awareness on home composting. IN HSR LAYOUT, KALIKA KENDRA is established by the community participation, where in all methods of composting units are established.	100%	50%	July-2021
18	15(v)	Construction, operation and maintenance of solid waste processing & disposal facilities	Solid waste processing & disposal facility is constructed, operated & maintained at 8 locations processing about 1000 MTD	100%	20%	July-2021
19	15(x)	Make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget	Sufficient funds are being allocated for SWM activities under Nagarothhana, Nava Nagarothhana, Shubra Bangaluru grants by GOK.	100%	-	Complied
20	15(za)	Prepare and submit annual report in Form IV on or before the 30th April of the succeeding year	Annual report for SWM, PWM and C &D Waste are submitted up to 2020-21 in prescribed formats to KSPCB.	100%	-	Complied
21	15(zf)	frame bye-laws and prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules	Bye laws have been framed and BBMP council has approved. Further final notification of SWM Byelaws is published in news papers	100%	100%	Complied
22	15(zg)	create public awareness through information, education and communication campaign and educate the waste generators	IEC programs are conducted regularly to educate the public by Link Workers at ward block levels , door to door campaign. Also ward Marshals go on rounds in patrol vehicle provided by BBMP at the time of door to door collection and educate public intensively	100%	50%	June-2021

23	15 (zj)	investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio mining and bio-remediation/ scientifically capped	A Committee is being constituted by Government to guide on eradication of legacy waste. Also all open dump sites have been identified and tenders are being invited for appointing agency for Bio remediation at Bagalur and Bio mining at Mandur.	100%	75%	Dec-2021
24	19, 20 & 21	Criteria for Duties regarding setting-up solid waste processing and treatment facility Criteria and actions to be taken for solid waste management in hilly areas.- Criteria for waste to energy process	Action is taken to ensure that the CPCB guidelines & CPHEEO manuals are referred for fixing all the criteria. Waste to Energy plants are proposed to be established at 5 locations, on PPP model, and Tender basis. Agreement has been entered into with KPCL for establishment of Waste to Energy plants and civil works has started.	100%	50%	Dec-2022
25	22	Time frame for implementation	The wards are directed to ensure all obligations under SWM Rules-2016 are implemented adhering to timelines.	100%	-	Dec-2022
26	23	State Level Advisory Body (SLAB)	Meeting are being held frequently as and when required under ACS UDD chairmanship.	100%	-	Complied
27	24	Annual report.	Submitted	100%	-	Complied

Annexure.....in the Affidavit  
 Mr./Mrs.....sworn to before me   
 on this.....  
  
 NOTARY PUBLIC BANGALORE

Sl. No.	Proposed activity as per SWM Rules 2016	Time frame for achieving
1	Identification of suitable sites for setting up solid waste processing facilities	Complied
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 stand-alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more .	NA
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	Complied
4	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source ,	1 year.
5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	3 months.
6	Ensure separate storage, collection and transportation of construction and demolition wastes	6 months.
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	1 year.
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 population.	NA
9	Setting up common or stand-alone 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	1 year.
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	NA
11	Bio-remediation or capping of old and abandoned dump sites	1 year.

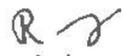
Annexure.....R-2.....in the Affidavit  
 Mr./Mrs.....swore to before me  
 on this.....

NOTARY PUBLIC BANGALORE

Special Commissioner (S. W. M.)  
 Bruhath Bengaluru Mahanagara Palike

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
23	<b>Rule 15(zj)</b> Investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of biomining and bio-remediation/scientificallly capped	Out of <b>6000</b> GPs, in 4343GPs SWM Plans are approved and in <b>1440</b> GPs units SWM units are operationaland all old open dumpsites potential of bio-mining and bio-remediation are being explored	100%	76%	March - 2022	
24	<b>Rule 19</b> Criteria for Duties regarding setting-up solid waste processing and treatment facility <b>Rule 20</b> Criteria and actions to be taken for solid waste management in hilly areas.- <b>Rule 21</b> Criteria for waste to energy process	Criteria for Duties regarding setting-up solid waste processing and treatment facility is covered under The Karnataka State Rural Sanitation and Waste Management Policy, Strategy & Model Bye laws on SWM and LWM was approved by Cabinet and GO was issued for Policy and Strategy on 12 <sup>th</sup> March, 2020 and Byelaws have been published in Gazetteer on 28 <sup>th</sup> May -2020.	100%	Nil	Complied	Commisioner RDW&SD
25	<b>Rule 22</b> Time frame for implementation	The time frame for implementation of SWM units are covered under The Karnataka State Rural Sanitation and Waste Management Policy, Strategy & Model Bye laws on SWM and LWM was approved by Cabinet and GO was issued for Policy and Strategy on 12 <sup>th</sup> March, 2020 and Byelaws have been published in Gazetteer on 28 <sup>th</sup> May -2020	100%	Nil	Complied	Commisioner RDW&SD
26	<b>Rule 23</b> State Level Advisory Body (SLAB)	SLAB is constituted on 03-06-2016, regular	100%	Nil	Complied	

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
		meetings are being conducted.				
27	<b>Rule 24</b> Annual report.	Necessary action will be taken to submit Annual reports as applicable to Gram Panchayats	100%	Nil	Complied	Executive Officer at Taluka Panchayat
28	<b>Rule 11</b> <b>Duties of the Secretary-in-charge, Urban Development in the States and Union territories.-</b>	Monitoring through SLAB is taking place on periodic basis.	100%	Nil	Complied	

  
 Commissioner  
 Rural Drinking Water and  
 Sanitation Department

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
		operational				
20	<b>Rule 15(za)</b> Prepare and submit annual report in Form IV on or before the 30th April of the succeeding year	Necessary action will be taken to submit Annual reports as applicable to Gram Panchayats to KSPCB	100%	Nil	Complied	Executive Officer at Taluka Panchayat
21	<b>Rule 15(zf)</b> Frame bye-laws and prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules	The Karnataka State Rural Sanitation and Waste Management Policy, Strategy & Model Bye laws on SWM and LWM was approved by Cabinet and GO was issued for Policy and Strategy on 12 <sup>th</sup> March, 2020 and Byelaws have been published in Gazetteer on 28 <sup>th</sup> May -2020	100%	Nil	Complied	Commissioner RDW&SD
22	<b>Rule 15(zg)</b> Create public awareness through information, education and communication campaign and educate the waste generators	IEC activities such as Kalajatha, Audio play for collection mechanism, preparation of brochures, post cards, street plays, dramas and hoardings are being taken up intensively at GP level: Social outreach by twitter, Instagram, Facebook, WhatsApp. Preparation of brochures on solid resource management and Video documentation on solid resource management.	100%	Nil	Complied	Executive Officer at Taluka Panchayat

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	<p>transportation cost and environmental impacts such as</p> <ol style="list-style-type: none"> <li>bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio-stabilization of biodegradable wastes</li> <li>waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns</li> </ol>	Out of 6000 GPs, till date 4343 GPs Solid Waste Management plans have been approved				
19	<p><b>Rule15(x)</b> Make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget</p>	Based on village population, funds are being released for SWM activities under SBM-G and additional Capex is met out in convergence with other schemes i.e MGNREGA, 15th Finance, MPLAD & MLALAD schemes. At present operation and maintenance of solid waste management services are covered through 15th Finance, GP / CSR funds. Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are	100%	27%	March - 2022	Executive Officer at Taluka Panchayat

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	over to waste collectors.	approved and in 1440 GPs SWM units are operational				
14	<b>Rule15(l)</b> Provide training on solid waste management to waste pickers/waste collectors	In all GPs, Various Training activities are taken up to address this issue.	Nil	Nil	Complied	Executive Officer at Taluka Panchayat
15	<b>Rule 15(m)</b> Collect waste from vegetable, fruit, flower, meat, poultry and fish markets on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations in the markets	Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are operational and 860 GPs are following day to day collection of waste from all the commercial shops and markets and the same is being treated by adopting different composting methods	100%	86%	March - 2022	Executive Officer at Taluka Panchayat
17	<b>Rule 15(t)</b> Involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing	Communities are being involved in household pipe composting, pot composting and livestock feeding Out of 6001GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are operational and Communities are involved for waste management	100%	76%	March - 2022	Executive Officer at Taluka Panchayat
18	<b>Rule15(v)</b> Construction, operation and maintenance of solid waste processing facilities and associated infrastructure with preference to be given to decentralized processing to minimize	The Department has already accorded in principle approval to take up Solid Waste Management activities in all Gram Panchayaths in Karnataka vide office GO No: RDWS&SD/126/SBM-G/Proj.M /2019 dated 14-10-2019as per SWM Rules – 2016.	100%	27%	March - 2022	Executive Officer at Taluka Panchayat

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	thereafter encourage integration in solidwaste management. <b>Rule15 (h)</b> Setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials	remaining districts also Self Help Groups are being formed.  Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in1440 GPs units SWM units are operational, in 860 GPs Dry waste collection centres have been set up.				Panchayat
11	<b>Rule15(e)</b> Frame bye-laws incorporating the provisions of these Rules within one year from the date of notification of these Rules	The Karnataka State Rural Sanitation and Waste Management Policy, Strategy & Model Bye laws on SWM and LWM was approved by Cabinet and GO was issued for Policy and Strategy on 12th March, 2020 and Byelaws have been published in Gazetteer on 28th May -2020	100%	0%	Complied	Commisioner RDW&SD
12	<b>Rule15(i)</b> Establish waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal	Dry waste collection centers in GPs are being provided with separate compartments for deposition of domestic hazardous waste in GPs. Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units waste deposition centers established for domestic hazardous waste.	100%	76%	March - 2022	Executive Officer at Taluka Panchaya:
13	<b>Rule 15(k)</b> Direct street sweepers not to burn tree leaves collected from street sweeping and store them separately to be handed	Fallen tree leaves are not being burnt and handed over to authorized waste collecting agencies. GO is issued in this regard. Out of 6000 GPs, in 4343 GPs SWM Plans are	100%	76%	March - 2022	Executive Officer at Taluka Panchaya:

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	as per State policy and strategy on solid waste management within six months from the date of notification of the State policy	Waste Management plans have been approved.				Taluka Panchayat
8	<b>Rule15(b)</b> Arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises	Out of <b>6000</b> GPs, in 4343 GPs SWM Plans are approved and in1440 GPs units SWM units are operational and 100% door to door waste collection is being carried out in <b>860</b> GPs	100%	86%	March - 2022	Executive Officer at Taluka Panchayat
9	<b>Rule15(c)</b> Establish a system to recognise organizations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorized waste-pickers and waste collectors to facilitate their participation in solid waste management	Udupi, Dakshina Kannada, Koppal, Bengaluru Urban and Kodagu districts have taken the lead in facilitating the network of waste pickers in their GPs for proper management of solid waste. The same will be escalated further in other districts also. State is in the process of integrating waste collectors / waste pickers for solid waste management in rural areas. Out of <b>6000</b> GPs, in 4343 GPs SWM Plans are approved and in <b>1440</b> GPs units SWM units are operational	100%	76%	March - 2022	Executive Officer at Taluka Panchayat
10	<b>Rule15(d)</b> Facilitate formation of Self Help Groups, provide identity cards and	Self Help Groups have been formed in Udupi and Dakshina Kannada districts for the proper integration of solid waste management and in	100%	76%	March - 2022	Executive Officer at Taluka

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	Communities and Institutions with more than 5,000 sqm area & Hotels and Restaurants) shall process and dispose off the bio-degradable waste through composting or bio-methanation within the premises	processing and disposing the biodegradable waste through Composting or Bio-methanation within the premises wherever feasible in these GPs.				Panchayat
	<b>Compliance w.r.t. duties of Deputy Commissioner(DC)</b>					
5	<b>Rule 12(a)</b> Facilitate identification and allocation of suitable land for processing & disposal	Out of <b>6000 GPs, 5404</b> GPs have suitable land for processing & disposal of solid waste. Remaining GPs are in the process of procuring required lands. Chief Executive Officers of Zilla Panchayats are identifying suitable land in the GP limits.	100%	10%	March-2022	Executive Officer at Taluka Panchayat
6	<b>Rule 12(b)</b> Review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with Commissioner (Rural Water Supply and Sanitation Department)	CEOs of ZPs have been reviewing the performance of GPs in respect of compliance of the provisions of Rule 12 (b)	100%	Nil	Complied	Executive Officer at Taluka Panchayat
	<b>Compliance w.r.t duties of Gram Panchayats(GPs)</b>					
7	<b>Rule 15(a)</b> Prepare a solid waste management plan	Out of <b>6000 GPs, till date 4343</b> GPs Solid	100%	27%	March - 2022	Executive Officer at

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
		take up Solid Waste Management activities in all Gram Panchayaths in Karnataka vide GO No: RDWS&SD/03/SBM-G PH-II / SWM / 2021dated 15-01-2021 as per SWM Rules – 2016.				
2	<b>Rule 4(2)</b> No throwing/burning/burying the solid waste generated on streets, open public spaces outside the premises or in the drain or water bodies.	Throwing of waste on the roads and public places will be stopped and action will be taken to stop the burning or burying of solid waste The Department has issued GO regarding not to burn / dumpwaste openly. Trainings and Workshops are being conducted regularly to Executive Officers of Taluk Panchayats(TPs), Panchayat Development Officers of GPs and Panchayat Raj Representatives on prohibition of burning of waste and open dumping. Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are operational	100%	76%	March 2022	Executive Officer at Taluka Panchayat
3	<b>Rule 4(3)&amp; Rule 15(f)</b> Payment of user fee for solid waste management, as specified in the bye-laws of GPs	Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are operational and out of 1440 GPs 860 GPs are collecting user fee for solid waste collection and management	100%	85%	March 2022	Executive Officer at Taluka Panchayat
4	<b>Rule 4 (8)</b> Bulk Waste Generators (Resident Welfare and Market Associations, Gated	Out of 6000 GPs, in 4343 GPs SWM Plans are approved and in 1440 GPs units SWM units are operational. Bulk Waste Generators are	100%	76%	March 2022	Executive Officer at Taluka

**Status of compliance to the Solid Waste Management Rules, 2016**  
**(Order of the Hon'ble National Green Tribunal in OA No.606/2018)**

Sl. No	List of provisions of SWM Rules 2016	Status of compliance	Desirable level of Compliance in terms of Status	Gap Between current status and desired levels	Proposed timeline for total compliance	Name and designation of designated officer for ensuring compliance
1	2	3	4	5	6	
	<b>Compliance w.r.t. duties of Waste Generators</b>					
1	<p><b>Rule 4(a)</b> Segregate and store the waste generated in separate streams of namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins and handing over to authorized waste pickers/waste collectors as per the directions of Gram Panchayats(GPs)</p> <p><b>Rule 15 (g)</b> Not to litter, i.e throw or dispose of any waste such as paper, etc and to segregate the waste at source as well as handover the segregated waste to authorized waste pickers/waste collectors</p>	<p>Total GPs in the State -6000 No of SWM DPRs approved : 4343 GPs GPs practicing 100% source segregation: 860 GPs practicing partial source segregation: 580</p> <p>Littering will be stopped and segregation of waste will be ensured through various strategies under Information, Education and Communication(IEC) component under the guidelines of Swachh Bharat Mission(Gramin)</p> <p>The Department has already accorded in principle approval to take up Solid Waste Management activities in all Gram Panchayaths in Karnataka vide office GO No: RDWS&amp;SD/126/SBM-G/Proj.M/2019 dated 14-10-2019as per SWM Rules – 2016.</p> <p>The Department has accorded approval for the remaining 2545 GPs and funds of Rs. 74.01Crores have been released to districts to</p>	100%	27%	March 2022	Executive Officer at Taluka Panchayat

**Rural Drinking Water and Sanitation Department**  
**Proposed activity as per SWM Rules 2016 with time lines for acheiving**

Sl.No.	Proposed activity as per SWM Rules 2016	Time frame for <i>achieving</i>
1	Identification of suitable sites for setting up solid waste processing facilities	Out of <b>6000</b> GPs 4343 GPs have identified suitable land. Remaining will be complied by <b>March-2022</b>
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 stand-alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	NA
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	<b>March-2022</b>
4	Enforcing waste generators to practice segregation of biodegradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source,	Out of <b>6000</b> GPs <b>860</b> GPs are practicing source segregation. Rest will be complied by <b>March-2022</b> .
5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	Out of <b>6000</b> GPs <b>1440</b> GPs are processing waste. Rest will be complied by <b>March-2022</b> .
6	Ensure separate storage, collection, and transportation of construction and demolition wastes	NA
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	NA
8	Setting up solid waste processing facilities by local bodies and census towns below 100000 population.	<b>March-2022</b>

Sl.No.	Proposed activity as per SWM Rules 2016	Time frame for achieving
9	Setting up common or stand-alone 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	NA
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	NA
11	Bio-remediation or capping of old and abandoned dump sites	NA

R J  
COMMISSIONER

Rural Drinking Water and Sanitation Dept.

Annexure.....in the Affidavit

Mr/Mrs.....sworn to before me

on .....

✓  
PUBLIC NOTARY

## Status of Implementation of SWM Rules, 2016

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
1	Enforce these rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department	<p>Review meetings are held with Urban Development Department and Director of Municipal Administration, Government of Karnataka regarding implementation of MSW Rules, 2016. Review meeting held on 01.07.2019 and following directions were issued.</p> <ol style="list-style-type: none"> <li>1. Department of Urban Development and Department of Rural Development and Panchayathraj shall take immediate action to publish the state policy on Solid Waste Management as required under the Rules.</li> <li>2. The Department of Municipal Administration and BBMP shall submit the Annual report to the State Board including the best practices followed by local bodies within 7 days.</li> <li>3. The time limit stipulated for management of Solid Waste under the Rules are not complied by the local bodies. Hence, Director of Municipal Administration and BBMP shall initiate action on war footing.</li> <li>4. All the Solid Waste Transportation vehicles shall be fitted with GPRS.</li> <li>5. Efforts should be made for complete segregation of waste at the source, not to mix segregated waste with the un-segregated waste. And also the facilities available for processing of waste shall be completely utilized.</li> </ol>	100%	50%	30.06.2021	Sri C. Ramesh, Environmental Officer, Waste Management Cell

2	Monitor environmental standards and adherence to conditions as specified under the Schedule I and Schedule II for waste processing and disposal sites.	Regular inspections of MSW sites are carried out by Regional Officers and monitoring is carried out wherever required.	100%	50%	30.06.2021	
3	Examine the proposal for authorisation and make such inquiries as deemed fit, after the receipt of the application for the same in Form I from the local body or any other agency authorised by the local body;	After the receipt of application, the facilities are inspected by the Regional officers.	100%	0%	Complied	
4	While examining the proposal for authorisation, the requirement of consents under respective enactments and views of other agencies like the State Urban Development Department, the Town and Country Planning Department, District Planning Committee or Metropolitan Area Planning Committee, as may be applicable, Airport or Airbase Authority, the Ground Water Board, Railways, power distribution companies, highway department and other relevant agencies shall be taken into consideration and they shall be given four weeks time to give their views, if any	Board has formed a Committee for disposal of the authorization applications. The Committee consisting of all the agencies indicated under this Rule. Concurrence of the Committee members will be taken for disposal of application. 19 No. of authorization have been issued under SWM Rules for processing facility in Karnataka from April 2019 and December 2019.	100%	0%	Complied	

5	Issue authorisation within a period of sixty days in Form II to the local body or an operator of a facility or any other agency authorised by local body stipulating compliance criteria and environmental standards as specified in Schedules I and II including other conditions, as may be necessary;	Authorization is issued within the time frame and stipulating compliance criteria and environmental standards as specified in Schedules I and II including other conditions, as may be necessary	100%	Nil	Complied	
6	Synchronise the validity of said authorisation with the validity of the consents	the validity of the consent and authorisation are synchronised	100%	Nil	Complied	
7	Suspend or cancel the authorization issued under clause (a) any time, if the local body or operator of the facility fails to operate the facility as per the conditions stipulated; provided that no such authorization shall be suspended or cancelled without giving notice to the local body or operator, as the case may be;	Authorization is cancelled / suspended after following due procedure as per rules.	100%	Nil	Complied	
8	On receipt of application for renewal, renew the authorisation for next five years, after examining every application on merit and subject to the condition that the operator of the facility has fulfilled all the provisions of the rules, standards or conditions specified in the authorisation, consents or environment clearance.	Board has formed a committee for disposal of the authorization applications. The committee consisting of all the agencies indicated under this Rule 16(1)(d). Based on the deliberations and recommendations of the committee , action is initiated to dispose the authorization applications	100%	75%	30.06.2021	

9	The State Pollution Control Board or Pollution Control Committee shall, after giving reasonable opportunity of being heard to the applicant and for reasons thereof to be recorded in writing, refuse to grant or renew an authorisation	Procedure is being followed.	100%	Nil	Complied	
10	In case of new technologies, where no standards have been prescribed by the Central Pollution Control Board, State Pollution Control Board or Pollution Control Committee, as the case may be, shall approach Central Pollution Control Board for getting standards specified.	whenever the local body approaches the Board with new technologies for Management of Solid Waste, CPCB will be approached for getting standards specified.	100%	Nil	Complied	
11	The State Pollution Control Board or the Pollution Control Committee, as the case may be, shall monitor the compliance of the standards as prescribed or laid down and treatment technology as approved and the conditions stipulated in the authorisation and the standards specified in Schedules I and II under these rules as and when deemed appropriate but not less than once in a year.	Regional Officers of KSPCB regularly inspect and monitor the compliance standards of the MSW sites as per Schedules I and II.	100%	Nil	Complied	

12	The State Pollution Control Board or the Pollution Control Committee may give directions to local bodies for safe handling and disposal of domestic hazardous waste deposited by the waste generators at hazardous waste deposition facilities.	KSPCB had issued directions under section 5 of the Environment (Protection) Act, 1986 on 14-12-2017 to Director of Municipal Administration to establish waste depositing centres for domestic hazardous waste and to ensure transportation to the Hazardous waste disposal facility.	100%	Nil	Complied	
13	The State Pollution Control Board or the Pollution Control Committee shall regulate Inter-State movement of waste.	There is issues regarding illegal interstate transportation of waste from Kerala State. The issue has taken up with CPCB and also Kerala State Pollution Control Board. In addition FIR has been registered in the local police station against the transporter of waste. Now, the illegal transportaion has been closely monitor and there are no fresh incidents of illegal interstate transportation of waste from Kerala State.	100%	Nil	Complied	
14	Each State Pollution Control Board or Pollution Control Committee as the case may be, shall prepare and submit the consolidated annual report to the Central Pollution Control Board and Ministry of Urban Development on the implementation of these rules and action taken against non -complying local body by the 31stday of July of each year in Form-V.	After receipt of the annual report of each local bodies of the state from DMA and BBMP, the data is compiled and annual report is submitted by KSPCB to CPCB within the time frame. Annual report for the year 2018-1 is submitted on 20-07-2019 to CPCB.	100%	Nil	Complied	

**Compliance to Bio-Medical Waste Management Rules 2016**

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
1	Why inventory on numbers of Healthcare Facilities is still incomplete in state/UT, as required under BMW Rules, 2016?	Inventory of HCFs is a continuous process & is completed and being updated as on date. Annual Report is prepared based on the inventorization details submitted by Regional Offices of the Board. While registering the HCFs under Karnataka Private Medical Establishment Act, 2007, the Health Department insists for valid authorization issued by KSPCB under BMW Rules, 2016. As on 31.03.2020, 36021 number of HCFs have been covered by the Board.	100%	25%	30.06.2021	Sri C. Ramesh, Environmental Officer, Waste Management Cell
2	What is the reason that inventory is still under process?	Every year new HCEs are being established in the State. Hence, inventory is a continuous process. However, the Regional Officers of the Board are instructed to update the list of HCEs with the District Health Officers.	100%	25%	30.06.2021	

3	As observed that non-bedded HCFs have not applied for authorization, why such HCFs are allowed to operate without authorisation under BMWM Rules, 2016?	Prior to 2016, clinics with less than 1000 patients per month were not required to obtain authorization. After 2016, the KSPCB has started covering all the HCFs and issuing authorization.	100%	25%	31.12.2020	
4	How many applications are still under process with State Boards for grant of authorisation?	126 as on 31.03.2020	100%	30%	30.06.2021	
5	In case of no Common Bio Medical Waste Treatment Facility in Arunachal Pradesh, Andaman & Nicobar, Goa, Lakshadweep, Mizoram, and Nagaland & Sikkim State/ UT for setting up CBMWTF?	Not Applicable				
6	Why still there is no proposal submitted by Arunachal Pradesh, Andaman Nicobar, Goa, Lakshadweep, Mizoram, and Nagaland & Sikkim State/UT for setting up CBMWTF?	Not Applicable				

7	Why Barcode system is not implemented in Andaman Nicobar, Arunachal Pradesh, Assam, J& K, Lakshadweep, Mizoram, Orrisa, Puducherry, Sikkim, Uttar Pradesh, West Bengal, Chandigarh, Delhi, Jhaerkhand, Madhya Pradesh, Maharastra, Rajasthan and Tamil Nadu, so far even when the deadline is over as per BMW Rules, 2016?	Not Applicable				
8	Whether State/ UT has constituted State Advisory Committee so as to review the implementation status?	Yes	100%	100%	100%	

9	What step have been taken by Advisory Committee so as ensure implementation of BMWM Rules, 2016?	The State Advisory Committee was formed in 04.08. 2016 and the last meeting was held on 10.04.2019. Later the Committee was amended on 14.10.2019. Understanding the inability of the Healthcare Facilities to make payment to the service of the CBMWTF, Rs. 73.86 Lakh was released and distributed to 42 Healthcare Facilities to clear the pending payments. Then separate Budget for BMWM was proposed in PIP-2020-21. Only the running cost was approved which is yet to be released. Similarly Proposal for formation of State Programme Management Unit & for implementation of BMW Rules 2016 is proposed to the State Government. OM has been issued nominating Nodal Officers in all Districts to review & monitor BMWM.	100%	75%	31.03.2021. The implementation of BMWM is mostly through ARS & UT Funds. Since there is no separate Team at the State Level (State Programme Management Unit) & District Level for implementation & Monitoring of BMW. Also there is no separate budget available for BMWM. Once the budget is released (proposal already submitted to GoK) compliance would be achieved.	Dr. Vivek Dorai- Deputy Director-BMWM/ Medical-2, Department of Health & Family Welfare, GoK.
10	How many HCFs other than hospitals, nursing homes etc. Such as veterinary hospitals, animal houses, Ayush hospitals have been monitored?	3078 Veterinary, 29 Animal Houses and 1708 numbers of Ayush hospitals have been covered by KSPCB. Letter has been addressed by KSPCB to the Department of Animal Husbandry to comply with BMW Rules, 2016.	100%	25%	30.06.2021	

11	What is the frequency for conducting training or capacity building programmes for State Board Officials and for staff of HCFs?	842 trainings were organised by CBMWTF operators for HCFs during 2018-19. All Technical Officers of the Board are well trained in BMW Rules, 2016.	100%	25%	30.06.2021	
12	What is the status of installation of Continuous Online Emission Monitoring System with CBMWTFs? What follow-up action has been taken by State Boards?	25 CBMWTFs have installed Continuous Online Emission Monitoring System	100%	0%	Complied	
13	How OCEMS data received by State Boards is being validated?	Manual stack monitoring will be undertaken and OCEMS data will be validated.	100%	50%	30.06.2021	
14	What is the status of compliance to BMWM Rules, 2016 by CBMWTFs? What action has been taken against defaulting facilities?	OCEMS have been installed in case of 25 CBMWTFs and connected to the CPCB server & 1 unit is yet to connect. Most of the CBMWTFs have adopted GPS system to track the movement of the vehicle transporting Biomedical waste. Board is carrying out third party audit of CBMWTF functioning through third party. Based on the findings action will be initiated against CBMWTF.	100%	10%	30.06.2021	

15	What is the frequency of monitoring of Healthcare Facilities for verification of compliance to BMW Rules?	CPCB has stipulated frequency for monitoring of Red, Orange & Green category organisation. Same is being followed for HCFs also. Due to shortage of staff, large category units are being inspected once in a year.	100%	75%	31.12.2021	
16	Compliance to guidelines issued by the CPCB in respect of scientific management and disposal of the COVID biomedical waste by the KSPCB.	The KSPCB has developed inhouse software application for accounting the generation of the COVID biomedical waste generated from HCEs, QCs and other facilities and same is being monitored by the Bio Medical Waste Team constituted by the Govt. of Karnataka. The Team is meeting every week to monitor the generation and disposal of the COVID Biomedical Waste about 673 Tons of COVID Biomedical Waste has been generated till end of the June, 2020 and same is collected and disposed scientifically in 26 nos. of CBMWTFs. Also CPCB tracking software in respect of COVID Biomedical Waste is also being put into used by many of the HCEs and CBMWTFs.	100%	75%	30.06.2021	Sri Natesh Environmental Officer, Waste Management Cell

## Implementation of C &amp; D Waste Management Rules, 2016 by KSPCB

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
1	Identification of Site for collection & processing facility	BBMP has proposed another facility with M/s Rock Crystals has proposed to establish 750 MTPD plant in BBMP land located in Kannur village, Bangalore and one more facility of capacity 20 TPD to be established by the Managalore City Corporation at Pachanady to process C&D waste. Sites for C& D wastes have been identified at Shivalli (50TPD) Hubli – Dharwad, at Vantamuri, Srinagar Belagavi, Mangalore, Mysore and Kalburgi.	100%(One C & D Facility in each District)	80	Action taken by KSPCB is enclosed as ANNEXURE. (Time line as given by UDD is December 2021)	Smt. Hemalatha K.R., Environmental Officer,
2	Commissioning & implementation of facility	M/s. Rock Crystals has established 1000 TPD C and D processing facility at Chikkajala, Bangalore	100%(One C & D Facility in each District)	96.7	31.12.2021 (as given by UDD)	
3	Formulation of policy by State Government	Draft policy is finalized by UDD, Govt. of Karnataka	100%	100%	Complied	The State has finalized the draft policy and same has been challenged in the Hon'ble High Court of Karnataka.

### **Implementation of C & D Waste Management Rules, 2016 by KSPCB.**

- (A) Board on 18.10.2016 had requested Secretary, Department of Ecology & Environment to convene a meeting of all concerned departments regarding implementation the C & D Waste Management Rules, 2016
- (B) Additional Chief Secretary Forest, Ecology & Environment has convened a meeting on 06.12.2016. The meeting was attended by Urban Development, P.W.D, B.B.M.P, Revenue, and RDPR. During the meeting following issues discussed;
1. Formulation of policy by State Government
  2. Identification of Site for collection & processing facility
  3. Commissioning & implementation of facility
  4. Monitoring by SPCB's
- (C) KSPCB has issued directions under Section (5) of the Environment (Protection) Act, 1986 read with Rule 4 & 6 of C & D Waste Management Rules, 2016 on 05.05.2017 to Lake Authority Development, BDA, BBMP and Karnataka Rural development department , PWD, CPWD, BMRCL regarding implementation of the provisions of the C & D Waste Management Rules, 2016
- (D) Directions under Section 5 of Environment (Protection) Act was issued on 10.05.2017 directing BBMP not to dump C & D & Solid Waste in the catchment area and also within Bellandur Lake.
- (E) Review meeting regarding implementation of the C & D Waste Management Rules, 2016 was held with BMRCL, BDA, Karnataka PWD, CPWD, KREDAI, DMA, N.H. (CPCB representative was also present) on 20.11.2017 proceedings communicated on 02.02.2018.
- (F) Letter addressed to Urban development Department on 24.2.2018 to prepare policy document as required under C & D Waste Management Rules.

#### C & D Facilities

**Existing facility** -M/s. Rock Crystals located at Chikkajala Bangalore of capacity 1000 TPD for which KSPCB has given authorization and it is operating.

**Proposed facility**

1. M/s. Rubbel Revival Pvt Ltd., has obtained Consent For Establishment from KSPCB on 28.05.2020 to establish 750 MTPD plant in BBMP land located at Kannur village, Bangalore to process C&D waste. Sites for C& D wastes have been identified at Shivalli (50TPD) Hubli - Dharwad, at Vantamuri, Srinagar Belagavi, Mangalore, Mysore and Kalburgi.
2. City Corporation, Mangalore have obtained CFE for establishment of the 20 TPD C&D Waste processing unit at Pachanady on 30.12.2020.

**Conditions stipulated in CFE**

While issuing CFE to Construction Project Condition regarding C & D Waste Management is being incorporated.

- (A) Annual Returns as required under the C & D Waste Management Rules, 2016.

###

**Format (D) for Compliance of Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016**

1. All the Chief Secretary of the all States/Uts have to provide compliance status report on implementation of recommendations made by Monitoring Committee in its interim report as well as final report to monitor of provisions of Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016 in compliance with Hon'ble Tribunals orders dated 12.04.2019 and 26.08.2019 in O.A. No. 804/2017 in the matter of Rajiv Narayan & Anr. Vs. Union of India & Ors. (copies of Hon'ble NGT orders enclosed), as per the following format;

Sl.No.	Directions of Hon'ble Tribunal in O.A. No.804/2017	Action plan along with time line for implementation of orders of Hon'ble Tribunal	Current Status of implementation	Gaps identified for implementing the directions of Hon'ble Tribunal	Details of state level committee constituted for the purpose of compliance of Howm rules, 2016
1	Vide orders dated 12.04.2019 Hon'ble NGT directed that "Having regard to the sensitiveness of the issue and impact of noncompliance on environment and public health, the above recommendations need to be fully implemented and monitored by the chief Secretaries at State Level.	The status of contaminated sites/probable contaminated sites is enclosed as <b>Annexure-I</b> . The remediation of the contaminated site in the premises of M/s Federal Mogul is under progress. For the Peenya Industrial Area, NGRI has conducted the study.	10%	90%	At present for supervision of hazardous waste management projects, a Steering Committee is constituted by the Govt. vide order No. FEE 146 ENV 2008, dt. 08.09.2014. The same Committee is being entrusted with the responsibility of supervision of action taken regarding the recommendations of the Monitoring Committee of CPCB and the directions of this Hon'ble Tribunal.
		<b>Inventorisation</b> of hazardous and other wastes	100%	100% ( prepared and submitted to CPCB for period ending 31.3.2019) On going process	Complied

		Grant and renewal of authorisation	100%	0% No gap	Complied
		Examining the applications for imports submitted by the importers and forwarding the same to Ministry of Environment, Forest and Climate Change	100%	0% No gap	Complied
		Uniform format for visits and inspections of HW handling facilities is necessary to ensure comprehensive inspections as per the provisions of the Rules.	100%	0% No gap	Complied
		The authorization document should clearly stipulate respective mode of management (such as common or captive incineration / secured landfilling or pre-processing or recycling or utilization or export or captive storage, as applicable) for each category of HW being generated.	100%	0% No gap	Complied
		SPCBs/PCCs shall conduct environmental audit including the site selection criteria, design and layout for the TSDFs in next one year. They can engage expert institutes for the purpose and seek CPCB's technical advice on the ToR of the study, if required.	100%	0% No gap	Complied
		All the Common SLF shall disclose the mandatory amount deposited in Escrow Account annually to SPCB/PCC, CPCB and display on their website. SPCB/PCC to take action in case of non-compliance	100%	0% No gap	Complied
		Capacity building of Officers ( All the technical officers have giving training in implementation of Rules)	100%	50%.All the Technical Staff will be specially trained in the field by 30.06.2021	30.06.2021

2	Vide orders dated 26.08.2019 Hon'ble NGT directed that All the Chief Secretaries of the States/Uts may be directed to submit biannually compliance report to CPCB by collecting information from the State Government/Departments like Labour/Industries/Environment and SPCBs/PCCs.		100%		Will be collected and submitted to CPCB.
3	Vide orders dated 26.08.2019 Hon'ble NGT has directed the Chief Secretaries of States to ensure effective and urgent implementation of the provisions of the rules as stipulated under Rule 5(2) of HOWM Rules, 2016 by the labour department.		100%		KSPCB has addressed letter to ACS and Principal Secretary, Department of Forest, Environment and Ecology, to ensure effective implementation of Rules on 20.06.2019. Letter has been addressed by KSPCB to Dept. of Labour.

\* Please provide, Name and designation of designated officers for ensuring compliance to provisions of Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016.

**Format (E) for seeking information w.r.t. Compliance to E-Waste Rules.**

In the present OA 512/2018 (Shailesh Singh Vs. State of Uttar Pradesh) filed before Hon'ble NGT, Principal Bench, N-Delhi the issue under consideration is management of e-Waste consistent with the E-waste (Management) Rules, 2016. The grievance in this application is against unauthorized recycling/collection/dismantling units, burning and selling of e-waste and unscientific disposal of e-waste in violation of the Rules causing contamination of ground water, air pollution and soil acidification.

In the compliance with the directions of the Hon'ble NGT, CPCB prepared an action plan for enforcement of E-Waste(M) Rules, 2016. The Stakeholders responsible for implementation of the said action plan included, CPCB, SPCBs/PCCs, Custom department, Ministry of commerce, Ministry of electronics \* telecommunication & District Administration of all the States. CPCB has also written to the PS to Chief Secretaries for the compliance of the action plan and requested for submission of Action Taken Report (ATR). Only few State Governments (District Administration) have responded so far.

CPCB may again write to all the Chief Secretaries seeking information w.r.t to compliance of E-Waste Rules in their respective States. The format for seeking information is as below:

Sl.No.	Challenges Activities	Stake holder responsible for implementation	Action	Current Status	Desirable level of compliance in terms of statues	Gap between current status & desired level	Proposal for attending the gap with timelines	Name, designation, contact number, of designated officer for ensuring compliance to the provisions under statue
a.	Checking of informal trading, dismantling and recycling of waste	SPCBs / PCCs/ District Administration	SPCBs/Pccs n coordination with District Administration has to carry out quarterly drive for checking of this activity.	There are 146 Nos of E-waste Dismantling, recycling and refurbishing units in the Karnataka, of which 87 units are in operation, 26 units have been closed and 26 units are Yet to Commission and 08 units are not working.	100%	75%	30.06.2021	Sri Natesh Environmental Officer, Waste Management Cell
b.	Facilitate collection and disposal of e-waste	SPCBs / PCCs/ District Administration/CPCB	State Government to formulate mechanism for collection and for incentivizing setting up of recycling facilities.	State Government to formulate mechanism for many informal sectors, now converted to formal section. As per the E-waste Management Rules only Producer, PRO's, Processors of E-waste can open collection centers. In karnataka there are 66 Nos of collection center opened ( based on the information given by CPCB). Since Karnataka is having adequate number of E-waste processing units, there is no necessity of giving incentives to recycling units.	100%	0%	Complied	Sri Natesh Environmental Officer, Waste Management Cell

c.	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.		100%	100%	30.06.2021	Sri Venkateshan, Special Director
d.	Capacity building at district/State/CPCB level	SPCBs / PCCs/ District Administration/CPCB	Special workshops to educate functionaries in Government / NGOs be run over one year	The KSPCB will request the State Government on the matter	100%	Few Awareness programs have been held	30.06.2021	Sri Natesh Environmental Officer, Waste Management Cell
e.	IEC plan be firmed up and executed	SPCBs / PCCs/ District Administration/CPCB	State Government to firm up IEC plan for educating public at large about the system of collection, incentive structure and facilities for recycling. Time frame - Three (3) months. The IEC plan to be executed over on year.	The KSPCB will request the State Government on the matter.	100%	100%	30.06.2021	SEO, Awareness Cell, KSPCB
f.	Strengthen system of enforcement	SPCBs/PCCs/ District Administration CPCB	quarterly review of violation and enforcement actions at City/District/State level and quarterly reports to be filed with CPCB.	District level Committees to monitor OA No. 606 will be asked to monitor implementation. However, KSPCB is regularly monitoring	100%	0%	Complied	

## Status of CETPs/ ETPs including performance

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
	Status of CETPs/ ETPs including performance	In Order to monitor any illegal discharges from the CETPs following are the action plan				Sri Natesh Environmental Officer, Waste Management Cell
		1. GPS enabled vehicles are required to be used for transportation of effluents from the industry to CETP	100%	0% ( No gap)	Complied	
		2. Only Board authorised vehicles shall be used for transportation of effluents from the industry to CETP	100%	0% ( No gap)	Complied	
		3. Uploading of authorized vehicles to the Board website.	100%	0% ( No gap)	Complied	
		4. Online generation of manifest system	100%	50% ( Soft ware ready , trials conducted )	30.06.2021	
		5. GPS enabled Vehicle tracking system	100%	100%	Complied	
		6. Colour coding for transportation vehicles	100%	100%	30.06.2021	

	<p>7. Establishment of Common Effluent Treatment Plant at Urban Eco Park, Peenya of Capacity 200 KLD</p> <p>The establishment of CETP at Peenya will cater the needs of Peenya and surrounding areas most of the areas are coming under the catchment of V-Valley also. This will reduce the transportation distance.</p> <p>The State Government has sanctioned Rs. 10 Crores for establishment of CETP</p>	100%	<b>100% ( Tender called and to be finalised)</b>	30.06.2021	
	Fixing of inlet standards to CETP	100%	0%	Complied	
	Display of Inlet standards in the Board website	100%	0%	Complied	

Format (J) for Noise Pollution in Respect of Bangalore Metropolitan City						
Sl.No	CONTENT	CURRENT STATUS	DESIRABLE in %	GAP in %	TIME LINE	Name and designation of the Designated Officer for ensuring compliance
1	No. of stations for ambient Noise Monitoring	10	100%	0%	Complied	Sri T. Mahesh, Chief Environmental Officer
2	No. of Stations in Industrial Zone	2	100%	0%	Complied	
3	No. of Stations in Commercial Zone	3	100%	0%	Complied	
4	No. of Stations in Residential Zone	3	100%	0%	Complied	
5	No. of Stations in Silence Zone	2	100%	0%	Complied	
6	Compliance of Ambient Standards (No. of Stations)	Status of online Ambient Noise monitoring results of 10 stations for the Year 2019-20 is enclosed as <b>Annexure-I</b>				
	Industrial Zone		100	0%	Complied	
	Commercial Zone		100	8.0%	31.12.2022	
	Residential Zone		100	18.2%	31.12.2022	
	Silence Zone		100	25.3%	31.12.2022	
7	Identification of Hot Spots	Project is Under progress. (This project for Benaglauru city is entrusted to CSIR-NEERI by CPCB, Delhi).	100	100%		To be identified by CPCB
8	Designated Authorities defined as per Noise Rules (Y/N) (Details to be provided)	Yes. The Technical Officers of the KSPCB not below the rank of Deputy Environmental Officer are delegated with powers for enforcement. (O.M No. KSPCB/246/CC/2016/2009/5801, dated:3.2.2020).	100	0%	Complied	
9	Has Methodology been prepared for granting permission for installation of Public Address System? (Y/N) (Details to be provide)	Local Bodies and Police are granting permission for installation of public address system.	100	0%	Complied	

10	Has Methodology been prepared for redressal of complaint on noise pollution? (Y/N) (Details to be provide)	For redressal of complaint on Noise Pollution methodology present. (Flow chart has been prepared and enclosed as <b>Annexure-II</b> ). The Web based software has been developed and dedicated short code help line No. 10741 is allotted by Ministry of Communication and Information Technology, Department of telecommunications.	100	0%	Complied	
11	No. of Police Stations equipped with sound level meter	108 Police stations ( Law & Order) will be provided 108 Noise/ Sound level meters by KSPCB as per Govt. of Karnataka order). Procurement of Noise level meters along with caliberators and printers through E-tender. Issue of supply order is under progress.	100	0%	Complied	
12	No. of Police Stations having officers trained as per Noise Pollution Rules by SPCBs/PCs.	The KSPCB has conducted training programme for Police personnel on 6.11.2019.	100	0%	Complied	
13	Has Protocol been developed for taking appropriate action against the defaulters?	Protocol is being developed and will be submitted.	100	100%	30.06.2021	
14	No. of cities in which Noise Mapping has been done (if applicable)	Under progress. Only one city i.e. Bengaluru requires noise mapping. This project for Bengaluru city is entrusted to CSIR-NEERI, Nagpur by CPCB, Delhi.	100	100%	Complied	

Annexure.....R-4.....in the Affidavit  
 Mr./Mrs.....sworn to before me  
 on this..... day of .....

  
 NOTARY PUBLIC BANGALORE

## Compliance to Status of STPs &amp; re-use of treated water – 05-05-2021

Sl. No	NGT Order in OA 606 dated:12.09.2019 & 07.01.2020	Implementation status				
1	2	3	4			
<b>Compliance to duties of waste generators</b>						
		Current Status (Compliance as on till date)	Desirable Level of Compliance in terms of statutes	Gap Between current status and desired levels	Proposal of attending the gap with time lines	Name and designation of designated officer for ensuring compliance to provisions under statute (Commissioner/ Director) with Mobile No.
1	Status of (a) STPs & (As on 05-05-2021)	(a) BWSSB is having STPs with a total capacity of <b>1432.50 MLD.</b>  Presently, 03 STPs with total capacity of 161 MLD are under construction at different locations of the city making the total treatment capacity 1593.5 by 2021	<b>100%</b>	<b>0.52%</b>	30.09.2021	
	b) Re-use of treated water (As on 05-05-2021)	(b) 914.78 MLD of sewage is being treated out of which <b>561.68 MLD</b> of Treated water from different STP/TTPs is being utilised for various purposes like rejuvenating/recharging of Lakes Gardening, Industrial applications,	<b>100%</b>	<b>61.40%</b>	149.10 MLD (16.30%) gap is expected to be achieved by end of December 2022	

		<p>construction purposes etc. Detailed statement is enclosed as <b>Annexure-1</b> At present 561.68 MLD is being utilised. Balance treated quantity will be taken Kaveri Neeravari Nigama Ltd (KNNL)-120 MLD to Ramanagara District Lakes, Minor Irrigation Department-90 MLD to Kolar District, KPCL Yelahanka plant – 15 MLD, KIADB-40MLD to Narasapura. Also KPCL, Bidadi are requesting for 1 MLD from V.Valley To recharge/tap up the nearby lakes in the city.</p>			<p>204 MLD (21.74%) gap is expected to be achieved by end of December 2023</p>	
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 CE(WWM)  
 BWSSB  
 7/5/21

TABLE 1:  
DETAIL OF EXISTING STPS – Zone/Area Wise Summary

Table 1 (a) List of Existing STPs in Bengaluru (BWSSB)

SLNo	Name of the STP	Capacity in MLD	Location	Types of process for treating sewage	Drainage Zone	Average Inflow and treated in MLD	Reusing quantity	Used by / Disposed to
1	K&C valley	248	Belur Nagasandra (near Challaghatta)	Activated Sludge Process (ASP)- Secondary	K&C valley	215	215	Karnataka Golf Association, Bellanduru Lake, For recharging 126 Lakes of Kolar district
2	K&C Valley	60	Belur Nagasandra (near Challaghatta)	ASP with power generation - Secondary	K&C valley	60	60	For recharging 126 Lakes of Kolar district
3	Lalbagh	1.5	Lalbagh kere	Activated aeration + plate settlers + UV disinfection - Tertiary	K&C valley	1.5	1.5	Horticulture department
4	Cubbon Park	4	Cubbon Park (upgraded)	Membrane Bio Reactor - Tertiary	K&C valley	4	4	Rajbhavan, Hon'ble High Court, Bangalore Golf Course, Planetarium, War Memorial, CID, Vidhana Soudha, KPSC, KPWD, Civil Court
5	K.R.Puram Ph-I	20	Tambuchetti playa Road	UASB + Extended Aeration - Secondary	Hebbal	20	20	Vengaiana Kere
6	Yelemallappa Chetti kere	15	Yelemallappa Chetti kere	Sequential Batch Reactor - Secondary	Hebbal	12	12	Yelemallappa Chetti kere
7	Bellandur Amani kere	90	Vartur kere	Activated Sludge Process (ASP) - Secondary	K&C valley	91.94	89.18	For recharging 126 Lakes of Kolar district
8	Kadabeesanahalli Ph-I	50	Marathalli Outer Ring Road	Extended Aeration - Secondary	K&C valley	41.2	0.75	Presently letting into SWD - Proposed for future utilisation in KIADB Industrial Area at Narasapur with the completion of TTP at Narasapura
9	Kadugodi	6	Kadugodi	Sequential Batch Reactor - Secondary	K&C valley	4.2	0.15	Presently letting into SWD. Proposal : to HPCL. 2 MLD increasing to 6 MLD with completion of pipeline work for which work is under process.
10	Halasuru	2	Halasuru Lake	Sequential Batch Reactor - Secondary	K&C valley	1.67	0	Halasuru Lake
11	Rajacanal - Ph-I	40	Geddalahalli near Hebbal	Extended Aeration - Secondary	Hebbal	40	40	Chikkaballapura 5 MLD to Devanahalli KIADB Industrial area
12	Hebbal	60	Nagavara kere	Activated Sludge Process (ASP) - Secondary	Hebbal	45	0	Presently to Nagavarkere. Proposal to recharge 65 tanks of Chikkaballapura
13	Jakkur	15	Jakkur kere	Upflow Aerobic Sludge Blanket (UASB) + Extended Aeration - Tertiary	Hebbal	15	15	M/s. KPCL/ Recharge of Jakkur Lakes
14	Yelahanka Ph-I	10	Allalasanra kere	Activated sludge Process (ASP) + filtration + Chlorination - Tertiary	Hebbal	8	7	Airport Limited, M/s Indian Tobacco Company, M/s Indian Air Force, M/s Bharath electronics Limited, M/s Rail Wheel Factory, Prestige, Embassy and Excess effluent to
15	Rajacanal	40	Geddalahalli near Hebbal	Sequential Batch Reactor - Secondary	Hebbal	40	40	To recharge 65 tanks of Chikkaballapura
16	Horamavu Agara	20	In between Kalkere and Horamavu Agara kere	Sequential Batch Reactor - Secondary	Hebbal	20	20	To recharge 65 tanks of Chikkaballapura

17	Nagasandra Ph-I	20	Near Madavara kere (near Tumkur Road)	Extended Aeration - Secondary	Vrishabhavathy	10	10	To Storm Water Drain
18	Mallathahalli	5	Mallathahalli kere	Sequential Batch Reactor - Secondary	Vrishabhavathy	5	5	2.5 MLD to Malathalli Lake and 2.5 MLD to Ullal Lake
19	Nagasandra	20	Near Madavara kere (near Tumkur Road)	Sequential Batch Reactor - Secondary	Vrishabhavathy	10	10	To Storm Water Drain
20	Chikkabanavara	5	Chikkabanavara kere	Sequential Batch Reactor - Secondary	Vrishabhavathy	4.5	0	To Storm Water Drain
21	Mailasandra Ph-I	75	Mailasandra	Extended Aeration - Secondary	Vrishabhavathy	73	0.3	Tangline Developers (Global Village). Balance to Storm Water Drain.
22	V.Valley	180	Mysore Road	Two stage high rate trickling process - Secondary	Vrishabhavathy	60	10	10 MLD to tertiary plant, balance to Storm Water Drain
	TTP : 60MLD		Mysore Road	Densdag - Tertiary	Vrishabhavathy	10	0.8	M/s. Arvind Mills, M/s Wonder Blues, M/s Nandi Economic Corridor Enterprises
23	Kempambudhi	1	N.R.Colony	Extended Aeration - Secondary	Vrishabhavathy	1	1	Kempambudi Lake recharge
24	Doddabele	20	Doddabele	Sequential Batch Reactor - Secondary	Vrishabhavathy	18	0	Presently to Storm Water Drain.
25	Kengeri	60	Near Kengeri bus stand	Secondary-Activated Sludge Process - Secondary	Vrishabhavathy	40	0	Disposal sewer line linking work in progress.
26	Doddabele	40	Doddabele	Sequential Batch Reactor - Secondary	Vrishabhavathy	35	0	Presently to Storm Water Drain. Disposal sewer line linking work in progress.
27	Sarakki	5	Near Sarakki Lake	Sequential Batch Reactor - Secondary	K&C valley	3.52	0	Proposal to recharge existing Sarakki Lake.
28	Hulimavu	10	Hulimavu kere	Sequential Batch Reactor	K&C valley	5.49	0	Proposal to recharge existing Hulimavu Lake.
29	Agaram	35	Agara Ring Road	Sequential Batch Reactor	K&C valley	18.58	0	Proposal to recharge existing Agaram Lake.
30	Chikkabegur	5	Near Chikkabeguru kere	Sequential Batch Reactor	K&C valley	1.18	0	Proposal to recharge existing Chikkabegur Lake.
31	K.R.Puran	20	Tambuchetti palya Road	Sequential Batch Reactor	K&C valley	-	-	Newly Commissioned
	<b>Total</b>	<b>1182.5</b>				<b>914.78</b>	<b>561.68</b>	

\*As on 06.12.2019

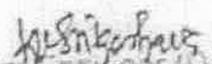
As per Rule No. IX of BWSSB Act 1964 under Recycle water it indicates that where Recycled water is supplied from the treatment plants of Board, water charges shall be levied at the rates. The prevailing rates are as follows.

(i) Secondary treated water: (1) Rs. 10/- per KL for supply at the plant premises through lorry tankers (2) Rs. 15/- per KL for supply through pipeline subject to entire cost of the pipeline being borne by the beneficiaries.

(ii) Tertiary Treated Water: (1) Rs. 15/- per KL for supply at the plant premises through lorry tankers. (2) Rs. 25/- per KL for supply through pipeline subject to entire cost of the pipeline being borne by the beneficiaries.

•Recently BWSSB has started supply of tertiary treated water through Tankers for non potable purpose @ Rs.360/- (6KL).

Compliance to provide Under Ground Drainage system with STP and Reuse of treated sewage						
Sl.No.	NGT Order dt.12-09-2019 and 07-01-2020	Implementation Status				
		Current Status (Compliance as on till date)	Desirable Level of Compliance in terms of statutes	Gap between current status and desired levels (in percentage)	Proposal of attending the gap with time lines	Name and designation of designated officer for ensuring compliance to provisions under statute (Commissioner/Director) with Mobile no.
1	Status of STPs and Reuse of treated water	A) Status of STPs: There are 276 ULBs, (Excluding Bengaluru) in Karnataka. Under Ground Drainage system with Sewage treatment plant provided in 83 Urban local bodies. The UGD system covered from 70% to 90 of the area. The UGD system with STPs are in progress in 55 Urban Local Bodies. The Directorate of Municipal Administration is implementing FSSM in 55 Urban Local bodies. The UGD system with STPs OR FSSM in remaining 90 Urban Local bodies and providing UGD with STP in the Un covered area of Urban Local Bodies will be taken up in phased manner based on availability of funds. It is proposed to achive this tarrget by 2026 subject to availability of funds.	100%	51%	2026	Sri K.V. Sri Keshava, Chief Engineer design and Monitoring, Mobile no. 9480813209
		B) Reuse of treated water: It is proposed to reuse the treated sewage for Industries and irrigation purpose. At present 3 MLD of treated sewage is being supplied to Janaki iron and steel industries in Bellary. Further a pre feasibility report for reuse of treated water in Bellary, Chitradurga and Hubli-Dharwad is prepared for Rs 142.49 crores is prepared and being submitted to Government for approval.	100%	99%	2030	

  
 Chief Engineer (D & M)  
 K.U.W.S. & D. Board,  
 Bengaluru. 2

## STATUS OF SEWAGE TREATMENT PLANTS (STPS) & REUSE OF TREATED SEWAGE

### A. STATUS OF SEWAGE TREATMENT PLANTS (STPs)

#### **a) BENGALURU**

1 Bruhat Bengaluru Mahanagara Palike (BBMP) comprises of 800 SqKms and consists of 245 Sq. Kms. of core area, 330 SqKms of erstwhile CMC/ TMC and 225 SqKms of 110 Villages. The population of Bengaluru BBMP area is projected to double i.e., from 10.08 Million in 2016 to 20.96 Million by 2050. Bangalore Water Supply and Sewerage Board (BWSSB) is supplying 1400 MLD of water from River Cauvery. It is estimated that about 400 MLD water is utilized from ground water (public + private). Total water utilized is 1800 MLD, out of which 80% i.e., 1440 MLD will become used water which will constantly increase with the growth of the city. Details of existing used water treatment plants in Bengaluru and utilization of treated water is mentioned below:

There are 25 STPs of installed capacity 1067.5 KLD has been installed and 711.4 KLD is being treated. 11 STPs of 520 KLD is under construction and 12 STPs of capacity 120 MLD is proposed to be commissioned between 20-21 to 23-24

#### **b) OTHER THAN BENGALURU**

There are 274 Urban Local Bodies in Karnataka, out of which 27 are AMRUT towns and 247 are non-AMRUT towns in the State of Karnataka. Only 76 local bodies possess Sewage Treatment Plants (STPs) the remaining local bodies are in the process of establishing the STP's. Government of Karnataka has accorded approval for establishing these STPs.

District wise implementation of STP's in the urban local bodies have been provided in the table below:

TABLE-2

## DETAIL OF EXISTING STPS - CITY WISE SUMMARY

SI No	Name of the town	Name of the District	Population as per census 2011	Designed capacity of Existing STP (in MLD)
1	Bagalkote	Bagalkote	111933	12.50
2	Guledgudda		33382	1.00
3	Jamkhandi		68938	11.20
4	Ilkal		60242	8.00
5	Badami		30943	2.00
6	Mudhol		52199	9.06
7	Bilagi		17792	3.00
8	Hunagund		20877	3.50
	<b>TOTAL</b>		<b>396306</b>	<b>50.26</b>
9	Bailhongal	Belagavi	49182	2.28
10	Chikkodi		38307	5.80
11	Sadalga		23790	14.00
12	Gokak		80650	8.70
	<b>TOTAL</b>		<b>191929</b>	<b>30.78</b>
13	Bellary	Bellary	410445	45.00
14	Hospet		206167	10.00
15	Hadagali		27967	4.27
	<b>TOTAL</b>		<b>644579</b>	<b>59.27</b>
16	Kanakapura	Bengaluru Rural	54014	6.29
17	Magadi		27605	3.70
18	Anekal		44260	6.40
19	Doddaballapura		93105	12.00
	<b>TOTAL</b>		<b>218984</b>	<b>28.39</b>
20	Kollegal	Chamarajanagar	57149	3.30
21	Gundlupet		28105	2.50
22	Chamarajanagar		69875	9.00
	<b>TOTAL</b>		<b>155129</b>	<b>14.80</b>
23	Chickmagalur	Chickmagalur	118401	6.50
24	Birur		22484	2.64
	<b>TOTAL</b>		<b>140885</b>	<b>9.14</b>

Sl No	Name of the town	Name of the District	Population as per census 2011	Designed capacity of Existing STP (in MLD)
25	Chitradugra	Chitradugra	145853	20.00
	<b>TOTAL</b>		<b>145853</b>	<b>20.00</b>
26	Harapanahalli	Davangere	47039	7.92
27	Davangere		434971	40.00
28	Harihara		434971	8.84
29	Honnali		17928	3.30
	<b>TOTAL</b>		<b>934909</b>	<b>60.06</b>
30	Mangalore	Dakshina Kannada	499487	85.50
31	Sullia		19958	2.00
	<b>TOTAL</b>		<b>519445</b>	<b>87.50</b>
32	Gadag-Betageri	Gadag	172612	15.89
	<b>TOTAL</b>		<b>172612</b>	<b>15.89</b>
33	Arsikere	Hassan	53216	3.00
34	Belur		22484	2.70
35	C.R Patna		40417	4.60
36	Hassan		155006	13.00
37	H. N Pura		29974	3.00
	<b>TOTAL</b>		<b>301097</b>	<b>26.30</b>
38	Ranebennur	Haveri	106406	17.16
	<b>TOTAL</b>		<b>106406</b>	<b>17.16</b>
39	Kalburgi	Kalaburagi	543147	107.24
40	Jewargi		25686	3.25
41	Chittapura		31299	5.10
	<b>TOTAL</b>		<b>600132</b>	<b>115.59</b>
42	Kolar	Kolar	138462	10.16
43	Srinivasapura		26793	3.00
44	Chintamani		76068	6.40
45	Siddlaghatta		51159	3.10
46	Malur		43658	4.00
	<b>TOTAL</b>		<b>336140</b>	<b>26.66</b>
47	Gangavathi	Koppal	114642	3.72
	<b>TOTAL</b>		<b>114642</b>	<b>3.72</b>
48	Maddur	Mandya	28754	3.50

Sl No	Name of the town	Name of the District	Population as per census 2011	Designed capacity of Existing STP (in MLD)
49	Mandya		137358	18.52
50	SR Patna		25061	1.39
51	Nagamangala		17776	3.00
52	Malavalli		37601	5.65
	<b>TOTAL</b>		<b>246550</b>	<b>32.06</b>
53	Mysore	Mysore	920550	157.67
54	Nanjangud		50598	7.00
55	Bannur		21896	3.31
56	Hunsur		50865	3.89
57	K.R.Nagar		35805	2.89
	<b>TOTAL</b>	<b>1079714</b>	<b>174.76</b>	
58	Raichur	Raichur	234073	48.86
	<b>TOTAL</b>	<b>234073</b>	<b>48.86</b>	
59	Ramanagar	Ramanagar	95167	7.57
	<b>TOTAL</b>	<b>95167</b>	<b>7.57</b>	
60	Bhadravathi	Shimoga	151102	5.83
61	Shimoga		322650	5.18
62	Shikaripura		36015	5.00
	<b>TOTAL</b>	<b>509767</b>	<b>16.01</b>	
63	Tumkur	Tumkur	302143	24.57
64	Turuvekere		14194	1.97
65	Tiptur		<b>59543</b>	<b>6.00</b>
	<b>TOTAL</b>	<b>375880</b>	<b>32.54</b>	
66	Udupi	Udupi	144960	12.00
67	Karkala		25800	2.95
	<b>TOTAL</b>	<b>170760</b>	<b>14.95</b>	
68	Bhatkal	Uttara Kannada	32000	3.50
69	Karwar		77139	1.50
	<b>TOTAL</b>	<b>109139</b>	<b>5.00</b>	
70	Vijayapura	Vijayapura	327427	45.36
71	Basavanabagevadi		33198	4.20
72	Indi		38217	4.00

Sl No	Name of the town	Name of the District	Population as per census 2011	Designed capacity of Existing STP (in MLD)
73	Talikote		31693	4.00
74	Hubli-Dharwad	Dharwad	943788	60.00
75	Bidar	Bidar	223783	17.26
76	Chikkaballapura	Chikkaballapura	63652	10.00
	<b>TOTAL</b>		<b>1661758</b>	<b>144.82</b>
	<b>GRAND TOTAL</b>		<b>9422359</b>	<b>1010.87</b>

### B. Reuse of treated sewage

#### Bengaluru city ( source BWSSB)

- Bangalore Water Supply and Sewerage Board proposes to use the treated sewage water for recharge of Lakes, use in Industrial establishments. Minor Irrigation Department, Government of Karnataka has entered into MOU with BWSSB to supply the secondary treated used water to recharge the Lakes of Kolar, Chikkaballapura Districts. Further, there are plans to provide the treated water to the industrial areas in Anekal, Narasapura and Devenahalli.
- From 30 MLD STP at B. Nagasandra of K & C Valley 2MLD of secondary treated sewage water is being supplied to Karnataka Golf Association, Domalur for the maintenance of turf.
- From 108 MLD, 110MLD and 30 MLD, 60 MLD STPs at B. Nagasanadra along with 90 MLD STP at Bellandur, Ammanikere of K & C valley, MOU has been made with Minor Irrigation Department (MI) of GOK to supply 400 MLD of secondary treated used water to recharge 126 Lakes covering 7 Taluks of Kolar District and 120 MLD to 69 Lakes of Anekal Taluk, Bangalore urban district. Presently 200 MLD of secondary treated used water being supplied to Kolar district.
- From 1.5 MLD Tertiary Treated Plant (TTP) at Lalbagh is used by Horticulture Department used in Lalbagh gardens.

- Out of 4 MLD TTP at Cubbon Park, 2.5 MLD of tertiary treated used water is supplied to Horticulture department for gardening Cubbon Park, Rajbhavan, Hon'ble High Court of Karnataka, Bangalore Golf Course, Planetarium and War Memorial Gardens. Supply of 1.5 MLD is in the pipeline to supply treated water for gardening the premises of Criminal Investigation Department, Karnataka Public Service Commission, Karnataka Public Works Department and Civil Court.
- From 40 MLD STP-1 at Rajacanal, supply of 40 MLD secondary treated sewage water will be supplied to Devanahalli Industrial area of KIADB. Presently 5 MLD is being used.
- From 10 MLD Tertiary Treatment Plant (TTP) at Yelahanka, 6 MLD of tertiary treated sewage water is being supplied to M/s Kempegowda International Airport Limited, M/s Indian Tobacco Company, M/s Indian Air Force, M/s Bharath Electronics Limited, M/s Rail Wheel Factory, Prestige for their Gardening and other non-potable purposes.
- From 75 MLD STP at Milasandra, 3 MLD of secondary treated sewage water is being supplied to M/s. Bhagyalakshmi Farms and M/s Tangline Developers (Global Village) for the gardening and other non potable purposes.
- 60 MLD Tertiary Treated Plant at Nayandahalli, Vrishabhavathi Valley, which was constructed on the request of Karnataka Power Corporation Limited (KPCL) for their contemplated gas based power project at Bidadi, however the supply has not commenced since the power project is yet to be commissioned. Presently, 10 MLD of water is treated in the plant. Out of 10 MLD, 2 MLD is utilized by M/s. Arvind Mills, M/s. Wonder Blues, M/s. Nandi Economic Corridor Enterprises for industrial and other non-potable purposes. Balance is let into SWD.
- . BWSSB while treating the used water also planning to generate power from a few of its STPs i.e., 3.6 MW/ day at Koramangala&Challagahtta Valley, 1 MW/day at Hebbal Valley and 4.8 MW/day at Vrishabhavathi Valley. Out of which, 1 MW /day is commissioned at K & C Valley.
- Apart from the above uses, tertiary treated sewage water being supplied to the Construction of High-rise buildings and for curing of Concrete roads in Bengaluru.

- BWSSB has made mandatory for installation of STP and Dual Piping System by a regulation vide notification No.BWSSB/CAO-S/ 5008 /2017-18 dtd: 21.2.2018 for the residential, commercial, educational institutions and industrial establishments.
- From 60 MLD existing STP & 100 MLD under Construction STP at Hebbal, 40MLD STP at Rajacanal, and 20 MLD STP at Horamavu of Hebbal Valley, MOU has been made with Minor Irrigation Department (MI ) of GOK to supply 210 MLD of secondary treated sewage water to recharge 65 Lakes covering 4 Taluks of Chikkaballapura District. MI department presently carrying out the pipeline work to supply the treated water.
- From 15 MLD STP at Jakkur of Hebbal Valley which is upgraded from 10 MLD to 15 MLD on the request of Karnataka Power Corporation Limited (KPCL) for their project at Yelahnika for use in Cooling Towers.
- From 6 MLD STP at Kadugodi, secondary treated sewage water is to be supplied to Hindustan Petrochemical Corporation Limited., (HPCL) Research and Development Center at Devargunthi for gardening and recharging purpose.
- Apart from the above, BWSSB is taking steps to curtail the supply of Cauvery drinking water to Bulk Consumers like Railways, Defence, Bengaluru Metropolitan Transport Corporation (BMTTC), Karnataka State Road Transport Corporation (KSRTC) and Bruhat Bengaluru MahanagaraPalike (BBMP) for gardening in their parks, by directing them to use treated used water for their non-potable purposes. BWSSB mandated installation of STPs to Apartment Buildings with dual piping system, creating awareness about conservation and save of water by Rainwater harvesting and re-use of treated water for non-potable purposes.

**c) Other than Bengaluru ( KUWS &DB and UDD)**

- Mangalore City Corporation has executed an Agreement with Mangalore SEZ during January 2008 for Operation and Maintenance of 3 STP of total capacity 80 MLD and to use treated effluent from the STPs for next 30 years and extendable further 20 years with the mutual consent. MOU enclosed
- Siddlaghatta City Municipal Council has auctioned treated Sewage of 3.10 MLD for

Agriculture purpose to the Farmer for one year.

- Bellary City Corporation executed an agreement with Hottur Ispat Pvt Ltd., Bellary during April 2017 for drawal of 2.55 MLD of treated Sewage from 15.00 MLD Sewage Treatment Plant at Cowl Bazaar, Bellary. Further, 3 MLD will be utilized by Janaki Corporation Limited, Bellary.
- Tumkur city Corporation has identified the opportunity of Re-use of 18.0 MLD of treated Sewage for Vasantha Narasapura Phase 1, 2 & 3 at an estimated cost of Rs.72.0 Crores.
- Bellary City Corporation has identified opportunity of Re-use of 9.0 MLD of treated Sewage for Mundargi Industrial area and Kuduthani Industrial area at an estimated cost of Rs. 70.0 Crores
- Chitradurga City Municipal Council has identified opportunity of Re-use of 10.0 MLD of treated Sewage for ISRO and BARC Industrial area at an estimated cost of Rs. 77.0 Crores
- Hubli-Dharwad City Corporation has identified opportunity of Re-use of 2.5 MLD of treated Sewage for Belur Industrial area at an estimated cost of Rs. 30.5 Crores
- Mangalore City Corporation has identified opportunity of Re-use of 5.0 MLD of treated Sewage for Mangalore SEZ Industrial area at an estimated cost of Rs. 60.0 Crores
- Bidar City Municipal Corporation has identified opportunity of Re-use of 2.8MLD of treated Sewage for Kolhar Industrial area at an estimated cost of Rs. 26.0 Crores.
- Vijayapura City Corporation has identified opportunity of Re-use of 1.25MLD of treated Sewage for ETCO Denim Unit at an estimated cost of Rs. 9.0 Crores
- Harihara City Municipal Council has identified opportunity of Re-use of 2.16MLD of treated Sewage for proposed MRPL Yethanal Unit at an estimated cost of Rs. 60.0 Crores

Annexure.....P-5.....In the Affidavit  
 Mr./Mrs.....  
 on this.....

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Annexure R-6

## Compliance to Rejuvenation of Water Bodies

NGT Order Dated: 12.09.2019 & 07.01.2020	Implementation status				
1	2				
	Current Status (Compliance as on till date)	Desirable Level of Compliance in terms of statutes	Gap Between current status and desired levels	Proposal of attending the gap with time lines	Name and designated officer for ensuring compliance to provisions under statute (Commissioner/Director) with Mobile No.
Compliance to Rejuvenation of Water Bodies	The Rejuvenation of Water Bodies will be undertaken as per the guidelines of Jal Shakti Abhiyan & AMRUT schemes	100%	70.72	Dec-2022	7760545536 Rudramuni (Joint Director)

Annexure.....R-6..... in the Affidavit  
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## Compliance on prevention of Illegal Sand Mining

Sl. No.	SWM Rule Clause	NGT order Dated: 12.09.2019 & 07.01.2020	Implementation Status					
1	2	3	4					
<b>Compliance on prevention of Illegal Sand Mining</b>								
		Current Status of Action taken about Illegal Mining Activities (January 2021 to March 2021)	Current Status of Production and Royalty / Additional Periodic Payment collected from Lessees in Karnataka State (January 2021 to March 2021)		Proposal of attending the gap with time lines	Name and designation of designated officers for ensuring compliance under statues (Commissioner/ Municipal Commissioner/ Chief Officer) with Mobile No.		
1	Compliance to order dated: 24.7.2019 of Director of Mines and Geology Bengaluru in OA 606/2018	Action taken to curb Illegal Sand Mining and Transportation in the State during Quarter from January 2021 to March 2021. 61 Illegal Sand Mining cases were booked. In 38 Cases,	Production (in MT)	Royalty	APP/ AAPP (Rs. in lakhs)	DMF	The Karnataka New Sand Policy 2020 has been issued as per Government order CI 344 MMN 2019, Bangalore dated: 05.05.2020 and published in the Gazete dated: 21.05.2020. It has come into force on the	Sri. Dr. Lakshamma Deputy Director (Mineral Administration) Dept. of Mines and Geology, Bengaluru. +919480031622
			11,63,034	930.47	2997.03	93.08		

accused admitted the guilty and penalty of Rs. 18.74 lakhs has been recovered. In 23 cases. Private complaints / FIR were registered.

966 Illegal Sand Transportation cases were booked. In 635 Cases. accused admitted the guilty and penalty of Rs. 181.00 lakhs has been recovered. In 331 cases. Private complaints / FIR were registered.

87 Illegal Sand Storage cases were booked. In 36 Cases. accused admitted the guilty and penalty of Rs. 65.59 lakhs has been recovered. In 36 cases. Private complaints / FIR were registered.

In 06 cases of Illegal Filter Sand cases were booked. Private Complaints / FIR were registered in all 06 cases.

same day and it is under implementing stage.

Government has sanctioned special enforcement squad called "Mineral Protection Force" to curb illegal sand mining and transportation in the 8 districts. Copy of order details.

*Kanase*  
Deputy Director (M.A)  
Department of Mines & Geology  
SW

Annexure *R.F* ..... in the Affidavit  
Mr./Mrs. .... sworn to before me  
on this, .....

*[Signature]*  
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**COMPLIANCE TO GROUND WATER EXTRACTION:-**

**Current Status (Compliance as on 31<sup>st</sup> March-2021 ):-**

- The Groundwater Directorate is carrying out the work of assessing the Groundwater Resources as per the Groundwater Estimation Methodology (GEM) given by the Groundwater Estimation Committee (GEC) since 1999.
- Based on the Groundwater Recharge and Groundwater Utilization, the areas are categorized into over exploited, critical, semi-critical and safe.

Sl No	Category	Groundwater Utilization/ withdrawal against groundwater recharge in %
1	Over Exploited	>100
2	Critical	90-100
3	Semi Critical	70-90
4	Safe	<70

- If we observe over a period of time the Over exploited taluks have gradually increased thus creating stress on groundwater availability. The below table shows the gradual increase in over exploited taluks from the results of previous groundwater assessment.

Year of Assessment	Over Exploited taluks	Critical taluks	Semi Critical taluks	Safe taluks	Mixed taluks	Stage of Groundwater Development in %
2004	22	NIL	NIL	51	102	70
2009	35	3	10	70	58	68
2011	30	6	7	70	63	64
2013	43	14	21	98	-	66
2017	45	8	26	97		70

- As per Groundwater Resources estimation 2017 more than 60% of groundwater is used for irrigation and 50% of State irrigation is from groundwater. The overall stage groundwater utilization is 70% against availability.
- In order to control over exploitation of groundwater, the State Government has enacted the Karnataka Groundwater (Regulation and control of Development and Management) Act 2011, Rules 2012. As per the section 10 of the Act 2011 the areas will be notified.
- There is a restriction to drill a new bore well in the notified taluks. As per section 11 of the Act 2011, prior permission from the appropriate authority should be taken to drill a new bore well in the notified area.

- Registration of drilling rigs is made compulsory to drill bore well in any part of the State. The registration certificate is issued in form-7A by the Karnataka Groundwater Authority.
- Any commercial user of groundwater for industry / infrastructure / mining / entertainment purposes, must obtain permission / NOC from Karnataka Groundwater Authority (KGWA).

**COMPLIANCE TO GROUND WATER CONTAMINATION: -**

Not applicable to Groundwater Directorate.

**COMPLIANCE TO GROUND WATER RECHARGE: -**

**Current Status (Compliance as on 31<sup>st</sup> March-2021): -**

- Various line departments in the supply side are involved in the construction of check dams, infiltration wells, under other various groundwater recharge Schemes. Groundwater directorate is giving technical assistance to these line departments for identifying suitable location for construction of Artificial Recharge Structures.
- The NOC for groundwater withdrawal by Karnataka Groundwater Authority are issued based on the recharge capacity of the industry / infrastructure / mining / entertainment projects.
- Ground water “Awareness Programmes” are conducted for Public and Students in Schools/Colleges” and also through media to create awareness among public about the judicious usage of groundwater.

## Annexure-11

Compliance to Solid Waste Management Rules 2016

Sl. No	NGT Order dated:14.12.2020	Implementation status					
1	2	3	4				
<b>Compliance to duties of waste generators</b>							
			<b>Current Status (Compliance as on 31<sup>st</sup> December-2020)</b>	<b>Desirable Level of Compliance in terms of statutes</b>	<b>Gap Between current status and desired levels</b>	<b>Proposal of attending the gap with time lines</b>	<b>Name and designation of designated officer for ensuring compliance to provisions under statute (Commissioner/ Director) with Mobile No.</b>
1	Compliance to Ground Water Extraction/ Recharge		As per Groundwater Resources estimation 2017 more than 60% of groundwater is used for irrigation and 50% of State irrigation is from groundwater. The overall stage groundwater utilization is 70% against availability.	<68% of Groundwater utilization against availability	2%	2025	Sri. G. Jayanna Director I/c, Groundwater Directorate, Bangalore. Mb No. 9449542169
	Compliance to Ground Water Contamination		<b>Not applicable Groundwater Directorate</b>				

Annexure..... 29 ..... in the Affidavit  
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Director,  
Groundwater Directorate,  
Bengaluru.

### Compliance to 351 Polluted River Stretches in the Country (Karnataka)

SI No	Thematic area	Current Status	Desirable level as per status	Gap between current Status and desired levels	Time frame for addressing the Gap	Name, designation, contact number, of designated officer for ensuring compliance to the provisions under statute
1	351 Polluted River stretches	Construction of Under Ground Drainage (UGD) system & installation of Sewage treatment plants (STP's) to treat the sewage from 17 identified Polluted River stretches in Karnataka State (35% of sewage generated is being treated )	100%	65%	DEC-2021	Urban Development Department , GoK

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## 122 Non –attainment cities

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
1	122 Non –attainment cities	There are 4 non attainment cities in the Karnataka state a) Action plan for Bengaluru city -44 (Approved during 29th Septemebrer 2019 by CPCB) around 34.9% reduction in PM10 concentration (Annual average values for the year 2014-15 are compared to the2019-20)	100%	65.1% for Bengaluru city	31.12.2022	Sri T. Mahesh, Chief Environmetnal Officer
		b) Action plan for Davangere-27 Action points (approved during 25th June 2019 by CPCB) around 16.33 % reduction in PM10 concentration (Annual average values for the year 2014-15 are compared to the 2019-20)	100%	83.67% for Davangere	31.3.2022	
		c) Action plan for Hubli-Dharwad city -27 Action points (approved during 25th June 2019 by CPCB) around 21.71 % reduction in PM10 concentration (Annual average values for the year 2014-15 are compared to the 2019-20)	100%	78.29% for Hubli-Dhawad	31.3.2022	
		d) Action plan for Kalaburagi cuty -27 Action points (approved during 25th June 2019 by CPCB) around 16% increase in PM10 concentration (Annual average values for the year 2014-15 are compared to the 2019-20)	100%	100% for Kalaburagi	31.3.2022	

Annexure.....P-10 in the Affidavit  
 Mr./Mrs..... sworn to before me  
 on this.....

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**ANNEXURE -I**  
**The Compliance annexure to air pollution including**  
**Noise pollution for Karnataka State**

**Ambient Air Quality Monitoring:**

**National Ambient Air Quality Monitoring Programme (NAMP) in Karnataka State**

During the year 2019-20 the Board has monitored the ambient air quality of Bengaluru city at 20 locations including 7 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) and using manual equipments under National Ambient Air Quality Monitoring Programme (NAMP) covering Industrial Area, Mixed Urban Area and Sensitive Area.

As per the Central Pollution Control Board guidelines ambient air quality monitoring is being carried out twice a week, 24 hourly, 365 days for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Ammonia and Lead. And carried out on 24 hourly basis using CAAQMS for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Ammonia, O<sub>3</sub>, CO and Benzene and the data is sent to CPCB, New Delhi electronically and also the data is uploaded in the Board's Web Site. The annual average results are shown in Table 5A.11 & 5A.12.

**Table 5A.11: Annual average values of Air Pollutants at Bengaluru city during the year 2019-20**

Sl. No	Name of the Station	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	Pb µg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>	AQI	Category
1	Export promotional Park, ITPL, Whitefield Industrial Area	2.0	24.9	82.7	28.7	24.6	*	*	*	83	Satisfactory
2	Rail Wheel Factory, Yelahanka	2.0	23.6	81.4	30.6	23.5	*	*	*	81	Satisfactory
3	Yeshwanthpura Police Station	2.0	25.5	75.0	31.6	24.4	*	*	*	75	Satisfactory
4	Central Silk Board, Hosur Road	2.0	26.0	90.1	33.2	23.6	*	*	*	90	Satisfactory
5	Rajeev Gandhi Institute of Chest Diseases, NIMHANS (CAAQMS)	7.6	15.5	60.0	25.0	13.7	*	47.3	6.0	60	Satisfactory
6	Central Silk Board (CAAQMS)	4.1	34.3	80.1	31.2	14.1	*	31.6	9.6	80	Satisfactory
7	Urban Ecopark Peenya	2.0	25.0	96.3	36.6	23.5	*	*	*	96	Satisfactory
8	Swan Silk Pvt. Ltd , Peenya	2.0	25.8	86.4	39.2	24.8	*	*	*	86	Satisfactory
9	AMCO Batteries, Mysore Road	2.0	25.6	84.0	32.2	23.7	*	*	*	84	Satisfactory
10	Banaswadi police station	2.0	20.7	93.3	*	19.3	*	*	*	93	Satisfactory

11	Kavika, Mysore Road(CAAQMS)	5.4	35.5	71.2	33.6	16.0	*	40.1	4.5	71	Satisfactory
12	Kajisonnenahalli	2.0	22.9	78.7	27.5	22.4	*	*	*	79	Satisfactory
13	TERI Office, Domlur	2.0	25.4	96.5	28.3	24.2	*	*	*	97	Satisfactory
14	UVCE, K.R Circle	2.0	22.5	82.5	19.5	22.4	*	*	*	83	Satisfactory
15	Victoria Hospital, Bangalore	2.0	23.5	59.5	25.4	22.8	*	*	*	60	Satisfactory
16	Indira Gandhi Child Health Care Centre	2.0	23.5	56.5	23.0	22.5	*	*	*	57	Satisfactory
17	Veternary College, Hebbal (CAAQMS)	6.9	20.0	62.3	27.8	9.9	*	33.5	5.5	62	Satisfactory
18	Jayanagara 5th Block (CAAQMS)	3.4	32.0	72.1	28.8	11.6	*	36.8	4.3	72	Satisfactory
19	S.G.Halli (CAAQMS)	2.0	21.8	113.8	*	21.0	*	*	*	109	Moderate
20	City Railway Stn(CAAQMS)	9.0	40.4	109.6	*	48.8	*	*	1.6	106	Moderate
	<b>Standards, <math>\mu\text{g}/\text{m}^3</math></b>	<b>50.0</b>	<b>40.0</b>	<b>60.0</b>	<b>40.0</b>	<b>100.0</b>	<b>0.500</b>	<b>100.0</b>	<b>2.0</b>		
<b>Note : * Monitoring not carried out</b>								<b>Annual average AQI</b>		<b>81.2</b>	<b>Satisfactory</b>

Category (Range)	Possible Health Impacts	Category (Range)	Possible Health Impacts
Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)	Respiratory illness to the people on prolonged exposure
Moderate (101-200)	Breathing discomfort to the people with lung,	Severe (>401)	Respiratory effects even on healthy people

#### Brief summary of results:

1. The measured  $\text{SO}_2$ ,  $\text{NH}_3$  and  $\text{PM}_{2.5}$  values are well within the national limit ( $50.0 \mu\text{g}/\text{M}^3$ ) ( $100.0 \mu\text{g}/\text{M}^3$ ) and ( $0.5 \mu\text{g}/\text{M}^3$ ) respectively in all measured places
2. The measured  $\text{NO}_2$  values are well within the national limit ( $40.0 \mu\text{g}/\text{M}^3$ ) in all measured places except City Railway Station.
3. The measured  $\text{PM}_{10}$  values have exceeded the national limit ( $60.0 \mu\text{g}/\text{M}^3$ ) in 16 locations.
4. Out of 20 locations 17 locations is satisfactory, 2 location AQI is moderate and 1 location is Good.

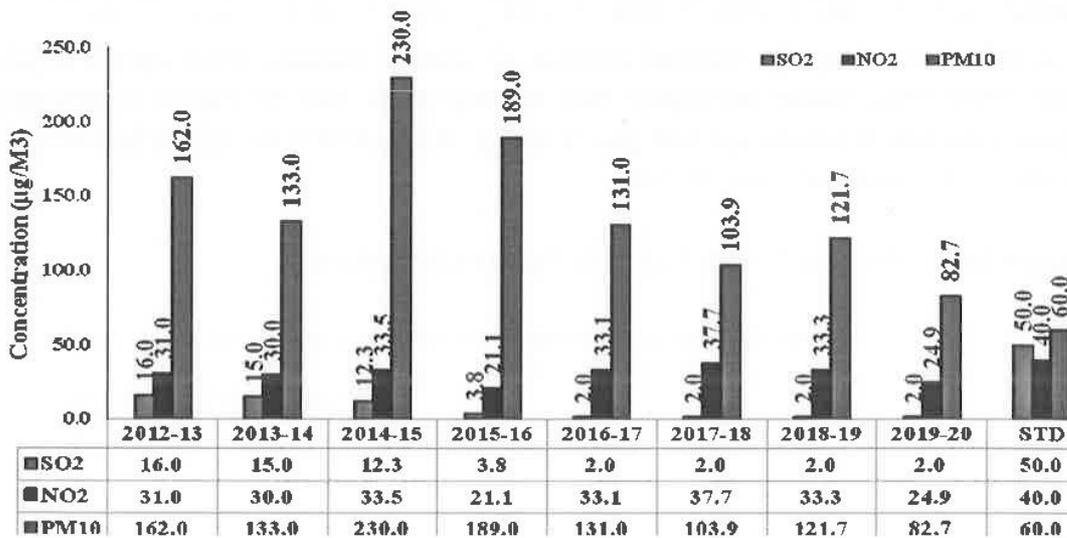
5. The levels of PM<sub>10</sub> is attributed to the vehicular emissions/movement, re-suspension of road dust and construction activities.

### 5A.7.1: AIR QUALITY IN DIFFERENT ZONES OF BENGALURU

- **Industrial Zone:** Four ambient air quality monitoring stations have been set up in the industrial zones of Bengaluru city viz.
  - i) Export Promotional Park , ITPL ,White Field Industrial Area
  - ii) Rail Wheel Factory Yelahanka
  - iii) Swan Silk Pvt Ltd, Peenya
  - iv) Peenya Industrial area, RO, Urban Ecopark

#### 1. ITPL, White field (Export Promotional Park), Bengaluru

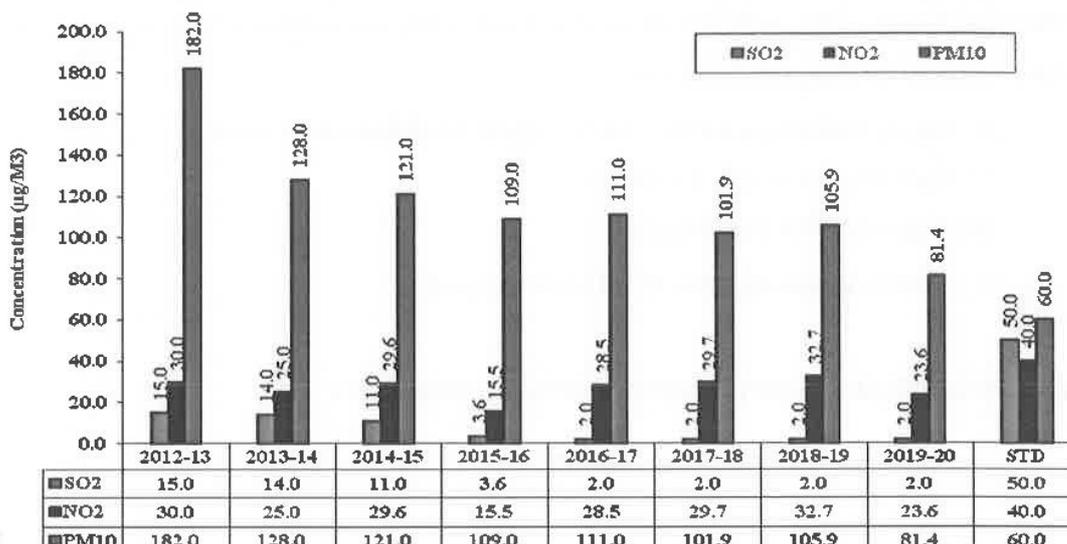
Annual average values of air pollutants at ITPL, Whitefield road during the year 2012-20



PM<sub>10</sub> values have exceeded the national limit (60.0 µg/m<sup>3</sup>) in all measured years, whereas SO<sub>2</sub> and NO<sub>2</sub> values are within the national limit during the period 2012-2020. Higher levels of PM<sub>10</sub> may be due to the construction activities and vehicular movement and road dust.

## 2. Rail Wheel Factory, Yelahanka, Bengaluru

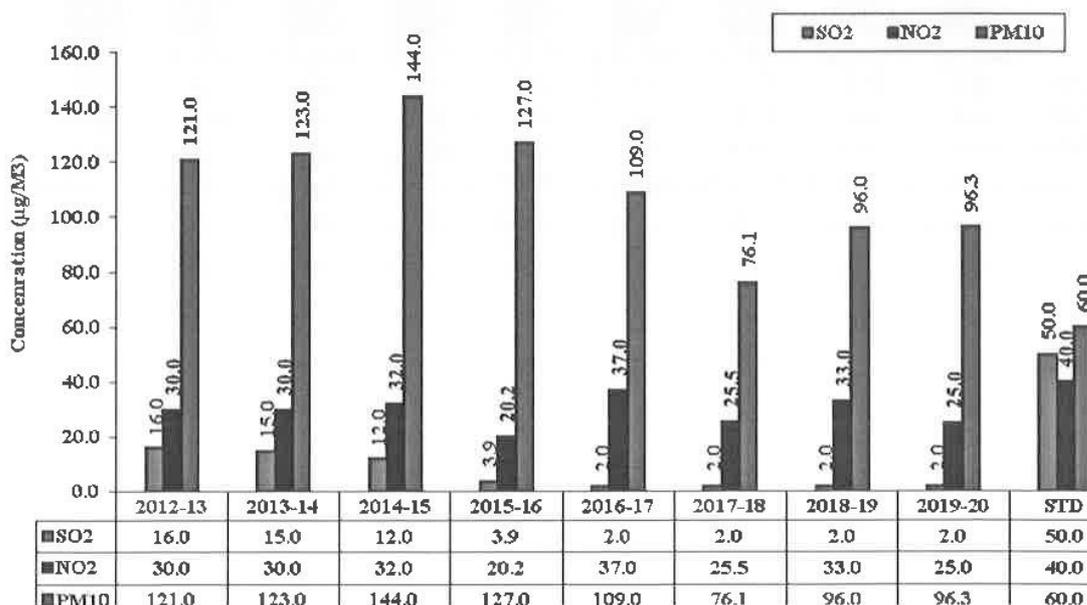
Annual average values of air pollutants at Rail Wheel Factory Yelahanka, during the years 2012-20



PM<sub>10</sub> values are exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all measured years. PM<sub>10</sub> values are higher than national limit, may be due to construction activities and vehicular movement and road dust. Whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit during all the measured years 2012-20.

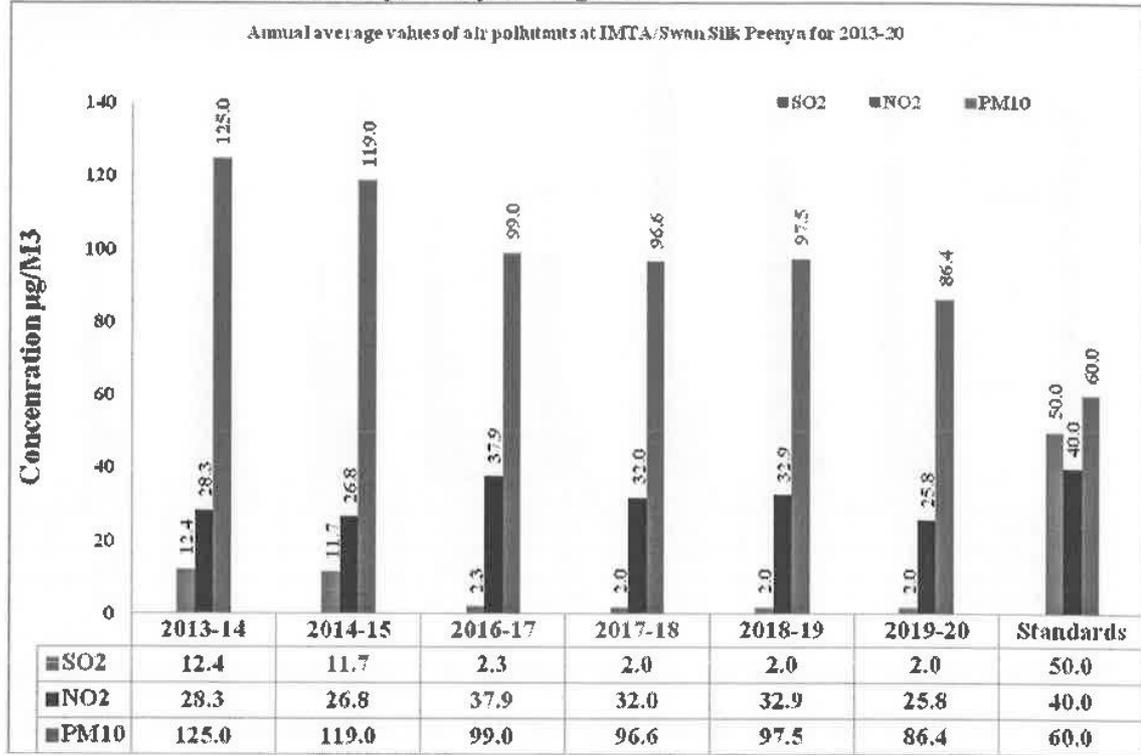
## 3. Peenya Industrial area(Urban Eco Park-Peenya), Bengaluru

Annual average values of air pollutants at Peenya Industrial Area, during the years 2012-20



PM<sub>10</sub> values are exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all the measured years due to the construction activities and vehicular movement and road dust whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit in all the measured years 2012-20.

#### 4. IMTA/Swan Silk Industry, Peenya, Bengaluru

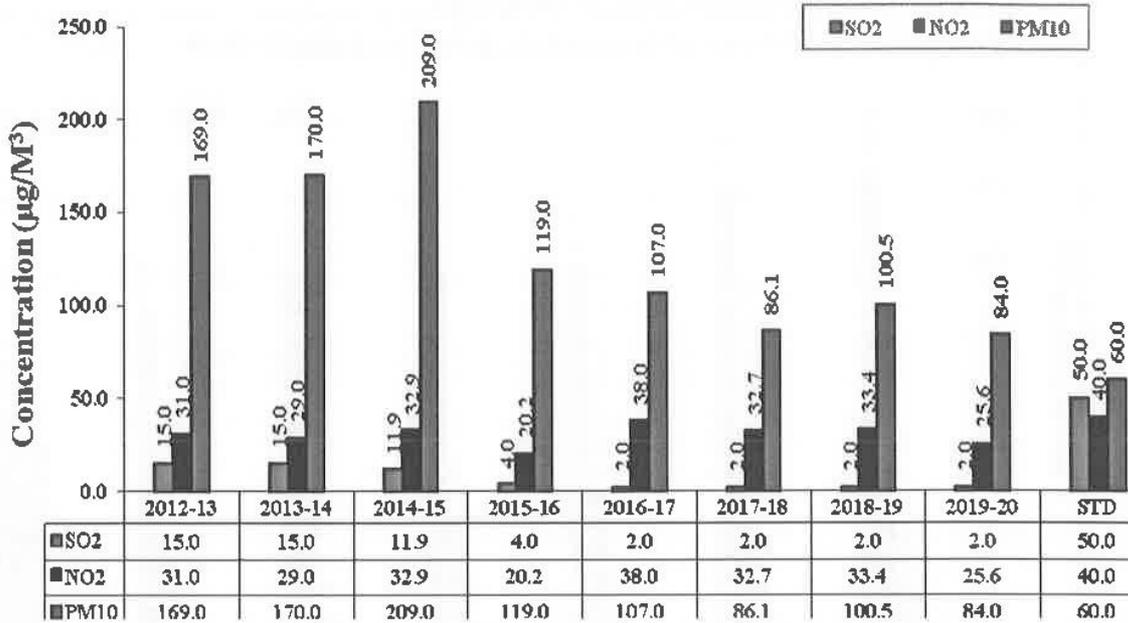


PM<sub>10</sub> values are exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all the measured years, due to the construction activities and vehicular movement and road dust , Whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit in all the measured years 2013-20.

**Mixed urban zone:** Nine ambient air quality monitoring stations have been set up in the mixed zone (Residential, Rural & Other areas) of Bengaluru city viz. 1. AMCO Batteries, Mysore Road. 2. Yeshwanthpur Police Station, 3. Central Silk Board, Hosur Road, 4. DTDC office, Victoria Road, 5. TERI Office, Domlur, 6. Banaswadi Police Station, 7. Kajisonnenahalli, White Field, 8.Saneguruvanahalli, 9. UVCE, KR Circle, Bengaluru.

## 5. AMCO Batteries Mysore Road, Bengaluru

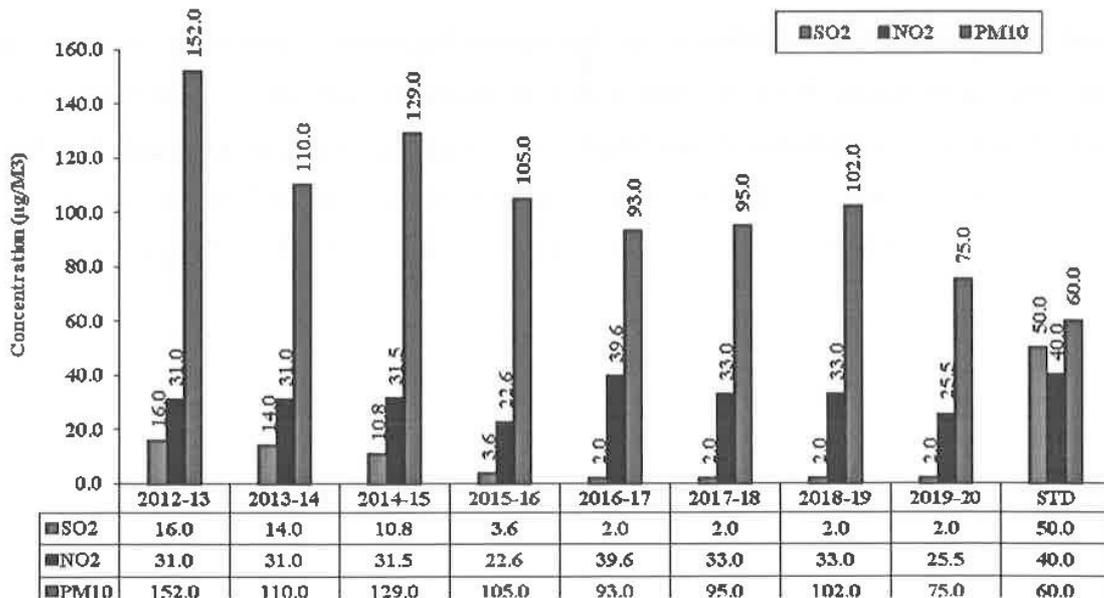
Annual average values of air pollutants at AMCO Batteries, Mysore Road, during the years 2012–20



PM<sub>10</sub> values have exceeded the national ambient air quality limit (60.0 µg/m<sup>3</sup>) during the years 2012-2020, due to the construction activities and vehicular movement and road dust. Whereas SO<sub>2</sub> and NO<sub>2</sub> are well within the national limit during the years 2012 -2020.

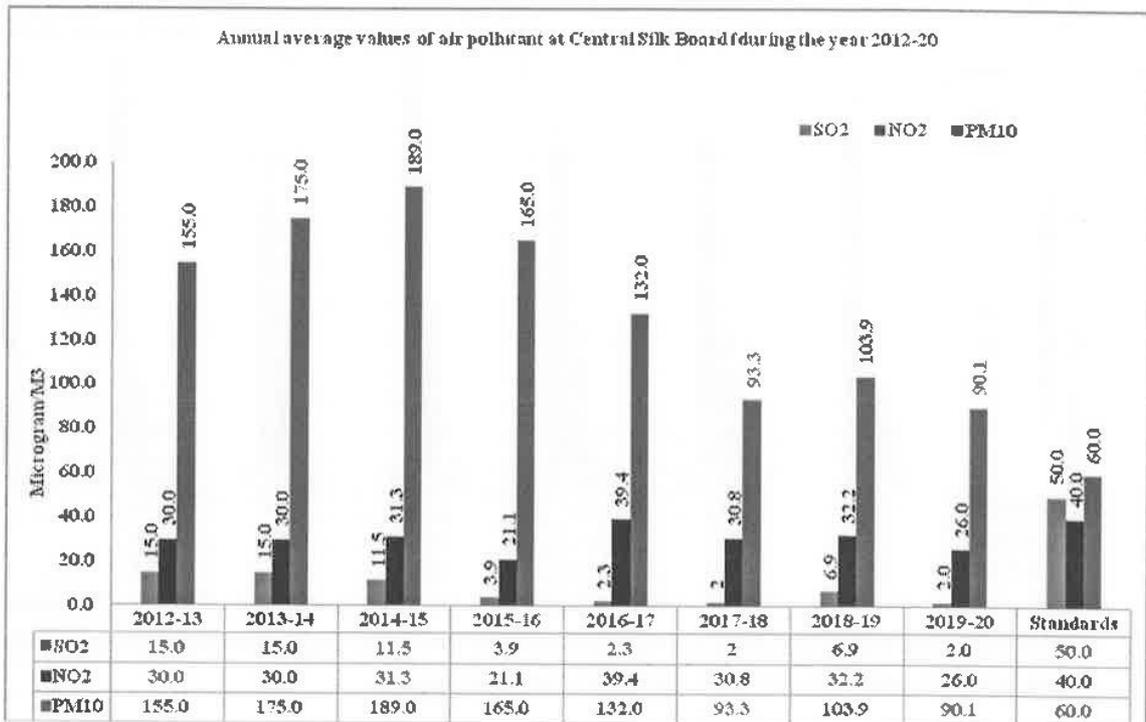
## 6. Yeshwanthpur Police Station, Bengaluru

Annual average values of air pollutants at Yeshwanthpur Police Station during the year 2012-20



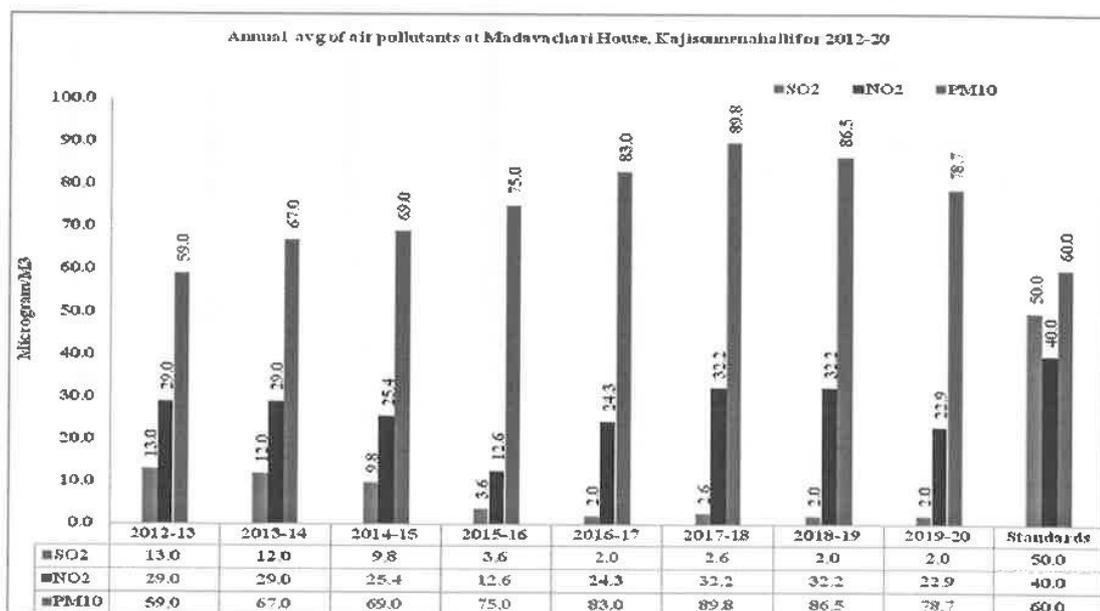
PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all measured years whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit during 2012-20. Higher levels PM<sub>10</sub> is due to the construction activities and vehicular movement and road dust.

### 7. Central Silk Board, Hosur road, Bengaluru



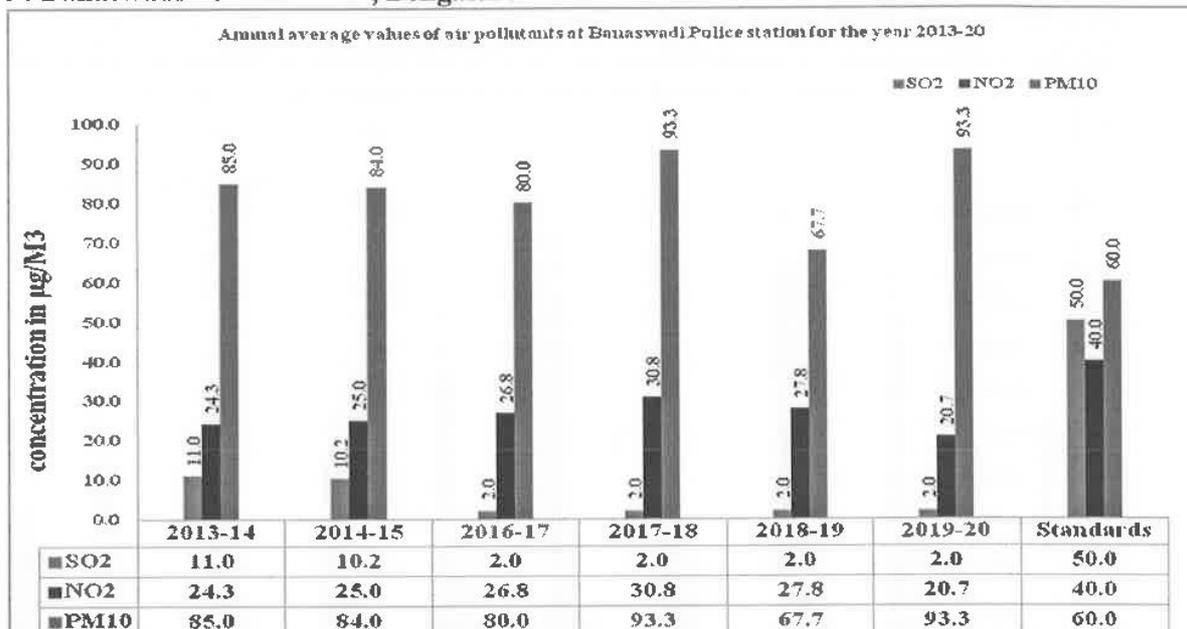
PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all measured years, due to the construction activities and vehicular movement and road dust whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit during 2012-20.

### 8. Madavachari House, Kajisonnehalli, Bengaluru



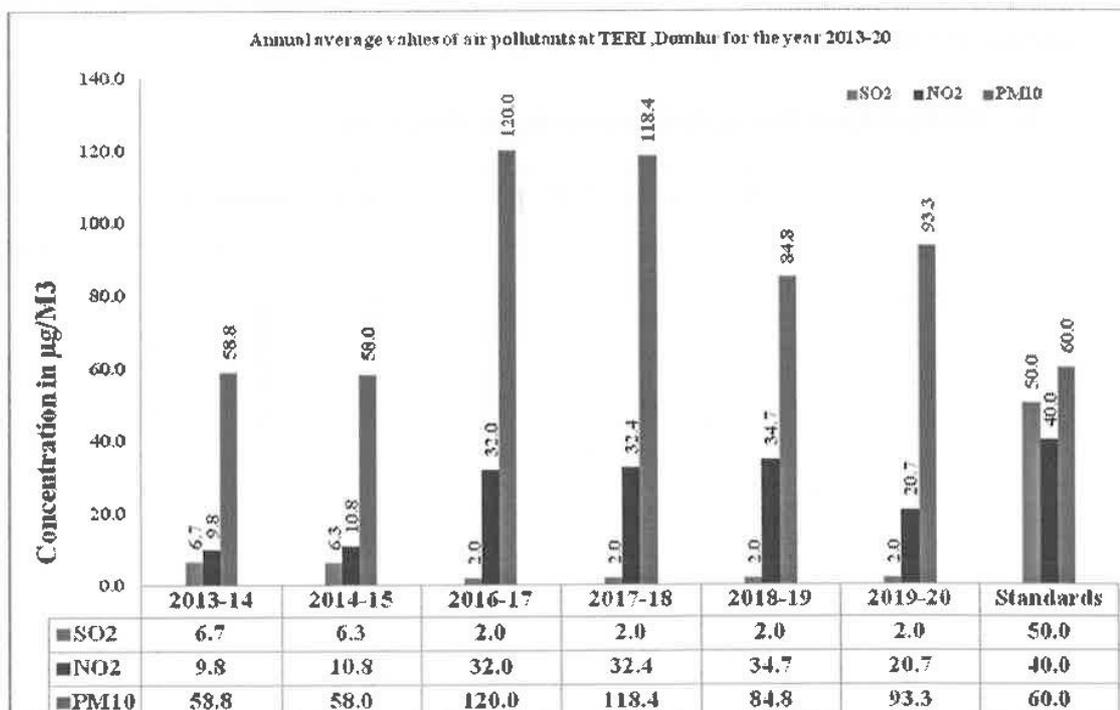
PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/ m<sup>3</sup>) in all measured years except in the year 2012-2013 (59.0 µg/ m<sup>3</sup>), which is near to the National limits whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit during 2012 -20.

### 9. Banaswadi Police Station, Bengaluru



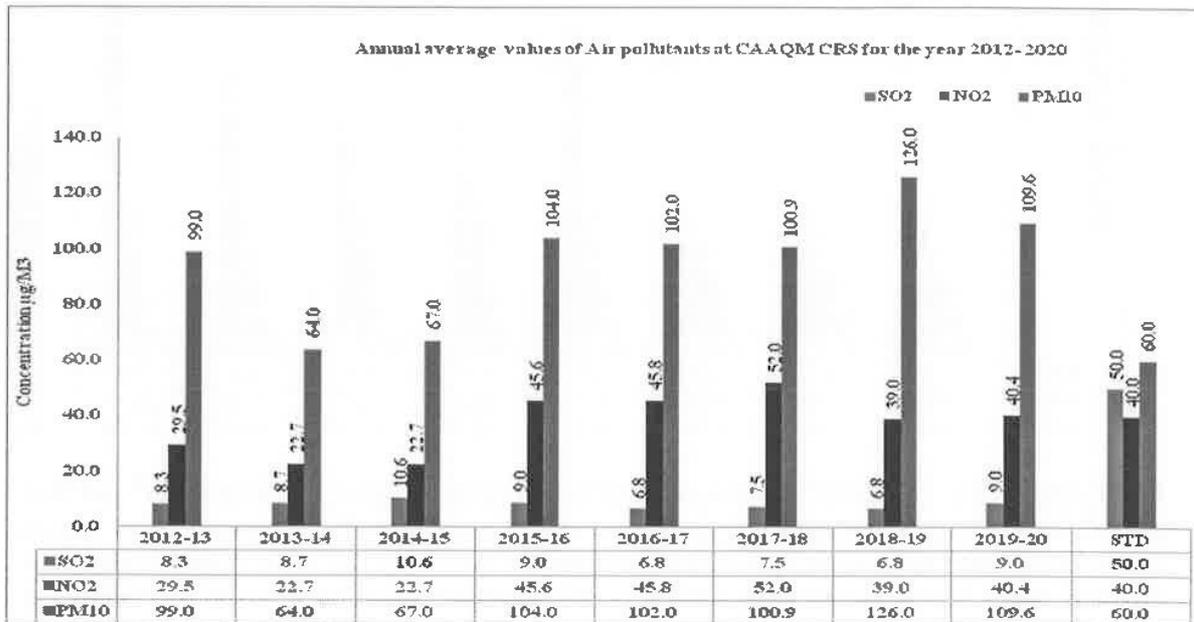
PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/M<sup>3</sup>) in all the measured years 2013-20, due to the construction activities and vehicular movement and road dust and SO<sub>2</sub> and NO<sub>2</sub> are well within the national limit.

### 9. TERI, Domlur, Bengaluru



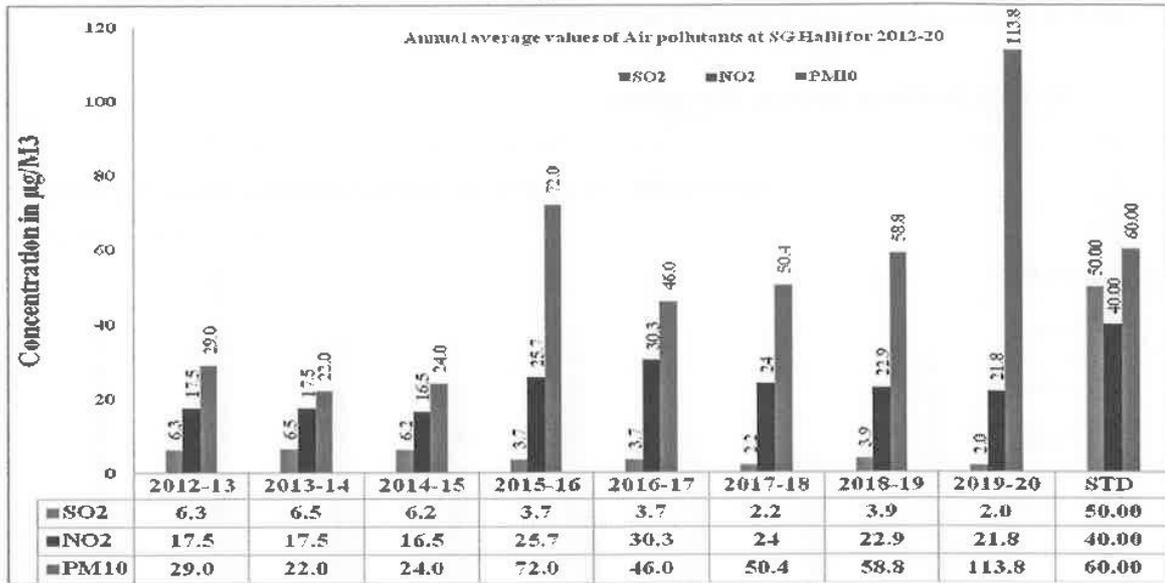
PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all the measured years 2013-20, due to the construction activities and vehicular movement and road dust and SO<sub>2</sub> and NO<sub>2</sub> are within the national limit.

### 10. City Railway Station, Bengaluru



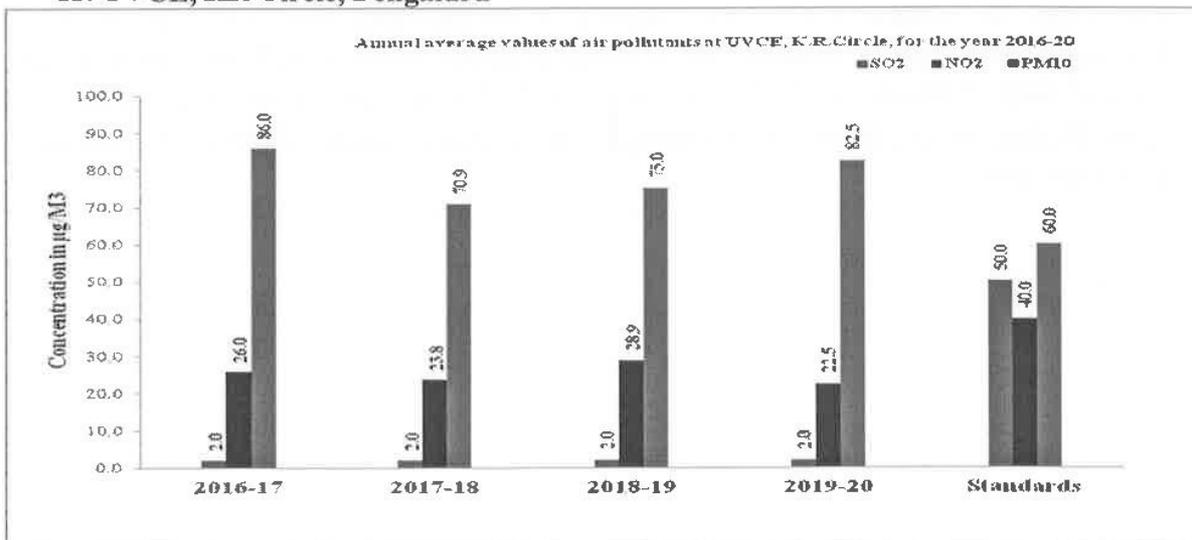
PM<sub>10</sub> values are exceeded the national ambient air quality standards 60.0 µg/m<sup>3</sup> for the years 2012-2019 and NO<sub>2</sub> values are within the national limit of 40.0 µg/M<sup>3</sup> for the years from 2012-13 to 2014-2015 & 2018-19 except for the year 2015-16 to 2017-18. SO<sub>2</sub> values are well within the national limit (50.0µg/m<sup>3</sup>) in all measured years 2012-2020. CO values are well within the national limit of (2.0 µg/m<sup>3</sup>) for all measured year 2012-2020. At City Railway Station Flyover construction is under progress, hence PM10 has exceeded the national limit. Vehicular traffic has decreased as the bus are moving towards satellite bus stand, Peenya, Mysore Road and Shanthinagar. Hence, the pollutants like SO<sub>2</sub>, NO<sub>2</sub> showing decreasing trend.

### 11. Saneguravanahalli CAAQM, Nisarga Bhavan, Bengaluru



At S.G.Halli SO<sub>2</sub>, NO<sub>2</sub> and CO values are within the national limit of ( 40.0 µg/m<sup>3</sup> and 50.0 µg/ m<sup>3</sup>, 2.0 mg/M3) respectively for the period of 2012 -20, and also PM<sub>10</sub> values are within the national limit ( 60.0 µg/M3), but increased for the year 2015-16. This is due to the sewer line and main drain construction activities inside and surrounding area of S.G.Halli and vehicular movement and road dust.

### 13. UVCE, KR Circle, Bengaluru



PM<sub>10</sub> values have exceeded the national ambient air quality standard (60.0 µg/m<sup>3</sup>) in all measured years whereas SO<sub>2</sub> and NO<sub>2</sub> are within the national limit during 2016-20. PM<sub>10</sub>

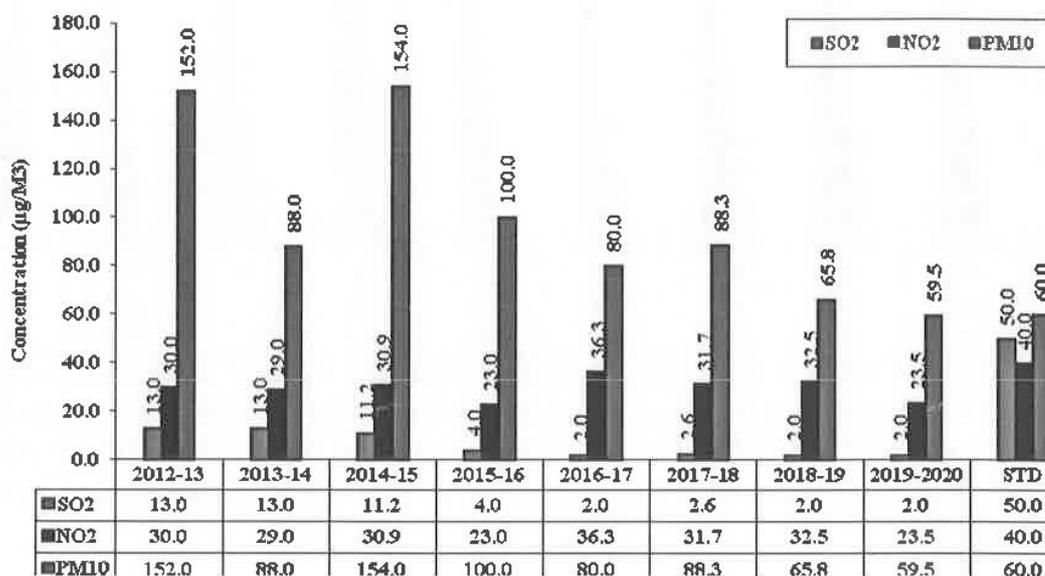
limit exceeding values is due to the construction activities and vehicular movement and road dust.

**Sensitive zone:** Ambient air quality monitoring stations are installed at following sensitive zones of Bengaluru and the results are as below:

- i) Victoria Hospital, Bengaluru.
- ii) Indira Gandhi Child Care Centre, NIMHANS

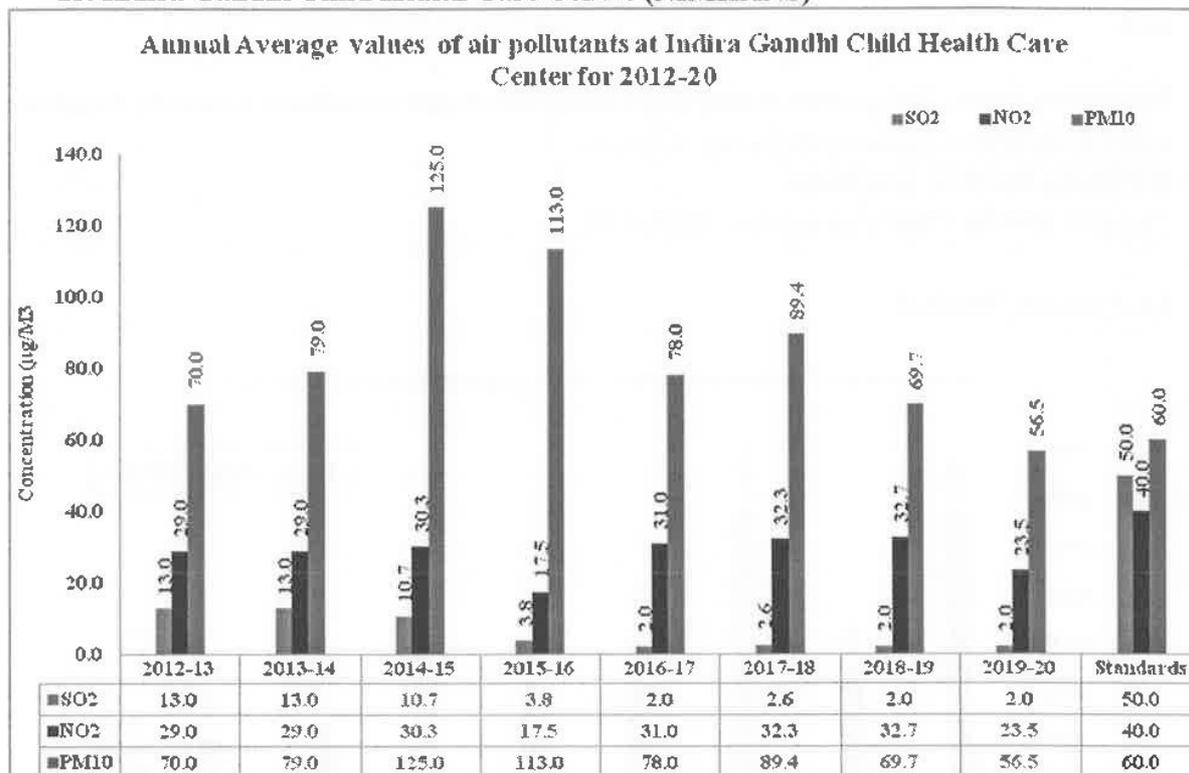
#### 14. Victoria Hospital

Annual average values of air pollutants at Victoria Hospital during the years 2012-20



PM<sub>10</sub> values are within limit of the national ambient air quality standard (60.0µg/m<sup>3</sup>) in all the measured years 2012-2019, whereas in the year 2019-20 showing decreasing trend due to developmental work like fly over ,metro ,road dust and SO<sub>2</sub> and NO<sub>2</sub> are within the national limit.

### 15. Indira Gandhi Child Health Care Centre (NIMHANS)



PM<sub>10</sub> values are within limit of the national ambient air quality standard ( $60.0\mu\text{g}/\text{m}^3$ ) in the years 2012-13 to 2018-19 this is due to the construction activities and vehicular movement and road dust and SO<sub>2</sub> and NO<sub>2</sub> values are within the national limit. Whereas in the year 2019-20 showing decreasing trend due to developmental work and implementation of some action points.

#### 5A.7.2: Air Quality in different districts of Karnataka

The Board during 2019-20 has monitored the ambient air quality at 22 locations of 19 major cities of Karnataka using manual equipments under National Ambient Air Quality Monitoring Programme (NAMP). Ambient air quality monitoring is being carried out twice a week throughout the year for 24 hours, for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Ammonia & Lead using manual equipments as per Central Pollution Control Board guidelines and the data is sent to CPCB, New Delhi electronically and also uploaded in the Board website.

**Table: 5A.12: Annual average values of Air Pollutants in other districts of Karnataka during the year 2019-20**

Sl No.	Location	SO <sub>2</sub> µg/M <sup>3</sup>	NO <sub>2</sub> µg/M <sup>3</sup>	PM <sub>10</sub> µg/M <sup>3</sup>	PM <sub>2.5</sub> µg/M <sup>3</sup>	NH <sub>3</sub> µg/M <sup>3</sup>	Pb µg/M <sup>3</sup>	AQI	Category
1.	KSPCB Office Premises, Kolar	2.0	24.6	100.1	29.3	44.2	*	100.1	Satisfactory
2.	KSPCB Office Premises, Tumakuru	2.0	25.4	92.2	28	20.9	*	92.2	Satisfactory
3.	KSRTC, Building,	2.0	15.3	49.1	26.7	15.4	*	49.1	Good

	K. R. Circle, Mysuru								
4.	KSPCB Office Premises, Mandya	2.0	13.2	41.4	13.0	12.5	*	41.4	Good
5.	KSPCB Office Premises, Kodagu	2.0	12.4	32.7	17.2	11.5	*	32.7	Good
6.	KSPCB Office Premises, Chamaraja nagar	2.0	14.1	52.2	27.1	14.3	*	52.2	Satisfactory
7.	KSPCB Office Premises, Hassan	2.0	22.0	40.5	23.2	5.0	*	40.5	Good
8.	Baikampady Ind. Area, Mangaluru	7.5	10.5	46.1	20.4	10.0	*	46.1	Good
9.	Gokul Rd. Opp. to New Bustand, Hubbli	2.0	19.6	75.0	23.6	22.3	*	75.0	Satisfactory
10.	Lakkamanahalli ind.area, Dharwad	3.5	15.2	57.3	18.3	20.6	*	57.2	Satisfactory
11.	Karwar Port, Director's Office, Karwar	*	*	*	*	*	*	*	*
12.	KSPCB Office Premises, Davangere	4.0	6.6	50.6	15.0	6.5	*	50.6	Satisfactory
13.	Mothi Theatre, Gandhi Circle, Davangere	24.5	12.0	100.5	*	7.0	*	100.5	Moderate
14.	HPF Intake Well, Ranibennur	*	*	*	*	*	*	*	*
15.	VISL, Bhadravathi,	21.0	6.3	31.2	11.3	5.8	*	31.2	Good
16.	KSPCB Office Premises, Chitradurga	3.0	6.0	50	15.0	5.3	*	50.0	Good
17.	KSPCB Office Premises, Belagavi	2.0	13.7	74	31	10.7	*	74.0	Satisfactory
18.	KSPCB Office Premises, Vijayapura	2.0	16.7	55.4	32.4	15.6	*	55.4	Satisfactory
19.	KSPCB Office Premises, Bagalkote	2.0	16.5	50	22.6	11.5	*	50.0	Good
20.	Government Hospital, Kalaburagi	3.0	14.0	88.6	46.5	23.3	*	88.6	Satisfactory
21.	KSPCB Office Premises, Raichur	2.0	7.6	56.6	16.6	24.0	*	56.6	Satisfactory
22.	KSPCB Office Premises, Bidar	3.0	11.0	67.5	32.4	17.2	*	67.5	Satisfactory
	<b>NAAQ Standards</b>	<b>50</b>	<b>40</b>	<b>60</b>	<b>40</b>	<b>100</b>	<b>0.500</b>		
	<b>Note : * Monitoring not carried out</b>					<b>Annual average</b>		<b>60.6</b>	<b>Satisfactory</b>

PM<sub>10</sub> values are exceeded the national ambient air quality standard at 7 cities viz Kolar, Dharwad, Hubli, Belgaum, Bidar, Tumakuru and Davanagere and PM<sub>2.5</sub> values are exceeded at Kalaburagi. All other parameters are well with in the national ambient air quality standards. The AQI of Mandya, Kodagu, Mysore, Hassan, Mangalore, Bagalkote, Chitradurga and Bhadravathi is under Good category, AQI of Kolar, Tumakuru, Davanagere, Bidar, Raichur, Vijayapura, Belgavi, Chamarajanagar, Mangalore, Hubli, Dharwad, Karwar and Chitradurga is under satisfactory category and AQI of Davanagere is under moderate category due to the construction activities and vehicular movement and road dust.

### 5A.7.3: Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in different districts of Karnataka

The Board has established total 29 Nos CAAQMS for 8 parameters in Karnataka in phased manner. Compiled Statistical Data is sent to CPCB, New Delhi through electronically and also the data is uploaded in the Board Website and displaying to the public.

- The 5 new CAAQM stations at Bengaluru are established in addition to 2 CAAQMS already installed.
- Each non-attainment cities viz Mangaluru, Hubli-Dharwad, Davangere and Kalaburagi each district one CAAQM station.
- Chikkaballapur, Ramanagar, Udupi, Haveri, Koppal, Yadagiri and Gadag-each district one CAAQM station.
- Mysore, Chamarajanagar, Hassan, Shimoga, Karwar, Raichur, Bidar, Chikkamagaluru, Vijayapur, Bagalkote and Kolar-each district one CAAQM station

### Annual Air Quality Index (AQI) of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in other cities of Karnataka for the year 2019-2020

Sl. No	Name of the Monitoring Stations	Monthly average values of Pollutants							AQI	Prominent Pollutant
		PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	NH <sub>3</sub> µg/m <sup>3</sup>	O <sub>3</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>		
1	KSPCB Premises, Mysuru	51.5	19.0	7.3	15.9	18.2	36.6	0.8	52	PM <sub>10</sub>
2	KSPCB Premises, Shivamogga	54.9	20.6	4.0	24.1	22.5	44.6	0.6	55	PM <sub>10</sub>
3	KSPCB, Premises, Chikamagaluru	35.0	17.7	4.3	12.8	8.8	54.2	1.0	50	CO
4	KSPCB Premises, Vijayapura	58.6	37.2	3.4	9.4	4.3	66.3	0.8	66	O <sub>3</sub>
5	Near District Stadium, Chamrajanagar	49.0	19.8	2.3	11.2	15.7	39.1	0.4	49	PM <sub>10</sub>
6	Basaveshwar Engineering College, Bagalkote	72.1	30.6	5.3	11.4	11.2	49.9	1.0	72	PM <sub>10</sub>
7	Government PU college, Chikkaballapur	77.9	31.6	12.1	16.7	11.3	27.4	0.7	78	PM <sub>10</sub>
8	DC Office Premises, Yadagiri	55.8	31.6	16.5	9.0	3.0	42.5	0.6	56	PM <sub>10</sub>
9	KSPCB Regional Office- Ramanagar	57.7	26.2	21.4	15.0	8.3	26.5	0.5	58	PM <sub>10</sub>
10	Mundaragi Road, Near Chirayu Hospital, Gadag	70.2	30.6	10.4	9.9	6.9	40.1	0.4	70	PM <sub>10</sub>

11	Corporation Garden Opposite, Hubballi	81.5	33.1	17.9	21.8	6.6	18.9	0.5	82	PM <sub>10</sub>
12	GOVT. ITI College, Kalaburgi	94.1	45.6	7.7	20.6	9.6	31.5	0.8	94	PM <sub>10</sub>
13	KSPCB Premises, Bidar	76.0	28.7	4.3	8.8	8.5	12.9	0.5	76	PM <sub>10</sub>
14	KSPCB Premises, Hassan	77.4	28.6	6.8	17.0	12.7	7.3	1.1	77	PM <sub>10</sub>
15	KSPCB Premises, Kolar	53.4	23.7	14.6	16.1	10.5	10.7	0.7	53	PM <sub>10</sub>
16	DC Office Compound, Koppal	80.2	25.8	11.4	13.7	26.3	24.7	0.6	80	PM <sub>10</sub>
17	Vasanth Vihar, Mangalore	60.3	22.5	14.6	6.5	12.2	8.2	1.1	60	PM <sub>10</sub>
18	DC Office compound, Raichur	98.2	35.5	6.7	9.1	12.2	14.8	0.5	98	PM <sub>10</sub>
19	Board High School compound, Udupi	76.0	52.7	20.9	10.9	6.4	13.4	1.3	88	PM <sub>2.5</sub>
20	KSPCB Premises, Haveri	59.7	22.9	12.4	8.2	24.4	15.5	1.1	60	PM <sub>10</sub>
21	Central Excise & Customs Office Devaraj URS layout, Davanagere.	71.1	16.5	37.2	9.0	6.2	28.6	0.5	71	PM <sub>10</sub>
22	KSPCB Premises, Karwar	69.0	31.5	21.1	16.9	5.3	6.4	0.3	69.0	PM <sub>10</sub>
	<b>Standards, µg/m<sup>3</sup></b>	<b>60.0</b>	<b>40.0</b>	<b>50.0</b>	<b>40.0</b>	<b>100.0</b>	<b>100.0</b>	<b>2.0</b>		
<b>Annual average AQI</b>									<b>68.8</b>	<b>Satisfactory</b>

**Note : \* Monitoring not carried out**

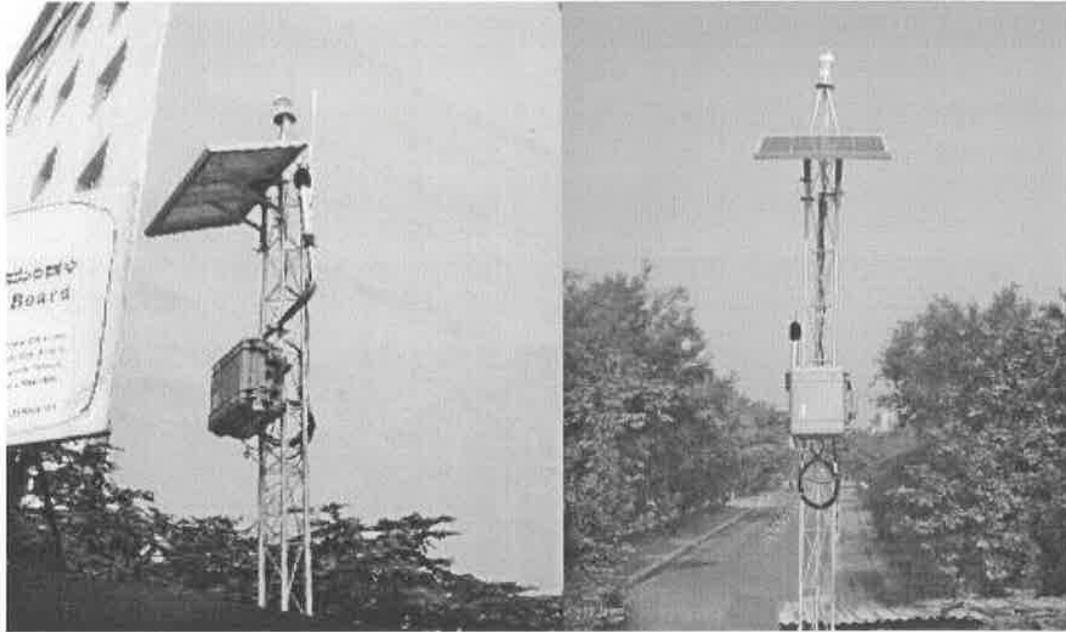
PM<sub>10</sub> values are exceeded the national ambient air quality standard at all monitoring locations except 9 cities viz Mysuru, Shivamogga, Chikkamagaluru, Vijayapura, Chamarajanagar, Kolar Yadagiri, Ramanagara and Haveri. PM<sub>2.5</sub> values are well within the national ambient air quality standard at all monitoring locations except Kalaburagi and Udupi. All other parameters are well within the national ambient air quality standards. The AQI of Chikamagaluru and Chamarajanagar is under Good category and all other cities are under Satisfactory. PM<sub>10</sub> values are exceeded due to the construction activities and vehicular movement and road dust.

**National Ambient Noise Monitoring Programme (NANMP) :**

As per section 5.2.8 (IV) of National Environmental Policy (NEP)-2006, CPCB is in the process of developing Noise Monitoring Network in India. It has decided to include ambient noise as a regular parameter for monitoring in specified urban areas.

The Hon'ble Minister for Environment and Forests, Govt of India has announced the road map for systematic monitoring of ambient noise national noise monitoring network covering 25 cities by 2012 to make Indian cities less noisy.

Karnataka is one among the State and in Bangalore it is proposed to establish 10 continuous monitoring stations. As per the proposal the Board has established 10 continuous ambient noise monitoring station with 50:50 cost sharing basis.



**Table 5A.16: Continuous Ambient Noise Monitoring Stations(CANMS) in Bengaluru**

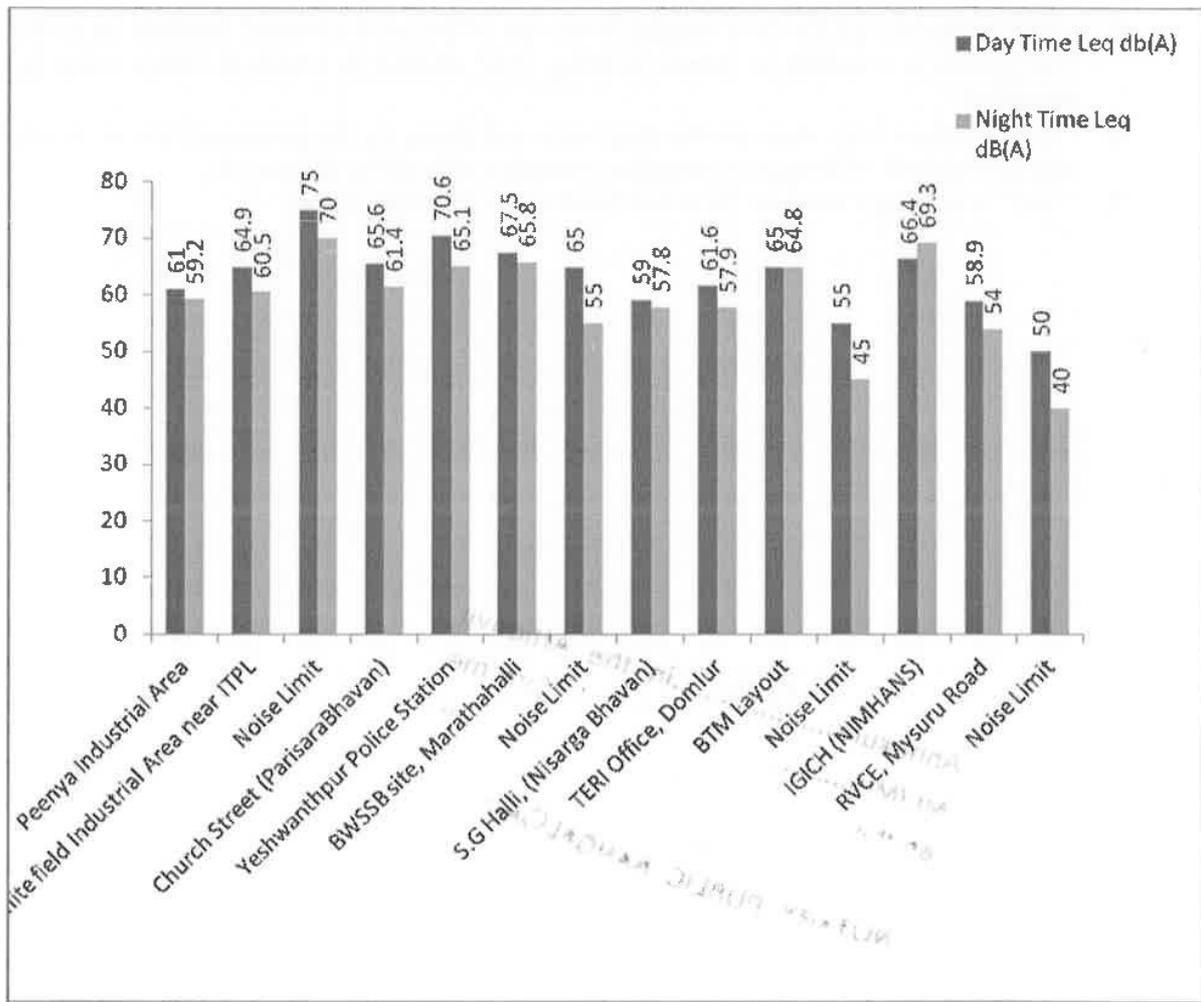
Sl No.	Station Name	Type of Area
1	White field Industrial Area ,( Graphite India )	Industrial Area
2	Ace Manufacturing System, Peenya Industrial Area	Industrial Area,
3	KSPCB, Parisara Bhavan, # 49, Church Street	Commercial area
4	BWSSB site No. 137. Kadubidnahalli	Commercial Area
5	Yeshwanthpur, Police Station	Commercial Area
6	KSPCB office Building, Nisarga Bhavan, Sanegravannahalli,	Residential area
7	Madival lake, BTM II <sup>nd</sup> stage	Residential area
8	TERI Office, Domlur	Residential Area
9	Indira Gandhi Institute of Child Health Care Centre(NIMHANS)	Sensitive Area
10	RVCE, Mysore Road	Sensitive Area

**Table 5A.17: Annual Noise levels measured at Ten Continuous Noise Monitoring Stations in Bengaluru city for 2019-20**

Sl No	Name of the Station	Limit dB (A) L <sub>eq</sub>	Day Time			% Increase/D decrease	Limit dB(A) L <sub>eq</sub>	Night Time			% Increase
			L <sub>eq</sub>	L <sub>min</sub>	L <sub>max</sub>			L <sub>eq</sub>	L <sub>min</sub>	L <sub>max</sub>	
1	Peenya Industrial Area	75	61.0	27.5	78.2	18.7 % ↓	70	59.2	48.9	70.9	Within limit
2	White field Industrial Area near ITPL	75	64.9	29.2	81.8	13.5 % ↓	70	60.5	49.7	74.6	Within limit

3	Church Street (ParisaraBhavan)	65	65.6	28.7	80.0	0.9 %↑	55	61.4	50.0	76.7	11.6 %
4	Yeshwanthpur Police Station	65	70.6	31.0	82.3	8.6 %↑	55	65.1	55.6	77.0	18.4 %
5	BWSSB site, Marathahalli	65	67.5	29.1	94.5	3.8 %↑	55	65.8	48.2	86.0	19.6 %
6	S.G Halli, (Nisarga Bhavan)	55	59.0	27.8	98.4	7.3 %↑	45	57.8	36.3	99.8	28.4 %
7	TERI Office, Domlur	55	61.6	27.5	80.2	12.0 %↑	45	57.9	40.5	74.9	28.7 %
8	BTM Layout	55	65.0	29.7	83.2	18.2 %↑	45	64.8	58.0	81.6	44.0 %
9	IGICH (NIMHANS)	50	66.4	25.8	96.8	32.8 %↑	40	69.3	37.8	88.3	73.2 %
10	RVCE, Mysuru Road	50	58.9	27.1	91.5	17.8 %↑	40	54.0	46.1	87.5	35.0 %

Continuous ambient noise level data of Bengaluru city for the year 2019-20



Sl. No	Category of Area	Day Limit ddB(A) Leq	Status of noise level in day	Night Limits dB(A) Leq	Status of noise level in night
1	Industrial Area	75	0 % exceeded	70	0 % exceeded
2	Commercial area	65	0.9 to 8.6 % of exceeded	55	11.6 to 18.4 % exceeded
3	Residential Area	55	0.9 to 18.2 % exceeded	45	28.4 to 44 % exceeded
4	Sensitive Area	55	17.8 to 32.8 % exceeded	45	35.0 to 73.2 % exceeded

**Note:**

1. Day time shall mean from 6.00 AM to 10.00 PM and Night time shall mean from 10.00PM to 6.00 AM
2. Silence zone is an area comprising not less than 100 meters around Hospitals, Educational Institutions, Courts, Religious places or any other which is declared as such by the competent authority.
3. dB(A) Leq denotes the time weighted average of the level of sound decibels on scale "A" which is relatable to human hearing. "A" decibel is a unit in which noise is measured.
4. "A" in dB(A) Leq, denotes the frequency weighting in the measurements of noise and corresponds to frequency response characteristics of the human ear.
5. "Leq" it is energy mean of the noise level over a specific period.

Annexure.....<sup>250</sup>.....in the Affidavit  
 Mr./Mrs.....  
 on this.....  
 NOTARY PUBLIC BANGALORE

## 100 Industrial cluster

Sl. No.	Thematic area	Current Status	Desirable level	Gap between current status and desired levels	Time lines for attending gaps	Name and designation of the Designated Officer for ensuring compliance
1	100 Industrial cluster	6 Industrial clusters in Karnataka				Sri . M. N.Yoganand, Environmental Officer, 17 Category
		o Action plan/Revised Action Plan prepared and submitted to CPCB				
		Bikampadi Industrial Area, Mangaluru ( achieved 35.05% of Revised action plan )	100%	64.95%	31.3.2024	
		Raichur Growth Center (achieved 61.54 % of Revised action plan)	100%	38.46%	30.6.2022	
		Shimoga (achieved 23.08 % of Revised action plan)	100%	76.92%	30.06.2021	
		Kolhar Industrial Area Bidar ( achieved 23.08% of action plan)	100%	76.92%	31.12.2025	
		Peenya I industrial area (achieved 7.14% of action plan)	100%	92.86%	31.12.2021	
Jigani Bommasandra industrial (achieved 14.28 % of action plan)	100%	85.72%	30.6.2022			

## Details of contaminated /probable contaminated sites of Karnataka

Sl. No	Site ID	Site Name and Address	GPS Coordinates		Land Use	Name of the Polluter (s)	Chemical of concern (CoCs)	Status report submitted before Hon'ble NGT CS/PCS	Action Taken	Action proposed
1	KA-560-16	Peenya Industrial Area, IIIrd Phase, Bengaluru - 560 058	13.035	77.5226	Industrial	Not Known	Zinc, Chromium, Lead	PCS	The GPS reading falls inside an industry by name M/s Biyar Rubbers Pvt Ltd., Plot No. 212, 3rd Phase, Peenya Industrial Area, Bangalore. This is a Orange category industry engaged in manufacture of Tyre retreading material. The main raw metrial used are Natural rubber, Synthetic rubber, Carbon black, Rubber processing oil and chemicals. The industry is not using any raw materials which generates zinc, cromium or lead as waste. There is no contamination at the said site. However, outside the said industry, at a distance of about 50 m, in the 1st Main Road, mixed solid waste (mostly construction & demolition waste, domestic garbage, industrial garbage & other wastes) of about 50-100 Tons has been dumped all along the road in a stretch of about 200 m. A letter is addressed to the BBMP to clear the solid waste dumped at the said site. Board will regularly inspect the site.	It is recommended to delete this site from the list of probable contminated site.
2	KA-560-17	Peenya Industrial Estate, IIIrd Stage, Bengaluru - 560 058	13.0195	77.4984	Industrial	Not Known	Lead, Zinc, Copper, Cadmium, Hexavalent, Chromium,	PCS	As per the GPS readings, the location falls behind M/s. Sain Coating Pvt. Ltd., Shed No. A-25 & 26, III Stage, PIE, Bengaluru (West side). The said industry is engaged in powder coating with pre-treatment activity. The effluent is being disposed to CETP and records submitted. The other industries surrounding the siad location are as follows; East side - 2M Engineering & Sri Ramakrishna Dairy (Green category industries). North side - Service road followed by Main Road South side - Main Road. There is no contamination found at the said location and there are no industries in the surrounding area using raw materials of Contaminants of Concern (CoCs).	It is recommended to delete this site from the list of probable contminated site.
3	360-9	Peenya Industrial Area, Bengaluru - 560 058	13.0255	77.525	Industrial, Habitation settlement	Peenya Industrial area, Bangalore	Zinc, Chromium, Lead	CS	As per the GPS readings, the location falls behind M/s. Paragon Polymer Products Pvt. Ltd., Shed No. B-69, 2nd Cross, Ist Stage, PIE, Bengaluru (Green category) (East side). The other industries surrounding the siad location are as follows; West side - M/s. Future Technologies, M/s. AS Tech & M/s. Innovative Engg Equipments (All Green category units). South side - Main Road North side - Main Road. There is no contamination found at the said location and there are no industries in the surrounding area using raw materials of Contaminants of Concern (CoCs).	It is recommended to delete this site from the list of contminated site.
4	KA-560-18	Peenya Industrial Area, Ist Phase, Bengaluru - 560 058	13.0384	77.5261	Industrial	Peenya Industrial area, Bangalore	Lead, Zinc, Copper, Cadmium, Hexavalent, Chromium,	PCS	As per the GPS readings, M/s. Triveni Engineering industry (Green Category unit carrying out engineering activity) is existing and the borewell water sample analysis indicates that Lead, Zinc, Copper, Cadmium, Hexavalent Chromium, Chromium, Nickel are with in the standards.	It is recommended to delete this site from the list of probable contminated site.
5	KA-560-2 city	Goripalya near Mysore Road, Bangalore, Karnataka E-waste recycling in Bangalore	12.9641	77.5566	Habitation settlement	Informal E-Waste recycling units	Cadmium, Lead, Mercury, Zinc, Chromium, Arsenic, Copper	CS	Earlier municipal solid waste was dumped in the open space. BBMP authorities have cleared the waste and sent solid waste to their solid waste landfill site for further treatment and disposal. At present there is no dumping of solid waste. Hence, no further action is required.	It is recommended to delete this site from the list of contminated site.

6	KA-560-6 city	Lalbagh Lake, Bangalore, Karnataka - 560 004.	12.945	77.585	Water Boadis	BBMP, BDA,PWD, MI, CMC and Panchayath, Tourism Dept.	Lead	PCS	The lake is located within Lalbagh garden and there is no industries closed by, a part of the sewage generated from Jayanagar 2nd block residential area was entering into the lake due to the leakage of manhole provided to the sewer line which is passing adjacent to the lake. BWSSB authorities have replaced and reconstructed manhole and diverted all the sewage into their sewer network. Now, there is no entry of any sewage into the lake. Board is monitoring the lake regularly. The analysis reports for the last 4 years reveals that there is no presence of lead in the lake water except during the year 2018 i.e., 0.001 mg/l (copy of the the compiled result data sheet is herewith enclosed for reference). Hence, no further action is required	It is recommen to delete this site from the list of probable contminated site.
7	KA-560-14	Federal Moghul Ltd., Doddaballapur Road, Yelahanka, Bangalore - 560 064.	12.9965	77.6109	Industrial	Escort Group	Chromium VI, Chromium Total	PCS	The Escorts Group is one of the Indian Automotive components manufacturing companies which were operating in Yelahanka, Bengaluru since 1977 involving in the manufacturing of automotive components such as Piston, Piston Rings and Pins. The Chrome plating is one of the process involved in the manufacturing of the Piston Rings. The Escorts group was storing used spent chromic acid in an RCC lined underground tank, which generates from the Chrome plating operation. As, chromic acid is corrosive and highly acidic in nature, the underground RCC tank which was used for storing of used spent chromic acid started leaking and slowly caused underground water contamination in and around the industry. The Escorts Group had sold the above said manufacturing unit to Federal Mogul Goetze India Ltd, in the year 2016. Subsequently, The Board noticed ground water contamination in few wells in and around the industry and imposed strict direction on the company for Ground water Remediation. The Federal Mogul has implemented effective ground water remediation program by the involving American based consultants. Federal Mogul also involved National Geo-physical Research Institute(NGRI) as per the direction of Karnataka State Pollution Control Board for ground water modelling to understand the extent of contamination and the year from which the ground water contamination started. The ground water in and around the industry was jointly monitored by Federal Mogul, University of Agricultural Sciences, Bangalore since 2010 and many recommendations were given both by the NGRI and University of Agricultural sciences towards the remediation. The quality of ground water was monitored on quarterly basis and now it is monitored at six monthly intervals. Based on various scientific studies conducted by Federal Mogul and as per the advice of NGRI, Federal Mogul adopted United State Environmental Protection Agency (USEPA) approved remediation process such as Ex-situ and In-situ treatment. The Ex-situ treatment is the remediation methodology where the ground water is being pumped out /extracted from the ground to create hydraulic capture/ avoid off-site migration and treated in a automated chrome water treatment plant followed by excavation of highly contaminated soil and off- site treatment at TSDF facility. Similarly, In-situ treatment is the injection of reductants directly in to the soil and ground water for treatment of Hexavalent chromium at the contaminated source itself. The Federal Mogul also shifted the old plating operation in order to facilitate the remediation activity to a new location where the scientific impervious floor lining is done to eliminate any possibilities of soil or ground water contamination in treatment. The Ground water remediation is still going on .	Remediation action is under progress.
8		Hebbal Lake, Bangalore, Karnataka-560024	13.0462	77.5858	Water bodies	Forest Department, Minor Irrigation Department, Horticulture Department, Public Works Department(PWD), Bangalore Mahanagara	Lead	PCS	Hebbal Lake is located in the north of Bangalore and at the mouth of National Highway 7, at the junction of Bellary road and the outer ring road(ORR). It was one of the three lakes created in the year 1537 by Kempegowda, like most lakes or "tanks" in the Bangalore region it was formed by the damming natural valley systems by the construction of bunds. The catchment area of the lake includes the reidential areas of Yeshwanthpur, Mathikere, Rajmahal Vilas Exention, Bharat Electronics Limited and Hindusatn Machine Tools Limited colonies. In the late 1990s, an ecological experiment was conducted with the introduction of Neochetina. A project for lake restoration funded under the Indo-Norwegian Environmnet Programme led to major changes in the ecosystem begining in 1998, two artificial islands were created using the soil from delisting under this project. In 2004, the LDA began a process of "public-private participation" where private companies bid for the lakes to "develop and maintain" them for the next 15years. The Hebbal, lake is leased for 15years to M/s. East India Hotels Ltd for maintenance. Specific	It is recommended to delete this site from the list of probable contminated site.

						Palike(BBMP), Bangalore Development Authority(BDA), Tourism Department, City Municipal Councils and Panchayats.			Observations: 1. Hebbal Lake presently is in an extent of 116acres including park. The depth of the lake is 7feet. 2. All along the lake, a bund has been provided to prevent entry of sewage in to lake. 3. It was observed that the tank is maintained well and no sewage is entering into the tank. 4. Fish culture is being done in the lake by the department of fisheries. 5. M/s. East India Hotels Ltd., have developed and maintained the garden on the southern side of the lake. A path way is also provided for the walkers. 6. The tank is rain fed. 7. M/s. East India Hotels Ltd has provided one sewage treatment plant on the western side of the lake. Whenever, water level in the lake comes down the sewage from the air will be taken to the STP and treated sewage will be taken in to the lake to maintain the lake water level, mainly during summer. This office is conducting water quality monitoring every month. As per the analysis report, last one year the water quality status of this lake falls under "D" category which is fit for propagation of wild life and fisheries.	
9	KA-560-10	Vrishabhavathi River	12.9442	77.5285	Water bodies	Not Known	Chromium	PCS	This KSPCB is regularly monitoring Vrishabhavathi Valley (Near Kalyani Motors- Nayandahalli as indicated in the GPS coordinates of Contaminated sites). Every month water sample are collected and analyzed at Board Central laboratory. There is no trace of Chromium in effluent sample and traces of Chromium found in sediment sample, the level of concentration is well below the limit prescribed for Hazardous ( $\geq 5000$ Mg/Ltrs) this may be due to operation/ discharge of effluent from un organized Electroplating and textile industries operating in the upstream of sampling location in BBMP area. Board has banned the establishment of new Electroplating and surface treatment units within BBMP area since 2013. The analysis reports of the Sediment sample for the period from 2014 to 2017 is enclosed for kind reference. (Annexure _____)	It is recommended to delete this site from the list of probable contaminated site.
10	KA-560-3	Kengeri Tank, Bangalore, Karnataka-560060	12.9174	77.49	Water bodies	Forest Dept, Hort Dept, BDA,PWD, MI, CMC and Panchayath, Tourism Dept.	Cadmium	PCS	Water sample from Kengeri Tank was collected and analyzed at Board Central laboratory. There is traces of Cadmium in Tank water sample which is within the limits. the level of concentration is well below the limit prescribed for inland surface water (2 Mg/Ltrs).This may be due to usage of phosphate fertilizers (before the development of upstream area into residential), Sewage entry from the catchment area, degradation of Nickel Cadmium batteries, Coloured plastic (household use) in the dumpings of municipal solid waste. Presently tank is full of weeds and sewage, hence further sampling have been stopped.	Board has addressed letter to Chief Engineer BWSSB, Joint Commissioner BBMP and Commissioner/ Executive Engineer BDA to take preventive action by stopping discharge of sewage and sullage into the tank immediately and to divert the sewage and sullage into UGD networks of BWSSB for further treatment.
11	KA-560-15	Mavalipura Dumpsite, Yelahanka Karnataka 560 060.	13.1224	77.5378	waste land	Industrial and municipal dumping site	Total Cr, Tin, Silver, Zn, Mo, Cu, Cd, Pb, Arsenic, Hg, Hexavalent, Chromium,	CS	This is a solid waste processing facility, currently not in operation. There is large quantity of accumulated legacy waste at this site.	The Board has addressed letter to BBMP for management of legacy waste.

12	KA-560-8	Mangamnapalya Road, Mangamnapalya Village, Hosur Road, Bengaluru, Karnataka-560030	12.9029	77.632	Water bodies	Habitation, Settlement, Commercial and industrial	Lead	CS	The co-ordinates mentioned were verified and it pertains to Hosur Road, i.e., NH-7 (Chennai-Bengaluru Highway) and fly over road to Electronics City. The road and fly over is developed and is under use. However the sample collected from Mangamnapalya Lake reveals that the parameters are conforming to Class D standards.	It is recommended to delete this site from the list of contaminated site.
13	KA-560-7	Madiwala Lake, BTM 2nd Stage, Bengaluru, Karnataka-560076	12.5417	77.3649	Water bodies	Not Known	Lead	PCS	KSPCB is regularly monitoring water and sediment quality of Madiwala Lake. TAs per the Analysis report Lead concentration in lake water sample is BDL for the January 2020 but water quality shows class D. Sediment sample of lake having lead concentration 22.1 mg/Kg. The level of lead concentration in sediment are below the concentration limit of Hazardous (> 5000 mg/Kg).	It is recommended to delete this site from the list of probable contaminated site.
14	KA-560-3	Bellandur Lake, Bellandur Village, Bengaluru, Karnataka - 560103	12.927	77.668	Water bodies	Forest Dept, Hort Dept, BDA, BBMP, PWD, MI, CMC & Panchayath, Tourism Dept.	Cadmium	PCS	KSPCB is regularly monitoring water and sediment quality of Bellandur Lake. As per the Analysis report, there are no traces of Cadmium concentration in lake water sample but water quality shows class E. & sediment sample. The level of cadmium concentration in water shows class E Sediment sample of lake having lead concentration 16 mg/Kg. The level of cadmium concentration in sediment samples are below the concentration limit of Hazardous (> 50 mg/Kg).	The Board has advised BDA to carry out detailed analysis of sludge to ascertain whether it is hazardous in nature.
15	KA-560-4	Arekere Lake, Arekere Village, Bengaluru, Karnataka-560076	12.57	77.374	Water bodies	Forest Dept, Hort Dept, BDA, BBMP, PWD, MI, CMC & Panchayath, Tourism Dept.	Lead	PCS	KSPCB is regularly monitoring water quality of Arekere Lake. As per the Analysis report Lead concentration in lake water sample is BDL for the January 2020 but water quality shows class E. Sediment sample of lake having lead concentration 12 mg/Kg. The level of lead concentration in sediment are below the concentration limit of Hazardous (> 5000 mg/Kg).	It is recommended to delete this site from the list of probable contaminated site.
16	KA-560-1	Agara lake, Bangalore City, Karnataka-560102	12.5511	77.3834	Water bodies	Forest Dept, Hort Dept, BDA, BBMP, PWD, MI, CMC & Panchayath, Tourism Dept.	Lead	PCS	KSPCB is regularly monitoring water quality of Agara Lake. This lake is rejuvenated by Karnataka Lake Conservation and Development Authority. As per the analysis report of the lake water after rejuvenation lead concentration is BDL (Jan-2020). Sediment sample of lake having lead concentration 16 mg/kg. The level of lead concentration in water shows class D standards & sediment samples are below the concentration limit of Hazardous (>5000 mg/kg)	It is recommended to delete this site from the list of probable contaminated site.
17	KA-560-12	Begur Lake, Begur Road, Bengaluru, Karnataka-560068	12.5339	77.3713	Water bodies	Not Known	Chromium, Lead, Iron, Zinc, Nickel, Copper	PCS	KSPCB is regularly monitoring water quality of Begur Lake. As per the Analysis reports, the level of said parameters' concentration in water shows class D standards. sediment sample of lake is having having metal concentration are below the permissible limit of Hazardous except for Zinc 20000 mg/ Kg, Chromium, copper, Lead and nickel -5000 mg/Kg. However, there is no Standard stipulated for Iron.	Samples at various points in the lake will be collected based on the analysis reports further action will be taken.
18	KA-581-	Dandeli, Karnataka-581325	15.238	74.6151	Water Bodies	West Coast Paper Mills Ltd.,	Dioxins	PCS	The GPS Co-ordinates is showing as Urdu School which is more than 1 Km Upstream of M/s. West Coast Paper Mills Ltd. However, the polluter is mentioned as M/s. West Coast Paper Mill Ltd. The industry was using elemental chlprine until 2009 and this activity might have possibly resulted in Bio-accumulation in the surrounding environment including Water, Soil, Sediments, Sludge, Flora and Fauna around the said industry for the presence of dioxin in an obnoxious level.	The analysis of dioxin will be carried out and based on the results further action will be taken.
19	KA-570-2	Metagalli Industrial Area, Mysore city, Karnataka, India - 570 016 (Mys Urban)	12.3601	76.6326	Industrial	Not Known	Not Known	PCS	Presently the site ID KA-570-2 is utilized by Geetha Sistushikshana Education Trust (Engineering College). As per the records, earlier in the said site M/s. Vasavi Soft drinks (P) Ltd., was in operation & engaged in manufacturing of bakers yeast activity. The unit was closed and new Engineering college has been established & operating at the said site	It is recommended to delete this site from the list of probable contaminated site.
20	KA-571-	Cauvery River,	12.14	76.6757	Water	Not Known	Lead,	CS	No such Contamination of lead has been observed and there are no industries/ activities engage in the discharge of	CMC Nanjangud has been

		Downstream,			Bodies		Cadmium,		lead into river Cauvery.	informed to provide UGD
21	KA-570-3	Hebbal Industrial Area, Mysore city, Karnataka, India - 570 016 (Mys Urban)	12.3612	76.6008	Industrial	Not Known	Not Known	PCS	Site ID KA-570-3 is utilized by M/s. Infosys Limited (Software Company). As per the records, the site was earlier vacant under cultivation by farmers. No contamination is observed	It is recommended to delete this site from the list of probable contaminated site.
22	KA-570-4	Hootagalli Industrial Area, Mysore city, Karnataka India - 571 301	12.3537	76.5837	Industrial	Not Known	Not Known	PCS	There was an engineering industry namely Video Vision Technology with CNC machines drilling machines and sheet metal cutting machines, Now it is closed. It is not operating since 4-5 years. No contamination is recorded.	It is recommended to delete this site from the list of probable contaminated site.
23	KA-577-1	Davangere Harihara Taluk,	14.5114	75.8081	Mixed(Industrial and Habitation settlement)	Not Known	Fluoride	PCS	The area surrounded by residential activities. There are no any industrial activities in the said location. There was one municipal drain carrying the domestic sewage. The fluoride concentration may be due to natural phenomenon.	It is recommended to delete this site from the list of probable contaminated site.
24	KA-572-	Tumkuru Amanikere Lake Watershed, Karnataka, India- 572101	13.3533	77.1103	Water Bodies	Not Known	Not Known	PCS	The Amanikere was located in the midst of Tumkuru City. Bund was constructed at appropriate locations to check the entry of sewage into tank. There were no industries in the vicinity of tank. There was no discharge of effluent from industrial activity into the tank. 4. De-silting of tank was carried out by TUDA/City Corporation.5. The Tumkuru City is under Smart City Programme and action plan was prepared for improvement of overall city including tank and work of improvement is under progress. The entry of sewage into tank was plugged at many locations at periphery of tank. The plantation/garden was done at the periphery of tank. The tank was converted as a picnic spot. There were no slaughter houses near to the tank. Due to heavy rain in the area the tank was full of water. In emergency the water will be utilized by local body for supply of water to the city. Earlier the tank was reported as probable contaminated site and over a time the steps have been taken for protection tank by local body/TUDA. The tank will be monitored on regular basis.	It is recommended to delete this site from the list of probable contaminated site.
25	KA-582-1	Bidar, Karnataka (Vani Organics Pvt Ltd.,)			Industrial	Effluent	Inorganic Salts	PCS	M/s.Vani Organics is industrial unit is engaged in manufacture of Bulk Drugs located in Kolhar Industrial Area, Bidar. Earlier they have solar evaporation pond for treating the trade effluent and same has been closed during the year 2015. The sludge from ponds has been handed over to the TSDF. At present, all the solar evaporation ponds are closed filled with soil and over that plantation have been developed. Factory authority have established MEE with ATFD & ZLD at the time of inspection they were in working condition. There is no contamination found at the said site.	It is recommended to delete this site from the list of probable contaminated site.

Annexure R-11 in the Affidavit  
 Mr./Mrs.....  
 on this .....

  
 NOTARY PUBLIC BANGALORE



**Latest Solid Waste Management Implementation Status in 90 GPs selected as per NGT directions for developing as model GPs**

Sl.No.	DISTRICT	TALUK	GP	DPRs Approved Yes/No	Total No of Households + Shops + other waste Generators	Total No of households practicing HH Composting ( Pipe / Kitchen etc)	No of HHs covered under Door to Door collection in Segregation manner	Total waste generated in Ton	Wet waste Collected and Treated in Ton	Dry waste Collected in Ton	Compost sale Amount in Rs	Recyclable sale Amount in Rs (Dry Waste)	User fee Amount in Rs	Fines Amount in Rs
58	Koppal	Gangavathi	Shriramanagar	Yes	2502	50	955							
59		Koppala	Alavandi	Yes	2308	0	0	2.20	2.00	0.20				
60		Koppala	Munerbhada	Yes	2152	0	0	0.00	0.00	0.00				
61		Mandya	Bevinahalli	Yes	1474	1051	753	2.50	1.00	1.50				
62	Mandya	Maddur	Goruvanahalli	Yes	1390	834	1474	0.16	0.00	0.16				
63		Krishnarajpet	Bukinakere	Yes	2150	1612	1390	0.22	0.00	0.22	0.00	0.00	0.00	0.00
64	Mysuru	Hunsuru	Kattenahadi	Yes	2588	1	1438	0.17	0.00	0.17	0.00	0.00	0.00	0.00
65		Mysore	Hosahundi	Yes	1842	1	886		0.00	0.77	0.00	0.00	0.00	0.00
66		Nanjangud	Hardahanahalli	No	1686	1	970		0.00	0.90	0.00	0.00	0.00	0.00
67	Raichur	Lingsugur	Gurugunta	Yes	2072	0	0	0.00	0.00	0.84	0.00	0.00	0.00	0.00
68		Raichur	Talanur	Yes	1024	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69		Sindhuri	R.H Camp	Yes	3373	1686	1011	0.51	0.00	0.00	0.00	0.00	0.00	0.00
70	Ramanagar	Chanarayana	Kodamballi	Yes	1883	1769	1250	0.45	0.20	0.25	0.00	4000.00	0.00	0.00
71		Kanakapura	Kodihalli	Yes	1755	1755	1000	0.30	0.10	0.20	0.00	3000.00	0.00	0.00
72		Magadi	Kooduru	Yes	2870	90	2398	0.75	0.45	0.35	0.00	15000.00	0.00	0.00
73	Shrirangapatna	Bhadrahati	Holehonuru	No	3640	0	0		0.00	0.00	0.00	0.00	0.00	0.00
74		Hosangara	Ripponpete	Yes	2006	400	1500		0.03	0.40	10000.00	12000.00	30000.00	0.00
75		Sorab	Anavatu	Yes	2662	252	370		0.05	0.06	5000.00	5000.00	65000.00	0.00
76	Tumakuru	Tipaturu	Biliere	Yes	1912	1893	350		0.00	0.25		5000.00	17490.00	0.00
77		Turuvekere	Matasandra	Yes	1538	1675	1000		0.00	0.20		35000.00	56000.00	0.00
78		Tumakuru	K Palasandra	Yes	1513	1503	520		0.00	0.10				
79	Udupi	Kundapur	Vandse	Yes	1223	680	935		0.25	0.27				
80		Karkala	Nitte	No	2667	0	0		0.05	0.06	5000.00	5000.00	65000.00	0.00
81		Udupi	Yaramballi	Yes	702	252	307		0.16	0.11	18480.00	13000.00	17490.00	0.00
82	Uttara Kannada	Haljval	Teragan	Yes	1234	25	1180					35000.00	56000.00	0.00
83		Kumta	Mangalwada	Yes	3340	1254	781		0.00	1.50		2000.00	0.00	
84			Nadamaskeri	Yes	1809	0	495		0.00	0.03	0.00	6024.00	30600.00	
85	Vijayapur	Basavabagevadi	Lakkal	Yes	2234	0	785	1.57	0.00	0.42	0.00	0.00	2600.00	0.00
86		Vijayapur	Kanomadi	Yes	1570	0	1400		0.00	0.39	0.00	1200.00	0.00	0.00
87			NIDONJ	Yes	2025	0	1235		0.00	0.30	0.00	500.00	0.00	0.00
88	Yadgir	Shorapur	Kodikal	Yes	1525	0	1525		0.00	0.62	0.00	750.00	0.00	0.00
89		Shahpur	Doharnalli	Yes	2415	0	2415		1.38	0.92	0.00	0.00	0.00	0.00
90		Yadgir	Saidapur	Yes	1836	0	1836		1.72	1.20	0.00	0.00	0.00	0.00
	<b>Total</b>		<b>90</b>		<b>180217</b>	<b>61518</b>	<b>106406</b>	<b>50.92</b>	<b>25.57</b>	<b>28.48</b>	<b>47980.00</b>	<b>217416.00</b>	<b>475932.00</b>	<b>2500.00</b>
	<b>SWM DPRs Approved till date</b>			<b>81</b>										

Annexure..... R-12 in the Affidavit  
 Mr./Mrs..... before me  
 on this.....

  
**NOTARY PUBLIC BANGALORE**