

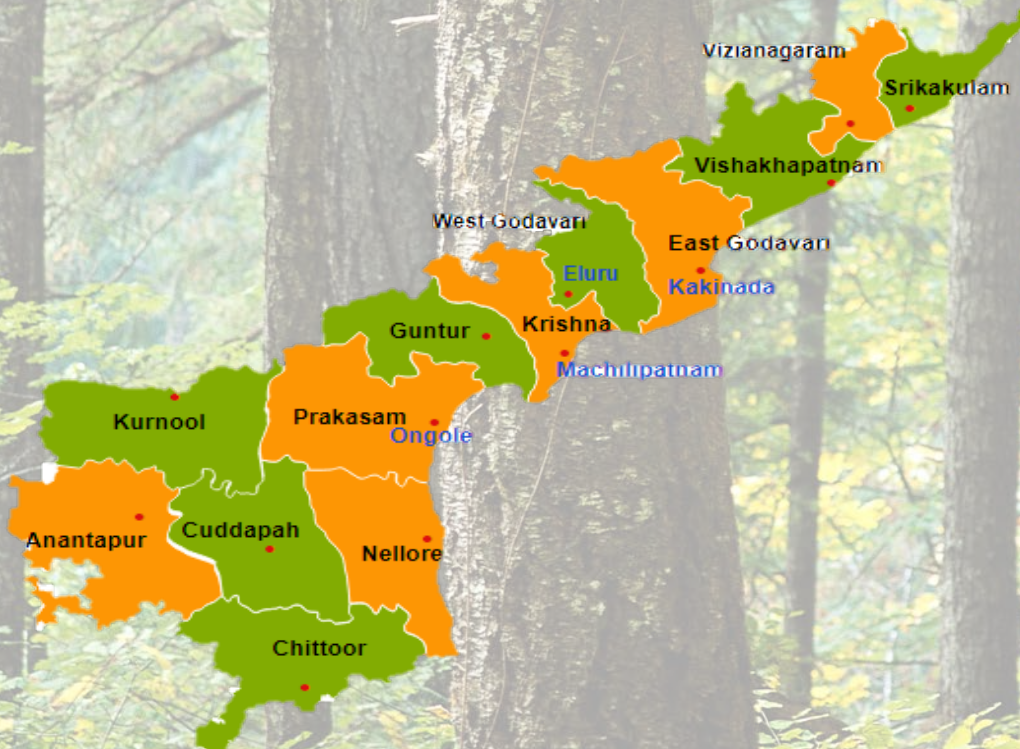


STATE ENVIRONMENT PLAN

FOR

THE STATE OF ANDHRA PRADESH

(As per Hon'ble NGT in O.A.No.360/2018 dated 26.09.2019)



January 2020

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INTRODUCTION

Andhra Pradesh:

Andhra Pradesh lies between 12°41' and 19.07°N latitude and 77° and 84°40'E longitude, and is bordered by Telangana, Chhattisgarh, and Orissa in the north, the Bay of Bengal in the East, Tamil Nadu to the south and Karnataka to the west. Andhra Pradesh has got a coastline of around 974 km, which gives it the 2nd longest coastline in the nation. Two major rivers, the Godavari and the Krishna run across the state. A small enclave 12 sq. mi (30 km²), the Yanam district of Puducherry, lies in the Godavari Delta in the north east of the state. The state includes the eastern part of Deccan plateau as well as a considerable part of the Eastern Ghats. It is the seventh-largest state in India, covering an area of 164,325.89 km². As per the 2011 census, it is the tenth-most populous state, with 49,386,799 inhabitants

After the state bifurcation, the state is made up of two major regions of Rayalaseema, in the inland southwestern part of the state, and Coastal Andhra to the east and northeast, bordering the Bay of Bengal consists of 13 districts namely, Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Prakasam, SPS Nellore, Chittoor, Anantapur, Kurnool and YSR Kadapa with 14 corporations and 96 municipalities & Nagar Panchayats.

The State of Andhra Pradesh is blessed with about 40 major and medium rivers out of which Godavari, Krishna and Pennar rivers contribute to the major chunk of the surface waters. The state has about 40000 minor irrigation sources spread over the thirteen districts. The Geographical area of the state is about 402.70 lakh acres out of which the total cultivable area is 199.04 lakh acres and out of which the irrigation potential is created for 103.11 lakh acres through the existing Major, Medium and Minor irrigation projects. The Water Resources Department caters to the Irrigation, Drinking and Industrial needs of the state of Andhra Pradesh and thus addresses one of the basic needs of the mankind, i.e., food, by providing water to the crops through its system comprising Reservoirs, Canals and other related infrastructure.

The State of Andhra Pradesh is located in East Central Peninsular India. It represents the extensive Deccan Bio-Geographic Zone. It has three important geographical zones i.e., the Coastal Plains, the Eastern Ghats and the Deccan Plateau. It has three important rivers Godavari, Krishna and Pennar which drain into the Bay of Bengal.

Andhra Pradesh has 1,64,325.89 Sq.km. of geographical area of the Notified Forest area is 36,914.69 sq.km. which is 22.46% of its geographical area. Forest under Protected Area Network is 8139.89 sq.km. which is 22.05%. There are **1 Tiger Reserve, 1 Elephant Reserve** (Koundinya Sanctuary and Rayala Elephant Reserve), **1 Biosphere Reserve** (Seshachalam), **3 National Parks** and **13 Wildlife Sanctuaries** in the State.

Corangi or Coringa Wildlife Sanctuary:

Corangi or Coringa is a beautiful Tidal Mada or Mangrove Forest, where the river Godavari joins the backwaters of Bay of Bengal. Between this area and the sea 'Hope Island' blocks the direct confluence of the sea and Godavari. As a result, about 40% of the sanctuary is only sea-backwaters and the rest of the area is intermingled with creeks and gets inundated with tidal waters. The sea coast of the Coringa Wildlife Sanctuary is a breeding ground for Olive Ridley Turtles, Black Capped King Fisher, Solomon Arab Butterfly, Fishing Cat, Fiddler Crabs, etc.

Mangrove plants like Rhizophora SPP, Avicennia SPP, Sonneratia SPP, etc. grow here. The plants possess salt glands to throw out excess of salt. They also give out pencil like roots called 'pneumatophores' or breathing roots (these help in exchange of atmospheric oxygen). The seedlings exhibit a phenomenon called 'Viviparity', where in they grow on the mother plant and detach themselves, to grow into new plant under favorable conditions.

The faunal diversity is wonderful with rare and endangered mammals like Smooth Indian Otter, Fishing Cat, Jackal, etc. Mangroves offer excellent habitat for birds like Black Capped Kingfisher, Brahminy Kite, Sea Gulls, Reef Heron, Sand Piper, etc. Reptilian Fauna Includes Estuarine Crocodile, Olive Ridley Sea-Turtles, Common Cobra, Rat Snake, etc. The invertebrate fauna that forms the main base for the other higher fauna is extremely diverse and rich with invertebrates like mollusks, gastropods, crabs, shrimps, insects, etc.

Kolleru Wildlife Sanctuary:

Kolleru is the largest fresh water lake in the Country, located between the deltas of Krishna and Godavari rivers. It is a wetland marsh habitat, consisting of aquatic weeds and certain tree species. Kolleru serves as a natural food-balancing reservoir between the two rivers. The lake is fed directly by the seasonal Budameru and Tammileru rivers and is connected to the Krishna and Godavari systems by 67 inflowing drain and channels. It is an important water fowl habitat and a reservoir of fish with an average production of 7,000 metric tons per year. Aquaculture is practiced here. The largest fresh water lake in the country. It is one of the Ramsar conservation sites- a paradise for Water birds in the country.

Indicator Species are Grey pelican. Typical wetland flora like Ipomoea Aquatic, Ottelia SPP,

Typha SPP, Acacia Nilotica, Samanea Saman, Prosopis Juliflora, create a wonderful niche for birds here. The lake supports a rich biodiversity of resident as well as migratory birds like Glossy Ibis, Open Billed Stork, Purple Moorhen, Painted Storks, Pied Avocet, Marbled Teal, Common Redshank, etc. It also supports a rich biomass of fish (63 species) and planktons – a major food source for the birds.

Pulicat Bird Sanctuary:

Pulicat is a vast coastal shallow, brackish water lagoon along the coast of Bay of Bengal in to which streams drain. The second largest brackish water eco-system in the Country supporting the largest congregation of Flamingoes is Andhra Pradesh. Greater Flamingoes come to Pulicat from Great Rann of Kutch (their breeding place), in the month of October and return back in April. It is a Southern tropical dry evergreen forests, interspersed with Mangrove forests and littoral vegetation and cane brakes on Sri Harikota Island. Its length is about 70 kms and width varies from 1 km to 20 kms. The lake has 16 island villages and 30 villages adjoining the lake. The people depend on the lake for their livelihood. The lake supports a colossal number of flora and fauna adapted to this brackish water ecosystem. Indicator Species are Flamingoes. About 15,000 flamingoes visit Pulicat each year. The green kingdom is represented with about 132 plant species like Walsura Piscida; Manilkara Elengi, Excoecaria Agallocaha, Spinifex Littoreus, Calamus Viminalis, etc.

The Sanctuary is rich in invertebrate life including planktons, mollusks, insects, coelenterates and crustaceans. Prawns and fishes are also abundant here. The fish fauna is incredible with over 60 species like Pomfret, Sable fish, Sargin fish, etc. Monitor lizard, Common Krait, etc; constitute the reptilian realm. The avian dominion is epitomized by 200 bird species like Greater and Lesser flamingo, Garganey, Spot billed duck, Besra sparrow hawk, Pied Avocet, Painted snipe, Grey plover, Marsh harrier, Rufous turtle dove, Brown headed gull, Indian Great reed warbler, Blue chat, Yellowthroated sparrow, etc. Jackal, Jungle cat, Black napped hare; are a few of the mammalian species inhabiting the Sanctuary.

Hon'ble NGT order dt.26.09.2019 in O.A.No.360/2018 and CPCB E-mail dated 01.11.2019 addressed to all the District Collectors requesting to prepare District Environment Plan (DEP) as per the local requirements. The CPCB also communicated the Model Plan.

Further, the Hon'ble NGT directed the State Govt., to finalize the State Environment Plan based on the District Environment Plans furnished by the respective districts.

Accordingly, the District Environmental Plans are prepared in compliance with rules in vogue and other local environmental issues viz.:

- 1.0.** Waste Management Plan
 - 1.1. Solid Waste Management Plan
 - 1.2. Plastic Waste Management Plan
 - 1.3. Construction and Demolition Waste Management Plan
 - 1.4. Bio-Medical Waste Management Plan
 - 1.5. Hazardous Waste Management Plan
 - 1.6. E-waste Management Plan
 - 2.0.** Water Quality Management Plan
 - 3.0.** Domestic Sewage Management Plan
 - 4.0.** Industrial Waste Management Plan
 - 5.0.** Air Quality Management Plan
 - 6.0.** Mining Activity Management Plan
 - 7.0.** Noise Pollution Management Plan
-
- 8.0.** Polluted River Stretches
 - 9.0.** Non - Attainment Cities
 - 10.0.** Industrial Clusters
 - 11.0.** Status of STPs & Reuse of treated Water
 - 12.0.** Status of CETPs / ETPs & Reuse of treated Water
 - 13.0.** Air Pollution including Noise Pollution
 - 14.0.** Sand Mining
 - 15.0.** Rejuvenation of Water Bodies

Based on the District Environment Plans of the 13 Districts in the State of Andhra Pradesh, the State Environment Plan is prepared covering all the thematic areas and submitted as below.



1.0. WASTE MANAGEMENT PLAN



1.0 Waste Management Plan Components:

- 1.1 Solid Waste Management Plan
- 1.2 Plastic Waste Management Plan
- 1.3 Construction and Demolition Waste Management Plan
- 1.4 Bio-Medical Waste Management Plan
- 1.5 Hazardous Waste Management Plan
- 1.6 E-Waste Management Plan



1.1 SOLID WASTE MANAGEMENT PLAN



COMPLIANCE TO SOLID WASTE MANAGEMENT RULES, 2016:

The Hon'ble National Green Tribunal, Principal Bench, New Delhi order dated 16.01.2019 in OA No. 606/2018, constituted a State Level Committee under the Chairmanship of Hon'ble Justice Sri B. Seshasayana Reddy, Former Judge of AP High Court for a period of 6 months to review the implementation status of Waste Management Rules in the State of Andhra Pradesh. Subsequently, the Govt., of AP vide G.O. Rt. No. 79, dated 30.07.2019 has extended the tenure of State Level Committee, as constituted by the Hon'ble NGT under order dated 16.01.2019, for a further period of 6 months. The State Level Committee is regularly reviewing the implementation status of Waste Management Rules in the State of Andhra Pradesh. Up to January 2020, twelve (12) State Level Committee meetings conducted.

Implementation of Solid Waste Management Rules, 2016:

- There are 110 Urban Local Bodies (ULBs) existing in the State of Andhra Pradesh with 14 corporations and 96 municipalities & Nagar Panchayats.
- As per 2011 census, the total population is 1,64,34,413 Nos with 3618 wards.

Report on inventory of total solid waste generation:

- The solid waste generation estimated is about 6766 TPD, out of which quantity of dry segregated dry waste is 1808 TPD, quantity of segregated wet waste is 3062 TPD, quantity of segregated C&D waste is 481 TPD, quantity of street sweepings are 270 TPD, quantity of drain silt is 485 TPD, quantity of domestic hazardous waste collected is 101 TPD and quantity of other waste viz., horticulture, sanitary waste etc., is about 209 TPD.
- There are 104 old dump sites existing in the State of AP and about 82.9 Lakh Tons of legacy waste stored in these dump sites.
- There are 4 No of Sanitary Landfills (SLFs) existing in the State of Andhra Pradesh.

Compliance by Bulk Waste Generators:

- About 1905 bulk waste generators identified, out of which 721 (38%) bulk waste generators practicing onsite facilities for wet waste compost.

Compliance in Segregated Waste Collection:

- Out of estimated 6766 TPD of solid waste generation, 6666 TPD of segregated solid waste is being collected (98.52%).

Waste Management Operations:

- 100% door to door collection achieved in 92 ULBs (83.6%). 100% Mechanical road sweeping is being practiced in 13 ULBs and partially in 37 ULBs.
- 100% manual sweeping is also being practiced in 80 ULBs and partially in 30 ULBs.
- Provided 100% segregated waste transport facilities in 35 ULBs and partially in 61 ULBs.
- Digesters for bio-methanation are being practiced in 17 ULBs. 100% composting operation practiced in 11 ULBs, partially in 40 ULBs.
- Material recovery facilities provided in 57 ULBs.
- 8 ULBs collecting 100% Solid Waste and no SLFs for remaining 102 ULBs.
- 46 ULBs initiated reclamation of old dump sites.
- 30 ULBs initiated action for linkage with waste to energy boilers/cement plants.
- 47 ULBs initiated action for linkage with recyclers for disposal of dry waste.
- 87 ULBs initiated action for authorisation of waste pickers.
- 32 ULBs initiated action for linkage with TSDF / CBMWTF.
- 81 ULBs initiated action for involvement of NGOs.
- 27 ULBs initiated action for linkage with producers / Brand owners.
- 85 ULBs initiated action for issuance of ID cards.

Adequacy of Infrastructure:

- 10649 Nos. (92%) of waste collection trolleys available against the requirement of 11584 Nos.
- 1566 Nos. (87.4%) of mini collection trucks available against the requirement of 1791 Nos.
- 66 ULBs provided 100% transport of segregated waste and partially by 36 ULBs.
- 216 Nos. (37%) of Bulk Waste Trucks available against the requirement of 583 Nos.
- 4054 Nos. (94%) of Waste Transfer points provided against the required 4307 Nos.
- 59 Nos. of Composting Units available against the requirement of 131 Nos.
- Material recovery facilities provided in 57 ULBs.
- Waste to Energy Plants under construction covering for 13 ULBs.
- Waste to RDF plants available in 5 ULBs against the requirement in 35 ULBs.
- Waste Deposit Centres available in 5 ULBs.

Notification and Implementation of By-laws:

- 110 ULBs notified the By-laws and implementing in 92 ULBs and under progress in 15 ULBs.

Adequacy of Financial status of ULBs:

- Capital expenditure of Rs. 536.34 Crores and operating expenditure of 349.88 Crores are required.

Action Plan:

- Two Waste to Energy Plants, which are under construction at Guntur & Visakhapatnam are likely to be commissioned by April 2020 & Aug 2020 respectively for disposal of solid waste generated in 13 ULBs.
- Installation and commissioning of Waste to Compost Plants completed in 25 ULBs and in remaining 72 ULBs, will be completed by September 2020 in phased manner.
- Installation of Material Recovery Facilities in all ULBs will be completed by the end of February 2020 in phased manner.
- 100% segregated waste collection will be achieved by end of January 2020. It is also proposed to procure 7000 Nos of e-Autos to reduce the drudgery of PH Workers for primary collection of garbage from gate to gate.
- Proposed to process the legacy waste in all ULBs by March. 2021.

Consolidated data is enclosed as Annexure-I.



1.2 PLASTIC WASTE MANAGEMENT PLAN



Plastic Waste Management:

- There are 110 Urban Local Bodies (ULBs) existing in the State of Andhra Pradesh with 14 corporations and 96 municipalities & Nagar Panchayats.
- As per 2011 census, the total population is 1,64,34,413 Nos with 3618 wards.

Inventory of Plastic waste generation:

Total estimated quantity of plastic waste generation in the State of Andhra Pradesh is 289 TPD.

Implementation of collection:

- 100% door to door collection is being practiced in 94 ULBs and partially in 16 ULBs.
- 100% segregated waste collection is being practiced in 25 ULBs and partially in 85 ULBs.
- The plastic waste is being collected at Material Recovery Facilities in 57 ULBs.
- 3440 Nos of plastic waste pickers authorized in 79 ULBs.
- 647 Nos of plastic waste collection centres established in 79 ULBs.

Establishment of linkage with Stakeholders:

- 7 ULBs established linkage with PROs of 23 Nos of Producers.
- 29 ULBs established linkage with NGOs for collection of plastic waste.

Availability of facilities for recycling or utilization of plastic waste:

- 11 Nos of plastic recycling units registered with APPCB.
- 97 Nos plastic producers registered with APPCB.
- No Pyrolysis units using plastic waste as raw material.
- 27 MTs/month of plastic waste is being used in road making in 3 ULBs.
- Above 550 Tons/Month of plastic waste is being sent to cement plants for co-processing.

Implementation of Plastic Waste Management Rules, 2016:

- 50 ULBs seized shops, who are selling less than 50 microns thickness plastic carry bags.
- All 110 ULBs prohibited the sale of carry bags less than 50 microns completely.
- 5 ULBs implemented the ban on carry bags.

Implementation of Extended Producer Responsibility (EPR) through Producers & Brand owners:

- 5 Nos of ULBs associated with 5 Nos of producers under EPR Plan.
- 1 No of producer financially assisting 1 ULB.
- 1 No of producer supporting infrastructure facility to 1 ULB.
- 3 Nos of producers / brand owners established collection centres in 3 ULBs.

Action Plan:

- Conducting strict vigilance and surprise visits on those who either manufacture or store or use or sell or dispose plastic with less than 50 microns thickness.
- Constituted 437 teams for inspections & levy of penalty from defaulters under Plastic Waste Management Rules, 2016 and conducted 5447 inspections / raids so far. An amount of Rs.128.37 lakhs collected towards penalty & seized 2.15 lakh kgs plastic carry bags so far.
- Insisting the ULBs to promote compostable carry bags certified by CPCB.
- Informing to the general public and all producers / manufacturers / recyclers that no unregistered plastic manufacturing/ recycling units and producing of less than 50 microns thickness of carry bags is in operation in the State by Public Notice.
- Constituted District Level Committee for monitoring of effective implementation of Plastic Waste Management Rules, 2016 at District Level vide G.O. Rt. No. 243, dt. 13.03.2019.
- Conducting meetings with ULBs & Cement Plants for tie up and disposal of non-recyclable of plastic waste to cement plants for co-incineration.
- The non-recyclable plastic waste from bio-mining of old dump sites is being sent to cement plants for co-processing.
- Public Notice issued to ensure for compliance with following provisions of the Plastic Waste Management Rules, 2016;
 - Thickness of Petro-based plastic carry bags / films shall not be less than 50 microns except compostable carry bags. No producer / vendor / seller shall manufacture / stock / sold / use plastic carry bags / film of thickness less than 50 microns.
 - Retailers and the street vendors shall not be selling or provide commodities to consumers in plastic carry bags or plastic sheets or multilayered packaging, which are not labeled with Registration number and thickness.
 - Usage of all petro-based plastic carry bags shall be replaced with Compostable (bio-degradable) carry bags in phased manner. The compostable carry bags / films

manufacturers shall obtain Registration from CPCB. The registered compostable carry bags / films manufacturers list is available at https://cpcb.nic.in/certified_manufactures-sellers/.

- The usage of plastic carry bags at Historical / Religious places shall be avoided.
- Dumping of plastic waste on drains, banks of rivers & canals and sea beaches is a serious offence and it is prohibited.
- Plastic carry bags / films manufacturing units shall not be operated without statutory permissions and Registration of the APPCB. No unit shall operate in residential area.
- No littering / open burning of plastic waste shall be practiced in Local Bodies and Gram Panchayats. Fines shall be levied for violating as per the PWM Rules, 2016.
- Hot food stuff shall not be placed in plastic carry bags / films.
- Sachets / pouches used for packing of pan masala, tobacco & guthka shall not be made of plastic material including VMCH (Vinyl Acetate – Maleic Acid – Vinyl Chloride).

Consolidated data is enclosed as Annexure-II.



1.3 C&D WASTE MANAGEMENT PLAN



C&D Waste Management:

- Total estimated C&D waste generation from all 110 ULBs in the State of Andhra Pradesh is about 391 TPD.
- 44 ULBs issued permission for bulk waste generators for implementing the C&D Waste Management.
- 71 ULBs established C&D Waste Deposition Points.
- 110 ULBs notified the Bye-laws for implementation of C&D Waste Management.
- 68 ULBs initiated collection of deposition and levying of disposal charges.
- Out of 110 ULBs, Construction & Demolition Waste Processing Facilities are provided at 3 ULBs i.e. Visakhapatnam, Tirupati and Vijayawada with total capacity of 480 TPD. The end product of sand and gravel from the Construction & Demolition Waste Processing Facilities is being supplied to industries and also used for construction of roads.

Action Plan:

- The ULBs generating above 50 TPD will go for C&D Plants and below 50 TPD for Crushing Units, under cluster approach, considering viability.
- Collection Centres in remaining 39 ULBs will be established by 31.01.2020.
- C&D Waste Call Centres in remaining 4 ULBs will be established by 31.01.2020.

Consolidated data is enclosed as Annexure-III.



1.4 BIO-MEDICAL WASTE MANAGEMENT PLAN



Bio- Medical Waste Management Rules, 2016:**Current Status:**

In the State of Andhra Pradesh, presently there are 12 Common Bio Medical Waste Treatment Facilities (CBMWTF) are in operation in the state. Every occupier of HCF is required to become member of respective CBMWTF for disposal of Bio-Medical Waste. Occupiers of non-complying institutions are liable for prosecution under the provisions of Environmental Protection Act and Rules. The total number of Health Care Facilities (HCFs) are 9,505 among which 8,907 Health Care Facilities (HCFs) are having valid Bio-medical Waste (BMW) Authorization which is 93.7% & 8,977 HCFs have tied up with Common Bio-medical Waste Treatment Facilities (CBWTFs) which is 94.44 %, as on January 2020. About 323 Veterinary institutions have obtained BMWA from APPCB and 187 Veterinary institutions shall obtain BMWA from APPCB. The AYUSH Hospitals in the State are being pursued for obtaining Authorization and tie up. All AYUSH Hospitals are non-bedded only.

Desirable level of compliance in terms of statutes

Target to achieve 100% Authorization and 100% tie up by 1st quarter of 2020.

Gap between current status and desired levels

598 HCFs shall obtain Authorization and 528 HCFs will tie-up with CBWTFs.

Proposals of attending the gap with time lines

All the HCFs including Veterinary, AYUSH shall operate with valid Bio-Medical Waste Authorization (BMWA) and shall tie-up with CBWTFs within 3 months. All the HCFs are reviewing in the State Level Committee meetings chaired by Hon'ble Justice Sri B.Seshasayana Reddy and recently reviewed in the 12th SLC meeting was held on 09.01.2020.

Action plan

- Authorization to all health care facilities including non-bedded HCFs.
- Inventorization of all HCFs and Bio Medical Waste generation.
- Facilitating for setting of adequate number of Common Bio-medical Waste Treatment Facility to cover entire State.
- Implementation of bar code system.
- Monitoring of HCFs other than hospitals/clinics such as Veterinary Hospitals, Animal Houses, AYUSH Hospitals etc.
- Training and Capacity building of officials of SPCBs and HCFs.

- Insulation of OCEMS by CBMWTFs.
- Preparation of annual compliance status reports.

Consolidated data is enclosed as Annexure-IV.



1.5 HAZARDOUS WASTE MANAGEMENT PLAN



Hazardous and other wastes (Management & Transboundary Movement) Rules, 2016

- The Ministry of Environment, Forest & Climate Change (MoEF&CC), GoI has notified the Hazardous and other wastes (Management & Transboundary Movement) Rules, 2016.
- The Hazardous Waste Rules will ensure resource recovery and disposal of hazardous waste in environmentally sound manner.
- The A. P. Pollution Control Board has been implementing the Rules notified by MoEF&CC, GoI from time to time, and also ensuring that all the industries are complying with the HWM Rules, 2016.
- The hazardous waste is disposed through the following ways:
 - Reuse / recycling
 - Recovery of by products
 - Land filling
 - Incineration
 - Co-Processing in cement plants
- Now the APPCB is encouraging disposal of Hazardous waste having calorific value through co- processing in cement plants where the waste is used as alternate fuel / energy source in cement plant. The APPCB has issued permissions to 8 Cement Plants for Co-Processing of Hazardous Wastes in the cement kiln.
 - There are 2683 Hazardous wastes generating units in the state of AP.
 - Total quantity of HW generated is 734714.99 MT
 - Total quantity of Incinerable HW is 10067.813 MT
 - Total quantity of Landfill Waste is 214081.428 MT
 - Total Quantity of Recyclable / utilizable HW is 5,69,832.6153 MT
 - No HW dumping sites in the State of AP.
 - There are No Probable Contaminated Sites in the State of AP.
 - 2678 No of industries having Authorization.
 - 1756 No. of industries have displayed Board of HW Generation in front of Gate.
- Andhra Pradesh is having two Treatment, Storage and Disposal Facility (TSDF) namely M/s. Coastal Waste Management Project, Pharmacity, Parawada, Visakhapatnam and M/s.

Coastal Waste Management Project (Unit-2) by M/s. Mumbai Waste Management Limited, (A Subsidiary of M/s. Ramky Enviro Engineers Ltd.,) SPSR Nellore District.

- M/s. Coastal Waste Management Project, Pharmacy, Parawada, Visakhapatnam was established in an area of 9.1 acres and 7.76 acres for disposal of landfill waste and Incinerable waste generated from the industries and is in operation since 2008.
- A common Hazardous Waste Incinerator was installed in TSDF with a capacity of 1.5 TPH for incineration of hazardous waste.
- M/s. Coastal Waste Management Project (Unit-2) by M/s. Mumbai Waste Management Limited, (A Subsidiary of M/s. Ramky Enviro Engineers Ltd.,) SPSR Nellore District was established in an area of 4.6 acres for disposal of landfill waste and Incinerable waste generated from the industries and is in operation since April 2019.
- M/s. Mumbai Waste Management Limited (A Subsidiary of M/s. Ramky Enviro Engineers Ltd.,) in SPSR Nellore District is an Integrated Common Hazardous Waste Treatment, Storage and Disposal Facility in an extent of 48.03 Acres with an investment of Rs.260.0 Crores.
- The Board has issued Consent for Operation (CFO) on 10.10.2018 to cater the industrial needs in the southern districts of AP to operate secured land fill of 548 TPD, treatment / stabilization of 383 TPD, recycling facilities for E waste - 82.0 TPD & alternative fuel and raw material - 55 TPD under Phase-I for a period upto 31.08.2023.
 - 387 Industries have linkage with TSDF.
 - No ULBs have linked to Common TSDFs for Domestic Hazardous Waste.

The APPCB is in the process of developing and implementing Online Manifest and Tracking Application for continuous monitoring of the Hazardous waste disposal system.

Action plan

- Encouraging Pre-Processing Facilities for blending of Hazardous Waste for Co-Processing in Cement Kilns.
- Identifying new routes for effective reuse and recycle of Hazardous Waste.
- Encouraging New Cement Units for Co-Processing
- Online Manifest Application for tracking and accounting of Hazardous Waste.

Consolidated data is enclosed as Annexure-V.



1.6 E-WASTE MANAGEMENT PLAN



E-Waste Management:

APPCB has carried out an inventory of e-waste in the state of Andhra Pradesh through EPTRI in the year 2016, as per the E-waste Management Rules 2016, based on the per capital generation in urban area. It was estimated that the e-waste generation during the year 2016-17 is 1,05,361 MT and projected e-waste generation is reported for the period up to 2022 with annual increase of 5–10 % every year. The CPCB issued EPR Authorizations to 199 producers with their collection centers in A.P. APPCB is monitoring the implementation of EPR plans of the producers. The collection centers are verified by the Board are not aware of the EPR plans and collection procedure. Although specified in EPR plans, the producers have not taken up any awareness programmes in major cities and towns of A.P. Local bodies are instructed to provide collection centers for orphan products. The Government of AP appointed nodal officers at State, City and District level for monitoring the compliance of implementation of the status of e-waste management rules. APPCB is conducting several awareness programmes at district level and state level. Recently workshops were organized on 13.09.2019 and 08.11.2019 at Vijayawada with all Bulk Consumers and other Stake holders. Presently there is 3 dismantlers as under operation, two (2) at Visakhapatnam and one at Srikakulam and another five (5) e-waste processing facilities are under proposal.

APPCB is in the process of establishing a linkage through an application. APPCB is also persuading local bodies to provide and maintain of e-waste collection centers. The Board is working to create an aware society which play an active role in managing e-waste by segregation channelization end of life wastes to authorized recyclers/dismantlers/re-furbishers.

Consolidated data is enclosed as Annexure-VI.



2.0. WATER QUALITY MANAGEMENT PLAN



Polluted River Stretches:

- The name of “Polluted River Stretches” came to know a report in “The Hindu” Newspaper dated 17.09.2018 under the Title “More River Stretches are now critically polluted:
- Hon’ble National Green Tribunal (NGT) Bench, New Delhi a report in The Hindu Newspaper Published on dt. 17.09.2018 to given order along with the directions has been issued by taking “Suo-Motu” Cognizance of based on above newspaper.
- NGT Directions Given to concerned department i.e., The Ministry of Water Resources, MoEF & CC, Ministry of Housing and Urban affairs, the NITI Ayog, National Mission for Clean Ganga, CPCB, C.S. of all State and Territories for Compliance of NGT Order dated 20.09.2018 received from CPCB through E-Samiksha.
- The APPCB following NGT directions and implementation of polluted river stretches action plans for restoration.
- The Central Pollution Control Board (CPCB) has identified the following five river stretches in Andhra Pradesh, as polluted river stretches.

S. No.	River	Stretch Identified	BOD Range / Max Value	Priority
1	Godavari	Rayanpeta to Rajamahendravaram	3.1 - 3.4	V
2	Krishna	Amaravati to Hamsala Deevi	3.2	V
3	Tungabhadra	Manthralayam to Bavapuram	3.2 – 6.7	IV
4	Kunduru	Nandyal to Madduru	7.7	IV
5	Nagavali	Along Thotapally	3.2	V

As per the directions of Hon’ble National Green Tribunal, New Delhi in the Order, dated 20.09.2018 in O.A. No. 673 of 2018, Govt. of Andhra Pradesh has constituted “**River Rejuvenation Committee**” (RRC), vide Government Order Rt. No.177, dated 05.12.2018 for formulation of action plans to restore the water quality of the said five river stretches. The RRC approved action plans have been communicated to the Municipal Administration and Urban Development Department and concerned Urban Local Bodies on 31.01.2019 for implementation.

“**River Rejuvenation Committee**” (RRC) with the following members for performing functions as ordered by the Hon’ble National Green Tribunal.

S. No.	Member of the Committee	Designation
1	Commissioner, Industries	Member
2	Commission & Director, MA&UD	Member

3	Member Secretary, APPCB	Member Convener
4	Special Secretary to Government Environment, Forest, Science & Technology Department	Member

- The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievements and failures may also be published on such website.
- The RRC will have the authority to recover the cost rejuvenation under Polluter Pay Principle from those who are responsible for pollution.

Hon'ble NGT Directions - Compliance

APPCB, based on NGT directions prepared action plan as follows:

S. No.	Directions	Compliance status
1	Constitution of four-member River Rejuvenation Committee (RRC)	RRC constituted, vide EFS & T Dept., Govt. of AP, vide G. O. Rt. No. 177, dated 05.12.2018.
2	Preparation of Action Plans by RRC	RRC 1 st meeting convened on 08.01.2019 and finalized & approved the Action Plans.
3	Submission of Action Plans to Hon'ble NGT by 31.01.2019	RRC approved Action Plans submitted to Hon'ble NGT on 17.01.2019 through mail to ngt.filing@gmail.com and speed posted to the Registrar, Hon'ble NGT on 17.01.2019.
4	Constitution of Special Environment Surveillance Task Force (SESTF) at District level.	SESTF for the districts Vizianagaram, East Godavari, Krishna and Kurnool have been constituted.
5	Creation of website inviting public participation for publishing achievements and failures.	Created. https://rrc.ap.gov.in
6	Uploading of water quality of polluted river stretches in APPCB website.	Uploaded
7	RRC Meetings	RRC 2 nd , 3 rd & 4 th meetings convened periodically on 03.04.2019, 11.07.2019 & 26.11.2019 with stakeholders to review the progress.

CPCB, vide letter dated 04.04.2019 has made certain observations and suggestions on the action plans.

APPCB has taken note of it and accordingly, has increased the water quality monitoring locations so as to cover interstate borders, other towns / cities, industrial establishments, etc. those may pose as pollution sources.

The above stretches APPCB is monitoring water quality of rivers regularly on monthly basis, values are updated to APPCB web: <https://rrc.ap.gov.in/Views/Monitoring.aspx>

- As per the Hon'ble NGT Orders, dated 08.04.2019 in O.A. No. 673 of 2018, Govt. of Andhra Pradesh has to execute the performance guarantee of Rs. 10.00 crores to CPCB.
- Accordingly, APPCB has addressed letters to Municipal Administration and Urban Development Department to execute performance guarantee, vide APPCB letters dated 24.07.2019, 18.08.2019 and 02.10.2019 based on the Polluter Pay Principle.
- The APPCB action plan was furnished to CPCB, Delhi vide letter dated. 16.10.2019 by mail dated. 21.10.2019 and same information furnished to South Zone of CPCB, Bangalore.
- The APPCB received revised action plans from CPCB in letter dated on 26.09.2019 & 14.10.2019 respectively. The Andhra Pradesh Pollution Control Board Conducted 4th RRC meeting on 26.11.2019 and reviewed about CPCB revised action plans, same was approved and furnished to all concerned stakeholders to implement approved revised action plans.

Consolidated data is enclosed as Annexure-VII.



3.0. DOMESTIC SEWAGE MANAGEMENT PLAN



Status of STPs and Re-use of treated waste water:

The estimated sewage generation in 110 ULBs of 13 Districts in Andhra Pradesh is 1463.20 MLD. There are 41 STPs existing in the ULBs with a treatment capacity of 531.45 MLD and 38 Nos of STPs are under construction with a capacity of 417.2 MLD. Another 84 STPs with a capacity of 99.2 MLD are planned and sanctioned under various schemes for treatment of sewage in addition to the above. A quantity 931.75 MLD of untreated sewage is being discharged without treatment.

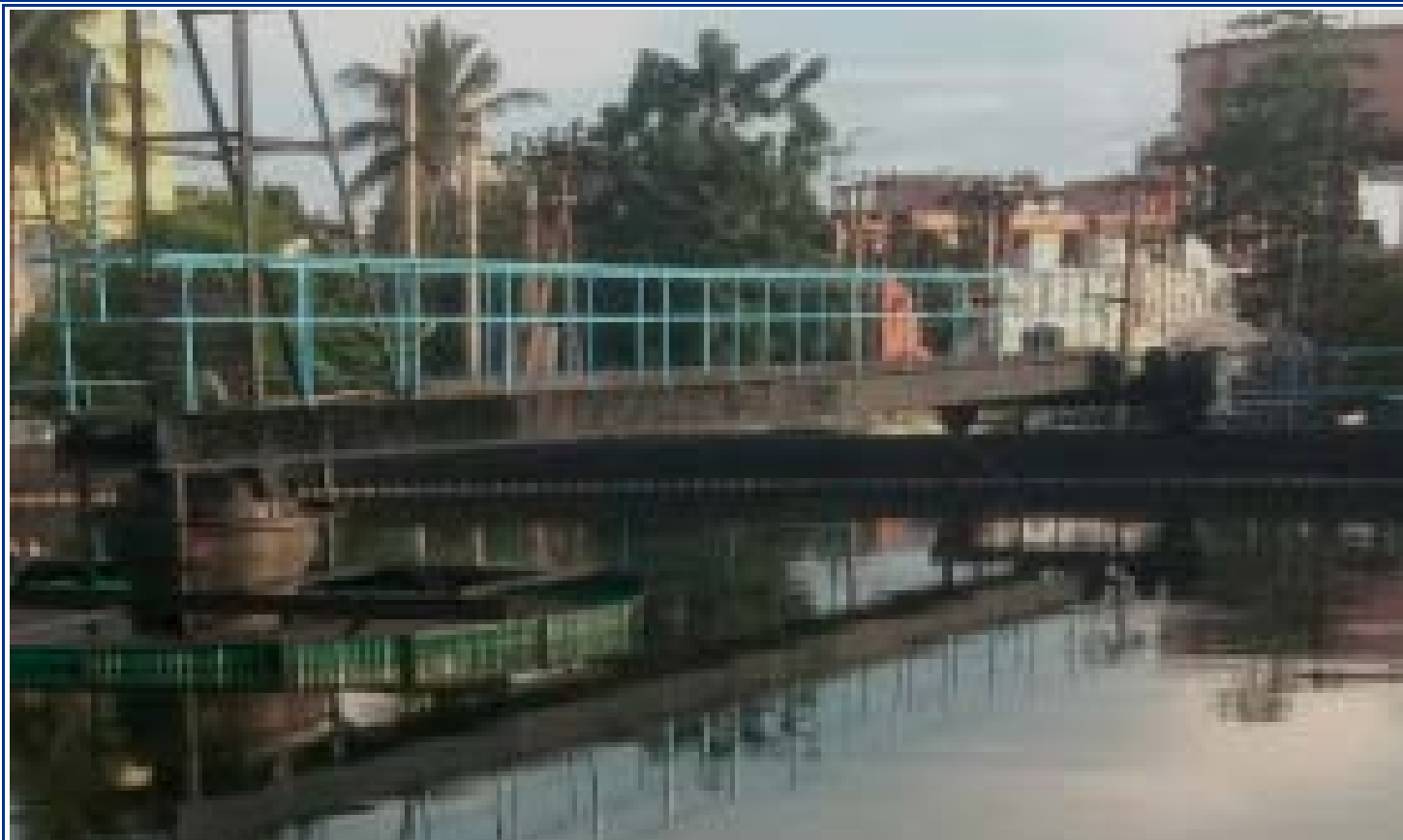
The total quantity of utilization of treated sewage is 109.556 MLD. In Greater Visakhapatnam treated sewage being utilized for plantation, maintenance of Golf Club, Welfare of Roads in Visakhapatnam Port Trust. In Tirupati 3.5 MLD is supplied to Sri Kalahasti Pipes Ltd., for industrial use. In other places treated sewage is being used for plantation and agricultural purpose. It is proposed to utilize 45 MLD treated sewage to Visakhapatnam Steel Plant, 21 MLD - Hindustan Petroleum Corporation Ltd., 20 MLD in NTPPS Thermal Power Plant, Vijayawada, 3.5 MLD in Gerdau Steel Plant. The other options of treated water in construction industries, Thermal Power Plants, Petroleum Refineries, Chemical Plants and metal working factories.

All ULBs shall treat 100% sewage generated by 01.04.2020 as per Hon'ble NGT order in O.A.No.593 / 2017.

Action Plan:

- 38 Nos of STPs are under construction with a capacity of 417.2 MLD.
- Another 84 STPs with a capacity of 99.2 MLD are planned and sanctioned under various schemes for treatment of sewage in addition to the above.
- The total quantity of utilization of treated sewage is 109.556 MLD. In greater Visakhapatnam treated sewage being utilized for plantation, maintenance of Golf Club, Welfare of Roads in Visakhapatnam Port Trust. In Tirupati 3.5 MLD is supplied to Sri Kalahasti Pipes Ltd., for industrial use. In other places treated sewage is being used for plantation and agricultural purpose.
- It is proposed to utilize 45 MLD treated sewage to Visakhapatnam Steel Plant, 21 MLD - Hindustan Petroleum Corporation Ltd., 20 MLD in NTPPS Thermal Power Plant, Vijayawada, 3.5 MLD in Gerdau Steel Plant.
- The other options proposed by CDMA is use of treated water in construction industries, Thermal Power Plants, Petroleum Refineries, Chemical Plants and metal working factories.

Consolidated data is enclosed as Annexure-VIII.



4.0. INDUSTRIAL WASTE WATER MANAGEMENT PLAN

Status of CETPs / ETPs including Performance:

There are 7 nos. of CETPs existing in the state. Out of 7 CETPs, 6 CETPs are in operation and one has obtained CFO in the month September 2019 and not started operations. The details are as follows:

1. M/s. Ramky Pharmacy, Parawada, Visakhapatnam District:

The CETP at Ramky Pharmacy, Parawada is being operated to treat the effluents generated from the member units (Pharma industries) located at Pharmacy. The capacity of CETP is 5 MLD (LTDS- 3.5 MLD & HTDS – 1.5 MLD) and operating capacity is 4.8 MLD. The CETP discharging treated effluents through marine outfall system under the presence of APPCB officials and operating satisfactorily.

2. M/s. Brandix India Apparel City, Atchuthapuram, Visakhapatnam District:

The CETP at Brandix India Apparel City, Atchuthapuram is being operated to treat the effluents generated from the member units (Textile industries) located at Atchuthapuram. The capacity of CETP is 20 MLD and operating capacity is 4.0 MLD effluents. The CETP is being operated satisfactorily. The CETP discharging treated effluents through marine outfall system under the presence of APPCB officials.

3. CETP, APSEZ, Atchuthapuram, Visakhapatnam District, A.P:

The CETP at AETL, Atchuthapuram obtained CFO on 06.09.2019 to treat the effluents generated from the member units. The capacity of CETP is 1.5 MLD (LTDS- 450 KLD & HTDS – 1050 KLD). The CETP **not started operations** as the marine pipelines works was not completed. The CETP has constructed 4 no of guard ponds of capacity 1.6 MLD (0.4 MLD each guard pond).

4. M/s. Machilipatnam Imitation Jewelry Park Pvt. Ltd., Machilipatnam, Krishna Dist. A.P:

APIIC Industrial Park, Machilipatnam is developed exclusively for the jewelry units such as electroplating units / casting / molding units and other associated activities. A CETP of 0.07 MLD capacity was constructed with Central Government's financial assistance and put into operation in September 2013, for treatment and disposal of the electroplating effluents generated in small quantities from the imitation jewelry units. Presently the CETP operating capacity is 0.002 MLD. The treated effluent after treatment is disposed of by forced sprinkling evaporation system. The CETP will be reviewed in the ensure Task Force committee meeting.

5. M/s. Kondapally Envirotech Ltd., (CETP) IDA, Kondapally, Krishna District:

A CETP with a capacity of 0.2 MLD (0.1 MLD High TDS effluents & 0.1 MLD Low TDS effluent) was constructed to cater to bulk drug units located in IDA, Kondapally. The CETP was commissioned in June 2016 and till date 14 industries have become members in CETP. The treated effluents are reused for cooling make up by CETP and the member industries. The CETP is maintaining Zero Liquid Discharge system. At present the CETP is not in operation and the APPCB, will review the CETP status in the ensure Task Force committee meeting.

6. CETP at IE, Autonagar, Vijayawada, Krishna District:

A CETP of 0.2 MLD capacity was constructed in Autonagar, Vijayawada, Krishna Dist. and was commissioned during August 2011 for treatment of effluents generated from the industries located in the area. M/s. Vijayawada Auto Cluster Development Company Ltd., Autonagar, Vijayawada, Krishna Dist. is operating the CETP and 8 units have become members of the CETP. The treated waste water is being utilized for greenbelt development in Jawahar Autonagar and Autonagar at Kanuru. At present the CETP operating capacity is 0.2 MLD.

7. CETP, Nagari, Chittoor District:

The Public Health department, Govt. of Andhra Pradesh has completed the construction of Common Effluent Treatment plant at Sy.No.270/3, 4 & 6 (Part), Gundraju Kuppam (V), Nagari (M) in an area of 3.46 acres with 4 MLD treating capacity. The CETP is operating at Nagari, Chittoor District for catering the cottage dyeing units located in and around Nagari. At present the CETP operating capacity is 0.8 MLD.

Action Plan:

- Atchuthapuram Effluent Treatment Ltd., (AETL), Visakhapatnam is another CETP with marine out fall disposal facility and is likely to commence its operations by 31.03.2020.
- Presently 30 MLD capacity of CETP's existing and requires additional treatment capacity of 42.3 MLD capacity of CETP's in different industrial areas in the state of Andhra Pradesh.

Industrial pollution control in Andhra Pradesh:

- The Board is regulating industrial pollution in the State through consent management and actions of Task force. The A.P. Pollution Control Board has identified around 9362 industries in Andhra Pradesh, out of which Red category - 3310, Orange – 3642 and Green – 2410. The Board is issuing consents to the industries in time bound manner by involving stakeholders through empowered committees. The A.P. Pollution Control Board closely monitoring errant polluting industries based on complaints lodged by public representatives and general public. The APPCB is monitoring highly polluting industries (including 17 categories of industries) through randomized risk-based inspections. The industries are subsequently reviewed in the External Advisory Committee for taking up necessary action. During the financial year of 2018-19, the Board Office has issued 1827(Directions/Revocations/Closure order/Stop Production order) to the industries.
- Enforcing the industries to comply with CFO conditions, through randomized & action plan-based inspections and verification of 6 monthly compliance reports submitted by the industries Effective enforcement of the environmental norms through Bank Guarantees / cut in production / stop production / Closure orders.
- In Andhra Pradesh 266 nos. of 17 category units are existing. 17 category units are being inspected by the Board Officials periodically by Board Officials. The A.P. Pollution Control Board is closely monitoring errant polluting industries based on complaints lodged by public representations and general public also. The industries are subsequently reviewed in the External Advisory Committee for taking up necessary action.
- 269 industries have installed 482 Continuous Emission Monitoring System (CEMS) connected to the stacks and the same is connected to APPCB server to verify the real time data. Based on the Online Monitoring Data received from CEMS, show-cause notices are being issued to the industries where parameters w.r.t. stack is exceeding the prescribed limits.
- So far 846 numbers of analyzers are transmitting the emission parameters from the pollution potential industries, 410 numbers of analyzers are transmitting the effluent parameters and 533 numbers of analyzers are transmitting the ambient air quality. APPCB is issuing SMS alerts to the industries as and when they exceed the pollution standards and notices are

being issued through email to the industries as and when they exceed the standards for a period of 15 minutes consistently.

- Levying environmental compensation based on the violations. Recently Hon'ble NGT has directed CPCB to levy "Environmental Compensation" on all the polluters. Subsequently CPCB has advised State Pollution Control Boards to take up this issue and same is being implemented by APPCB. APPCB initiated web based online Hazardous Waste manifest system to account the hazardous waste.

Action Plan:

- APPCB will impose Bank guarantees for non-compliances in the consent conditions. APPCB proposed Environment Improvement Act to impose penalties and Environmental Damage Compensation. The draft act submitted to the Government of Andhra Pradesh.
- APPCB is issuing CFOs after construction of full-fledged ETPs and for the new projects, the APPCB is stipulating a condition that "Consent is issued only after construction of ETP".
- Based on the alerts on CEMS, if the exceedance is more than 3 times in a month, the industry will be reviewed by the external advisory committee.

Consolidated data is enclosed as Annexure-IX.



5.0. AIR QUALITY MANAGEMENT PLAN



Air Quality Management Plan:

Andhra Pradesh Pollution Control Board is monitoring ambient air quality in the State of Andhra Pradesh at 81 locations covering 18 cities and towns including all district headquarters regularly using manual and continuous real-time monitoring stations. The PM₁₀ concentrations representing Respirable Suspended Particulate Matter found exceeding the annual average standard (60 µg/m³) at almost all the places. But, meeting the 24hour average standard (100 µg/m³). High concentrations of PM₁₀ can be attributed to the Road dust, vehicular exhaust emissions, Municipal Solid Waste burnings, Industrial activity, construction & demolition activities, etc. Action plans have been prepared and are under implementation to control air pollution in all the 13 non-attainment cities to bring down the PM₁₀ concentrations to below 60ug/m³ in coordination with the concerned stakeholders. Ministry of Environment, Forests and Climate Change, Govt. of India, New Delhi has sanctioned an amount of Rs. 10.40 crores to APPCB to undertake certain activities for monitoring of ambient air and to control air pollution in the four non-attainment cities namely, Vijayawada, Guntur, Nellore and Kurnool.

Non-attainment cities (Total- 13 cities):**Current Status:**

The APPCB has been monitoring air quality at 72 locations in 16 cities & towns in AP under National Air Monitoring Program on monthly basis as per CPCB protocol. Central Pollution Control Board (CPCB), Delhi has identified 122 cities and towns in India as non-attainment in respect of air pollution for not meeting the National Ambient Air Quality Standards (NAAQS). Thirteen of them, namely, Visakhapatnam, Vijayawada, Guntur, Nellore, Kurnool, Srikakulam, Vizianagaram, Rajahmundry, Eluru, Ongole, Chittoor, Kadapa & Anantapur in Andhra Pradesh have been identified as non-attainment cities in respect of Particulate Matter (PM₁₀). Out of 13 non-attainment cities, action plan was prepared by 6-member Air Quality Monitoring committee (AQMC) for 5 non-attainment cities and approved by CPCB for implementation. The Short Term (6 months), Medium term (1 year) and long term (2years) were prepared to implement action plan by all the stakeholder's departments to reduce the gap to meet the desired levels. The matter is being reviewed by the Air Quality Monitoring committee (AQMC) on quarterly basis. Draft action plan for the additional new 8 non-attainment cities identified by CPCB are prepared and same would be furnished to CPCB for final approval, duly after placing the draft action plan before the Air Quality Monitoring committee. As per the data of National Ambient Air Quality Monitoring Reports of 2019, out of 13 non-attainment cities, 3 cities namely Guntur, Rajahmundry & Ongole are meeting the National Ambient Air Quality Standards.

Desirable level of compliance in terms of statutes

The desirable level of compliance in terms of statutes as per National Ambient Air Quality standards for annual averages of PM 10 is 60 µg/m³

Gap between current status and desired levels

10 non-attainment cities namely Visakhapatnam, Vijayawada, Nellore, Kurnool, Srikakulam, Vizianagaram, Eluru, Chittoor, Kadapa & Anantapur are to be complied with National Ambient Air Quality Standards.

Proposals of attending the gap with time lines

Short Term (6 months), Medium term (1 year) and long term (2years) were prepared to implement action plan by all the stakeholder departments to reduce the gap to meet the desired levels. The Air Quality Monitoring committee (AQMC) is reviewing the item on quarterly basis. We are proposing to reduce 35% of excess levels next 3 years, 50% in next 5 years and 70-80% in next 10 years under National Clean Air Program (NCAP).

Name and designation of designated officer for ensuring compliance to provisions under statutes:

S.No	Department	Designated Officer for ensuring compliance
i.	Transport	Commissioner, Vijayawada
ii.	Industries	Commissioner, Vijayawada
iii.	MA&UD	Commissioner & Director
iv.	Agriculture	Commissioner
v.	APPCB	Member Secretary
vi.	EFS&T	Special Chief Secretary
vii.	Greater Visakhapatnam Municipal Corporation	Commissioner
viii.	Vijayawada Municipal Corporation	Commissioner

100 Industrial Clusters:**Current Status:**

The MoEF&CC conducted a meeting at New Delhi on 12.11.2018 and reviewed the status of CEPI scores of all States. The MoEF&CC informed that the CEPI score for Visakhapatnam city is reduced to 44.2. The Board informed that the CEPI score of Visakhapatnam was calculated based on the monitoring results of M/s. SMS Labs Services Pvt. Ltd. and is found as 26.24. The CEPI values drastically came down as the Board has taken stringent measures. The Board regularly monitoring and continuing to implement the action plans for improving environmental quality of Ambient Air, Ground and Surface Water in Visakhapatnam area and the same is being maintained to keep the CEPI score less than normal pollution index.

The industrial area of Ibrahimpatnam & Kondalli located near Vijayawada is also identified as Severely Polluted Area (SPA) with CEPI score of 68.04 i.e., between 60-70. APPCB conducted environmental quality monitoring covering ambient air, ground water and surface water analysis at different places in and around Vijayawada during 14th to 16th March, 2018 through a reputed lab i.e., M/s. SMS Lab Services Pvt. Ltd., Chennai and re-calculated the CEPI score and is reduced to 30.79 which shows the area falls under Other Polluted Areas (OPA) (less than with CEPI score of 60). It is stated that except thermal power plant, no other major polluting industries existing within the vicinity of the Kondapalli and Ibrahimpatnam Industrial areas covered under Vijayawada. One CETP is existing to cater the effluents generated from small bulk drug units for its treatment. The Board is closely monitoring the industries existing in Industrial areas and taking necessary stringent measures for maintaining the environmental standards, thereby, the CEPI value has come down drastically. The same was submitted to CPCB along with action plan on 12.03.2019 for favourable consideration and requested to consider Industrial areas of Vijayawada under Other Polluted Areas (OPA) from CEPI.

The Hon'ble NGT directed vide Order Dt.10.07.2019, the CPCB to take steps to prohibit operation of polluting activities in the said SPAs within 3 months and furnish a compliance report. Also directed the CPCB to make assessment of compensation to be recovered from the said polluting units for the period of last 5 years considering the cost of restoration and cost of damage to be public health and environment and the deterrence element. The Hon'ble NGT further directed that "No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters". The Hon'ble NGT vide Order Dt.23.08.2019, informed that the MoEF & CC can devise an appropriate mechanism to ensure that new and legitimate activity or expansion can be takes place after due precautions are

taken in the areas in question by orange and red category of units. Vide order Dt. 14.11.2019, the Hon'ble NGT directed for furnishing action taken to CPCB on compensation recovered from defaulters by 31.01.2020.

Desirable level of compliance in terms of statutes:

The CPCB score of Industrial clusters shall be maintained less than the Other Polluted Areas i.e. the CEPI score less than 60.

Gap between current status and desired levels:

The CEPI score of Kondapalli & Ibrahimpatnam industrial areas covered under Vijayawada shall be brought down to less than 60 and the same shall be maintained in Industrial clusters existing in the State of Andhra Pradesh by taking stringent measures against the defaulting industries.

In this regard, the CPCB has conducted video conference on 07.01.2020. The Board briefed to the CPCB highlighting the mistakes found in evaluation of the CEPI score of Vijayawada under Severely Polluted Area (SPA). In evaluating air pollution load & water pollution load & ground water pollution, all are considered under "C" category and "D" category even though adequate capacity of pollution control equipment existing in the industries and parameters are wrongly assessed, thereby the CEPI score of Vijayawada was re-evaluated as 68.04. On rectifying the same, the Board recalculated the CEPI score of Vijayawada as 22.10 which is indicating less than the normal pollution index. However, the CPCB directed to furnish the revised action plan duly considering the critical pollutants and action taken against defaulting industries and issuing of Closure Orders, levy of environmental compensation as per the Hon'ble NGT Orders Dt.10.07.2019 and assessment of amount to be incurred for environmental restoration.

Proposals of attending the gap with time lines:

The Board has prepared revised action plan for restoration of environmental quality in Industrial Estates of Kondapalli & Ibrahimpatnam. The revised action plan will be furnished to CPCB for onward submission of the same to the Hon'ble NGT. Further, the Board closely monitoring the industries in Industrial areas to comply environmental standards and to maintain environmental quality within the vicinity of industrial areas and its surroundings.

Name and designation of designated officer for ensuring compliance to provisions under statutes:

S.No	Department	Designated Officer for ensuring compliance
i.	APPCB	Member Secretary.

Consolidated data is enclosed as Annexure-X.



6.0. MINING ACTIVITY MANAGEMENT PLAN



Mining activity:

- Mining activity of colour granite, lime stone, laterite, beach sand minerals, manganese, quartz, barytes, mica, vermiculate, silica sand, dolomite, road metal & sand mines etc are being carried out in the State of Andhra Pradesh.
- Total area covered under mining in the State of AP is 562.71 Sq. kms.
- Total mining leases accorded are 6960 Nos.
- Total sand mining area is 284.83 Sq. Kms, out of which River Bed is 158.684 Sq. Kms & Non-River Bed is 126.235 Sq. Kms.
- 1640 mine leases complying with Environmental Clearance conditions.
- 1564 Nos of mine leases complying with consent conditions of APPCB.
- 31 Nos of pollution related complaints received against mining operations in the last 1 year.
- Mining operations suspended in 918 Nos of mine leases for violations of Environmental Norms.
- 158 Nos of mine leases were issued with directions by the APPCB for non-compliance with the consent conditions.

Action Plan:

- In the State of AP, all mine leases are permitted after obtaining EC from EIAA & SEIAA. For such mine leases are issued with CFE / CFO of the Board.
- The Board is in process of identifying issues / challenges of Air Pollution in Mining clusters of APs' and take measures for curtail the same.
- The State is implementing sand policy to avoid illegal sand mining and are being cleared through APMDC duly taking all statutory approvals required from the State Government.
- The Board is addressing pollution problems in mining clusters time to time in association with Mining Dept.

Consolidated data is enclosed as Annexure-XI.



7.0. NOISE POLLUTION MANAGEMENT PLAN



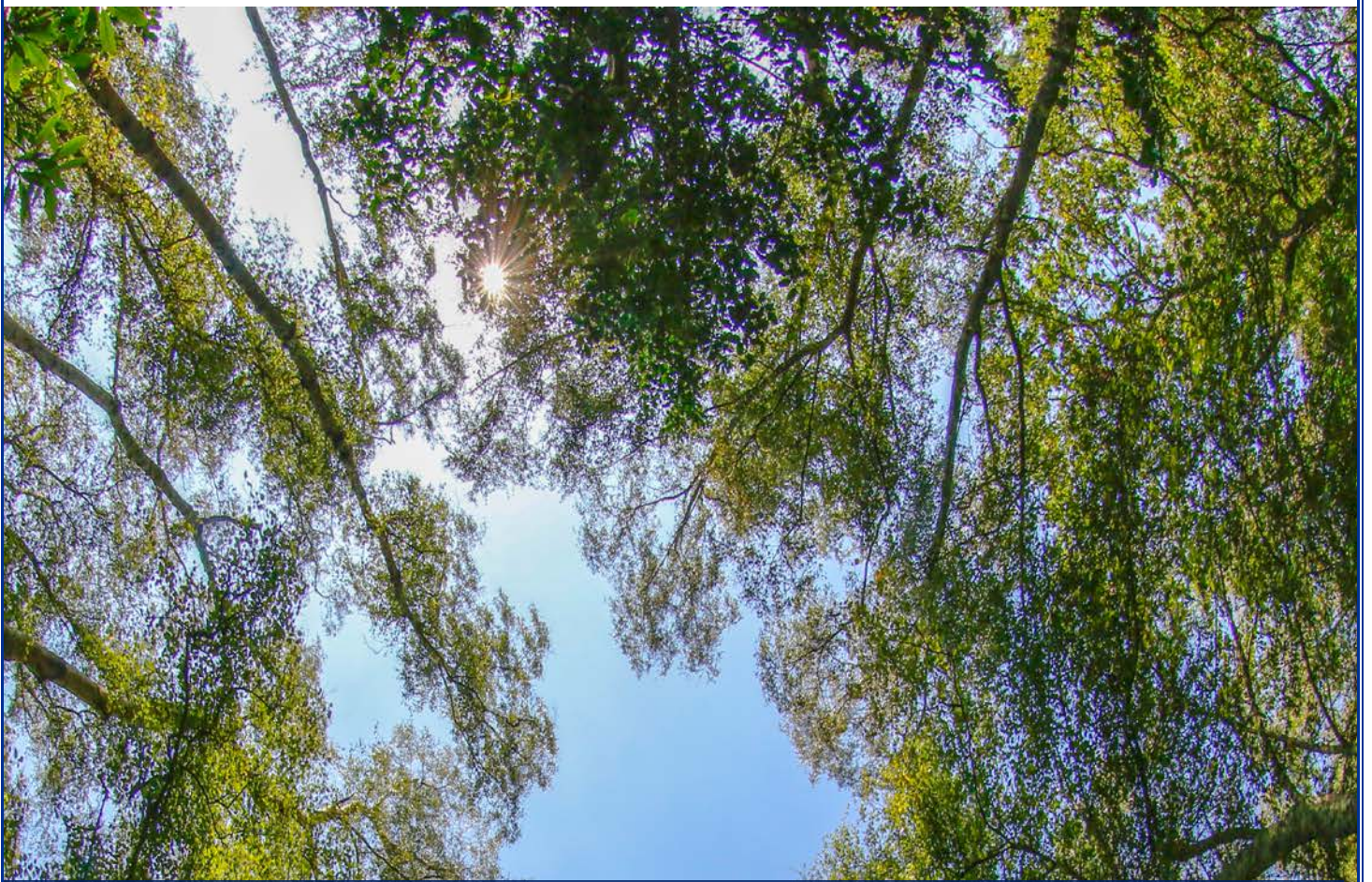
Noise Pollution Management Plan:**Current Status:**

- APPCB is operating four real-time noise monitoring stations at Visakhapatnam (2 Nos.) and Vijayawada & Tirumala one number each. Results are exceeding the noise standards stipulated for commercial. Reasons for higher noise levels could be attributed to indiscriminate use of horns, use of retro-fitted high sound horns & engines, public address systems, etc. APPCB has formulated the action plans for control of noise pollution in the State of Andhra Pradesh and communicated to Central Pollution Control Board on 15.07.2019 in compliance to the Hon'ble NGT Order, dated 15.03.2019 in the matter of O. A. No. 681/2018, titled "Times of India" authored by Sri Viswa Mohan titled "NCAP with multiple time lines to clean air in 102 cities to be released around August 15".
- APPCB has placed the action plans before the Air Quality Monitoring Committee (AQMC) during the meeting convened on 26.11.2019 for approval. The AQMC approved action plans have been communicated to the concerned stakeholders for implementation to contain the noise pollution in cities and towns of Andhra Pradesh.
- **Name and designation of designated officer for ensuring compliance to provisions under statutes:**

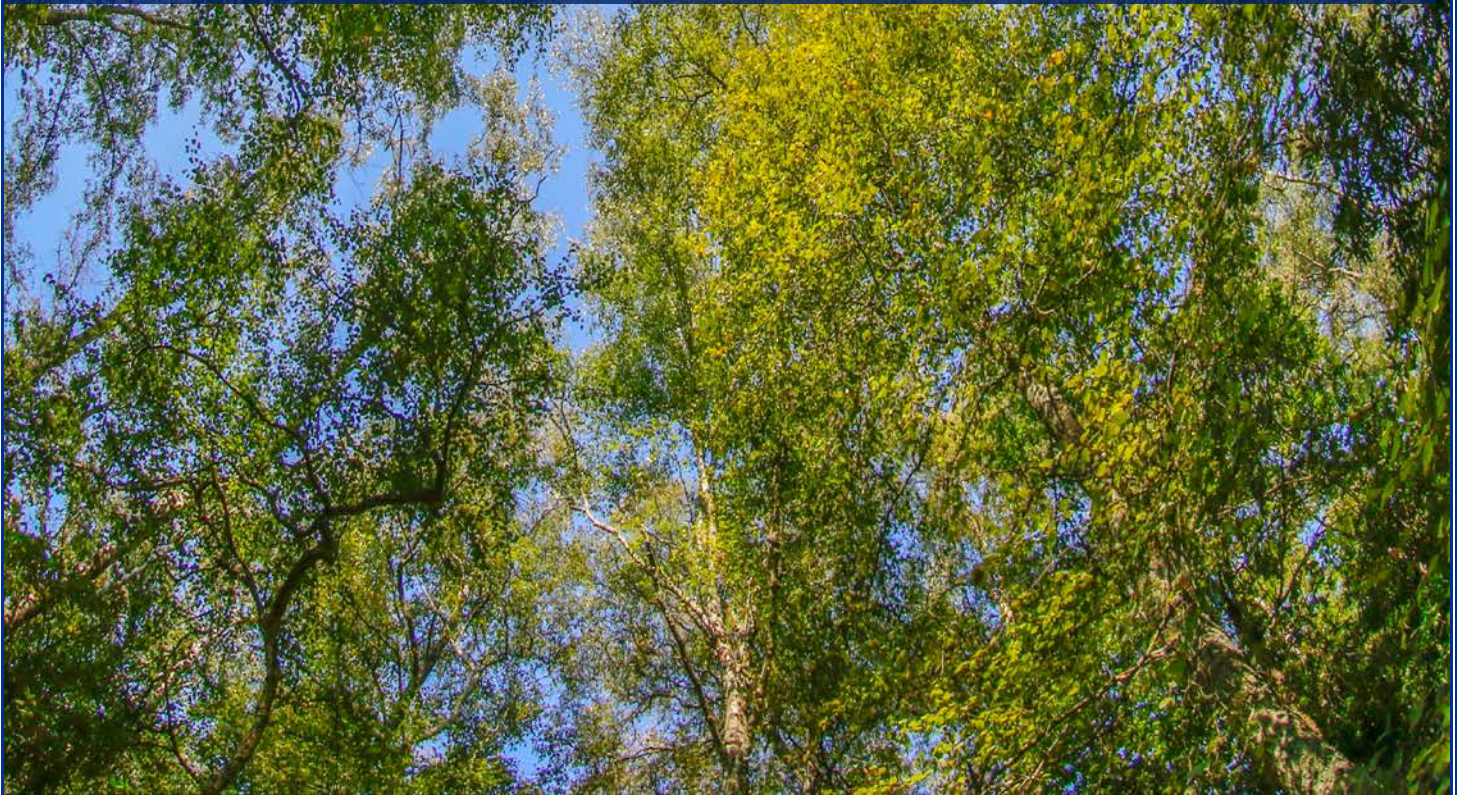
Head of following Departments:

i.	Police Department
ii.	Transport Department
iii.	Municipal Administration & Urban Development Department
iv.	Education Department
v.	A.P. Pollution Control Board

Consolidated data is enclosed as Annexure-XII.



8.0. CONCLUSION



CONCLUSION:

The State of Andhra Pradesh has extended the tenure of State Level Committee, as constituted by the Hon'ble NGT under order dated 16.01.2019, vide G.O. Rt. No. 79, dated 30.07.2019 for a further period of 6 months. The State Level Committee has regularly reviewed the implementation status of Waste Management Rules in the State of Andhra Pradesh. So far, 12 State Level Committee meetings conducted under the Chairmanship of Hon'ble Justice Sri B. Seshasayana Reddy, Former Judge of AP High Court.

In respect of Solid Waste Management in Urban Local Bodies, the works pertaining to two Waste to Energy Plants covering 13 ULBs will be completed by April 2020 and August 2020 respectively. In respect of 50 Waste to Compost Plants awarded, covering 54 ULBs, 27 Waste to Compost Plants, covering 30 ULBs are under operation and 23 Waste to Compost Plants will be commissioned by May 2020. For the 47 ULBs, which were earlier formed into 7 clusters, for establishment of Waste to Energy Plants, restructuring is under process to go for Waste to Compost Plants/Bio-Methanation Plants, duly restructuring the ULBs, with new timelines.

Now, in all the right earnestness, the State of Andhra Pradesh will stick to the committed dates and will abide by the directions issued by the Hon'ble NGT.

In respect of Hazardous Waste Management, the State is identifying the best practices for disposal of Incinerable Hazardous Waste for co-processing in cement plants thereby saving consumption of conventional fuels. With respect e-Waste Management, APPCB has initiated necessary steps to implement the e-Waste Management Rules, 2016 effectively in the State. APPCB is also in the process to establish an App for information to the public for e-waste collection and disposal.

In respect of implementation of Bio-Medical Waste Management Rules, 2016, the State of Andhra Pradesh has 12 Common Bio Medical Waste Treatment Facilities (CBWTF) for disposal of Bio-Medical Waste and Board issued Consent for Establishment (CFE) for another 2 CBWTFs. 93.7% of Health Care Facilities (HCFs) are having valid Bio-medical Waste (BMW) Authorization and 94.44% of HCFs have tied up with Common Bio-medical Waste Treatment Facilities (CBWTFs).

In respect of 100 industrial clusters, because of stringent measures taken by APPCB, the CEPI score for Visakhapatnam city is reported within the standards and same was deleted from the list of 100 industrial clusters. On implementing the stringent measures for controlling the pollution in Vijayawada, the monitoring was carried out for Vijayawada for CEPI score with 3rd party and the

CEPI score is recorded within the standards. The same is submitted to CPCB for necessary action. The action plans prepared for these 2 cities will be implemented from time to time.

In respect of compliance on the issues like Non-attainment Cities, Rejuvenation of water bodies, Polluted River Stretches, the action plans are being implemented by all Stakeholder Departments from time to time for achieving the desirable results.



9.0. ANNEXURE

Annexure I

1.0. Waste Management Plan

1.1. Solid Waste Management Plan

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
	No of Urban Local Body (ULB)		[Nos]	110
	Population		[Nos as per 2011 census]	16434413
SW1	Report on inventory of total solid waste Generation			
SW1a		Total solid waste Generation	[in MT/Day] or [Not estimated]	6766
SW1b		Qty. of Dry Waste segregated	[in MT/Day] or [Collection Not initiated]	1808
SW1c		Qty. of Wet Waste segregated	[in MT/Day] or [Collection Not initiated]	3062
SW1d		Qty. of C&D Waste segregated	[in MT/Day] or [Collection Not initiated]	481
SW1e		Qty. of Street Sweeping	[in MT/Day] or [Not estimated]	270
SW1f		Qty. of Drain Silt	[in MT/Day] or [Not estimated]	485
SW1g		Qty. of Domestic Hazardous Waste (DHW) collected	[in MT/Day] or [No Facility]	101

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
SW1h		Qty. of Other Waste (Horticulture, sanitary waste, etc.)	[in MT/Day] or [Qty not estimated]	209
SW1i		No of Old dump sites	[Nos] or [None]	104
SW1j		Qty stored in dumpsites	[MT] or [Not estimated]	8290923
SW1k		No of Sanitary landfills	[Nos] or [None]	4
SW1l		No of wards	[nos]	3618
SW2	Compliance by Bulk Waste Generators			
SW2a		No of BW Generators	[numbers] or [inventory not done]	1905
SW2b		No of on-site facilities for Wet Waste	[numbers] or [No data]	721
SW3	Compliance in segregated waste Collection SW Collection			
SW3a		Total generation	[Automatic] from SW1a	6666
SW3b		Wet Waste	[in MT/Day] or [Collection Not initiated]	3187
SW3c		Dry Waste	[in MT/Day] or [Collection Not initiated]	1953
SW3d		C&D Waste	[in MT/Day] or [Collection Not initiated]	436.35
SW4	Waste Management Operations			
SW4a		Door to Door Collection	[100%] / [partial %] / [not initiated]	100% - 92 ULBs Partial - 16 ULBs Not initiated - 2 ULBs

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
SW4b		Mechanical Road Sweeping	[100%] / [partial%] / [not initiated]	100% - 13 ULBs Partial - 37 ULBs Not initiated - 60 ULBs
SW4c		Manual Sweeping	[100%] / [partial%]	100% - 80 ULBs Partial - 30 ULBs
SW4d		Segregated Waste Transport	[100%] / [partial %] / [not initiated]	100% - 35 ULBs Partial - 61 ULBs Not initiated - 14 ULBs
SW4e		Digesters (Bio-methanation)	[% of WW] / [not initiated]	Partial - 17 ULBs Not initiated - 93 ULBs
SW4f		Composting operation	[% of WW] / [not initiated]	100% - 11 ULBs Initiated - 50 ULBs Not Initiated - 49 ULBs
SW4g		MRF Operation	[MRF used] / [not installed]	MRF Used - 57 ULBs Not installed - 53 ULBs
SW4h		Use of Sanitary Landfill	[% of SW collected] / [no SLF]	No SLF- 102 ULBs 100% SW Collected - 8 ULBs
SW4i		Reclamation of old dumpsites	[initiated] / [not initiated]	Initiated - 47 ULBs Not Initiated - 63 ULBs
SW4j		Linkage with Waste to Energy Boilers / Cement Plants	[initiated] / [not initiated]	Initiated - 30 ULBs Not initiated - 80 ULBs
SW4k		Linkage with Recyclers	[initiated] / [not initiated]	Initiated - 47 ULBs Not initiated - 63 ULBs
SW4l		Authorization of waste pickers	[initiated] / [not initiated]	Initiated - 87 ULBs Not initiated - 23 ULBs
SW4m		Linkage with TSDF / CBMWTF	[initiated] / [not initiated]	Initiated - 32 ULBs Not initiated - 78 ULBs
SW4n		Involvement of NGOs	[initiated] / [not initiated]	Initiated -81 ULBs

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
				Not initiated - 29 ULBs
SW4o		Linkage with Producers / Brand Owners	[initiated] / [not initiated]	Initiated - 27 ULBs Not initiated - 83 ULBs
SW4p		Authorization of Waste Pickers	[initiated] / [not initiated]	Initiated - 87 ULBs Not initiated - 23 ULBs
SW4q		Issuance of ID Cards	[initiated] / [not initiated]	Initiated - 85 ULBs Not initiated - 25 ULBs
SW5	Adequacy of Infrastructure:			
SW5a		Waste Collection Trolleys	[Nos. Required] / [Nos. Available]	Required - 11584 Available - 10649
SW5b		Mini Collection Trucks	[Nos. Required] / [Nos. Available]	Required - 1791 Available - 1566
SW5c		Segregated Transport	[yes] / [no] / [% area covered]	Yes - 66 ULBs Partial - 36 ULBs No - 8 ULBs
SW5d		Bulk Waste Trucks	[Nos. Required] / [Nos. Available]	Required - 583 Available - 216
SW5e		Waste Transfer points	[Nos. Required] / [Nos. Available] / [Not available]	Required - 4307 Available - 4054
SW5f		Bio-methanation units	[Nos. Required] / [Nos. Available]	Required - 1363 Available - 402
SW5h		Composting units	[Nos. Required] / [Nos. Available]	Required - 131 Available - 59
SW5i		Material Recovery Facilities	[used or installed] / [not available]	Available - 57 ULBs Not available - 53 ULBs
SW5k		Waste to Energy (if applicable)	[Required] / [Nos. Available]	Required - 62 ULBs Available - 13 ULBs
SW5l		Waste to RDF	[Required] / [Nos. Available]	Required - 35 ULBs Available - 5 ULBs

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
SW5m		Sanitary Land fills	[Nos] / [Nos. Available]	Available - 4 ULBs
SW5n		Capacity of sanitary landfills	[MT] / / [Nos. Available]	158 TPD in 4 SLFs
SW5o		Waste Deposit Centers (DHW)	[Nos] / [Nos. Available]	Required - 24 ULBs Available - 5 ULBs Not available - 81 ULBs
SW5p		Other facilities	[give or select from list]	Not available - 94 ULBs Available - 12 ULBs Required - 4 ULBs
SW6	Notification and Implementation of By-Laws			
SW6a		Notification of By-laws	[done] / [in progress] / [not initiated]	Done - 110 ULBs
SW6b		Implementation of by-laws	[done] / [in progress] / [not initiated]	Done - 92 ULBs Not initiated - 3 ULBs In Progress - 15 ULBs
SW7	Adequacy of Financial Status of ULB			
SW7a		CAPEX Required in Lakhs	[INR] / [Not required]	536.34 Crs
SW7b		OPEX in Lakhs	[INR per Year] / [% of requirement]	349.88 Crs
SW7c		Adequacy of OPEX	[Yes] / [No]	Yes - 23 No - 77

Annexure II

1.0. Waste Management Plan
1.2. Plastic Waste Management Plan

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
	No of Urban Local Body (ULB)		[Nos]	110
	Population		[Nos as per 2011 census]	16434413
PW1	Inventory of plastic waste generation			
PW1a		Estimated Quantity of plastic waste generated in District	[MT/day] / [Not Estimated]	289
PW2	Implementation of Collection:			
PW2a		Door to Door collection	[100%] / [partial %] / [not initiated]	100% -94 ULBs Partial - 16 ULBs
PW2b		Segregated Waste collection	[100%] / [partial %]	100% -25 ULBs Partial - 85 ULBs
PW2c		Plastic waste collection at Material Recovery Facility	[MRF used] / [not installed]	MRF Used - 57 ULBs Not installed -53 ULBs
PW2d		Authorization of PW pickers	[Nos] / [not initiated]	3440 Nos - 79 ULBs Not initiated - 31 ULBs
PW2e		PW collection Centers	[Nos] / [not established]	647 Nos Established - 79 ULBs Not established - 31 ULBs

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
PW3	Establishment of linkage with Stakeholders			
PW3a		Established linkage with PROs of Producers	[Nos] / [not established]	23 Nos - 7 ULBs Not established - 103 ULBs
PW3b		Established linkage with NGOs	[Nos] / [not established]	Not established - 81 ULBs 107 Nos - 29 ULBs
PW4	Availability of facilities for Recycling or utilization of PW:			
PW4a		No. of PW recyclers	[Nos]	11
PW4b		No Manufacturers	[Nos]	97
PW4c		No of pyrolysis oil plants	[Nos]	0
PW4d		Plastic pyrolysis	[Quantity in MT sent per Month]	5
PW4e		Use in road making	[Quantity MT used per Month]	27 MT - 3 ULBs
PW4f		Co-processing in Cement Kiln	[Quantity in MT sent per Month]	550
W5	Implementation of PW Management Rules, 2016			
W5a		Sealing of units producing < 50-micron plastic	[All sealed] / [Partial] / [no action]	All Sealed - 50 ULBs
PW5b		Prohibiting sale of carry bags < 50 micron	[Prohibited] / [Partial] / [no action]	Prohibited - 110 ULBs
PW5c		Ban on Carry bags and other single use plastics as notified by State Government	[Implemented] / [Partial] / [no action] / [No Ban]	Implemented - 5 ULBs

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
PW6	Implementation of Extended Producers Responsibility (EPR) through Producers/Brand-owners			
PW6a		No of Producers associated with ULBs	[Nos] / [None]	5 Nos – 5 ULBs & None –105 ULBs
PW6b		Financial support by Producers / Brand owners to ULBs	[Nos] / [None]	1 No – 1 ULB & None – 109 ULBs
PW6c		Amount of PRO Support	[Rs...]	50 lakhs – 1 ULB & None – 109 ULBs
PW6d		Infrastructure support by Producers / Brand owners to ULBs	[Nos of Producers] / [None]	Nos- 1 ULBs None-109 ULBs
PW6e		No of collection centers established by Producers / Brand owners to ULBs	[Nos] / [None]	Nos- 3 ULBs None-107 ULBs

Annexure III**1.0. Waste Management Plan****1.3. C&D Waste Management Plan**

Sl. No.	Action Plan Areas	Details of Data Requirement	Measurable Outcome	Total in the State
	No of Urban Local Body (ULB)		[Nos]	110
	Population		[Nos as per 2011 census]	16434413
CD1				
CD1a		Estimated Quantity	[Kg/Day] / [Not estimated]	391593
CD2	Implement scheme for permitting bulk waste generators			
CD2a		Issuance of Permissions by ULBs	[Initiated] / [Not initiated]	Initiated - 44 ULBs Not initiated - 56 ULBs
CD3	Establishment of C&D Waste Deposition centers			
CD3a		Establishment of Deposition Points	[Yes] / [No]	Yes - 71 ULBs
CD3b		C&D Deposition point identified	[Yes] / [No]	Yes - 110 ULBs
CD4	Implementation of By-Laws for CD Waste Management			
CD4a		Implementation of By-laws	[notified] / [not notified]	Notified - 110 ULBs

Sl. No.	Action Plan Areas	Details of Data Requirement	Measurable Outcome	Total in the State
CD4b		Collection of Deposition / disposal Charges	[Initiated] / [Not initiated]	Initiated - 68 ULBs Not initiated - 42 ULBs
CD5	Establishment of C&D Waste recycling plant or linkage with such facility			
CD5a	-	Establishment CD Waste Recycling Plant	[Established] / [Sent to shared Facility] / [No facility exists]	facility established - 3 ULB No facility exists - 107 ULBs
CD5b	-	Capacity of CD Waste Recycling Plant	[MT/Day] / [Not available]	480 TPD available - 3 ULB Not available - 107 ULBs

Annexure IV**1.0. Waste Management Plan****1.4. Biomedical Waste Management**

Sl. No	Action Plan Area	Details of the Data Required	Measurable Outcome	Total in the State
BMW1	Inventory of Biomedical Waste Generation			Total
BMW1a		Total no. of Bedded Hospitals	[Nos] / [No inventory]	4844
BMW1b		Total no. of non-bedded HCF	[Nos] / [No inventory]	2377
BMW1c		Total no. Clinics	[Nos] / [No inventory]	1208
BMW1d		No of Veterinary Hospitals	[Nos] / [No inventory]	288
BMW1e		Pathlabs	[Nos] / [No inventory]	579
BMW1f		Dental Clinics	[Nos] / [No inventory]	1018
BMW1g		Blood Banks	[Nos] / [No inventory]	128
BMW1h		Animal Houses	[Nos] / [No inventory]	10
BMW1i		Bio-research Labs	[Nos] / [No inventory]	2
BMW1j		Others	[Nos] / [No inventory]	233
BMW2	Authorization of HCFs by SPCBs / PCCs			
BMW2a		Bedded HCFs	[Nos Authorized]	4982
BMW2b		Non-bedded HCFs	[Nos Authorized]	2846
BMW3a	Biomedical Waste Treatment and Disposal Facilities (CBMWTFs)			
BMW3a		No of CBMWTFs	[Nos] / None	12
BMW3b		Linkage with CBMWTFs	[Yes] / [no linkage]	Yes

Annexure V**1.0. Waste Management Plan****1.5. Hazardous Waste Management**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
HW1	Inventory of Hazardous Waste			
HW1a		No of HW Generating Industry	[Nos.]	2683
HW1b		Quantity of HW	[MT/Annum]	734714.99
HW1c		Quantity of Incinerable HW	[MT/Annum]	10067.83
HW1d		Quantity of land-fillable HW	[MT/Annum]	214081.428
HW1e		Quantity of Recyclable / utilizable HW	[MT/Annum]	Recyclable - 478330.91 & Utilizable - 90719.95
HW2	Contaminated Sites and illegal industrial hazardous waste dumpsites			
HW2a		No of HW dumpsites	[Nos] / [None]	None
HW2c		Probable Contaminated Sites	[Nos] (provide list)	0
HW3	Authorization by SPCBs/PCCs			
HW3a		No of industries authorized	[Nos]	2678
HW3b		Display Board of HW Generation in front of Gate	[Nos]	1756
HW3	Availability of Common Hazardous Waste TSDF			
HW3a		Common TSDF	[Exists] / [No] / [Sent to Other District within State]	2 Nos.

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
HW3b		Industries linkage with TSDF	[Nos.]	387
HW4	Linkage of ULBs in District with Common TSDF			
HW4a		ULBs linked to Common TSDFs for Domestic Hazardous Waste	[Yes] / [No]	No

Annexure VI**1.0. Waste Management Plan****1.6. E-Waste Waste Management**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
EW1	Status of facilitating authorized collection of E-Waste			
EW1a		Does the citizen are able to deposit or provide E-Waste through Toll-free Numbers in the District	[Yes] / [No]	No
EW1c		Collection centers established by ULB in District	[Nos] / [None]	27
EW1d		Collection centers established by Producers or their PROs in the District	[Nos] / [None]	89
EW1e		Does the district has linkage with authorized E-Waste recyclers / Dismantler	[Yes] / [No]	Yes - 10 No - 3
EW1f		No authorized E-Waste recyclers / Dismantler	[Nos] / [None]	6 Nos proposed - 4 2 exists - 1 None - 8
EW2	Status of Collection of E-Waste			
EW2a		Authorizing E-Waste collectors	[Authorized] / [None]	3 Nos - 1 None - 12
EW2b		Involvement of NGOs	[Yes] / [No] / [Nos]	Yes - 2 No - 10
EW2c		Does Producers have approached NGOs/	[Yes] / [No] / [Nos]	Yes - 5

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
		Informal Sector for setting up Collection Centers.		No - 8
EW2d		Does ULBs have linkage with authorized Recyclers / Dismantlers	[Yes] / [No]	Yes - 5 No - 8
EW4	Control E-Waste related pollution			
EW4a		Does informal trading, dismantling, and recycling of e-waste exists in District	[Yes] / [No]	Yes - 1 No - 11
EW4b		Does the administration closed illegal E-Waste recycling in the District	[Yes] / [No] / [Nos]	No
EW4c		No of actions taken to close illegal trading or processing of E-Waste	[Nos]	No
EW5	Creation of Awareness on E-Waste handling and disposal			
EW5a		Does PROs / Producers conducted any District level Awareness Campaigns	[Yes] / [No] / [Nos]	10 Nos Yes - 5 No - 8
EW5c		Does District Administration conducted any District level Awareness Campaigns	[Yes] / [No] / [Nos]	18 Nos Yes - 8 No - 5

Annexure VII**2.0 Water Quality Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
WQ1	Inventory of water resources in District			
WQ1a		Rivers	[Nos] and [Length in Km]	Nos - 118 Length in Km - 3280
WQ1b		Length of Coastline	[in Km]	923 KM
WQ1c		Nalas/Drains meeting Rivers	[Nos]	1782 Nos
WQ1d		Lakes / Ponds	[Nos] and [Area in Hectares]	327243 Nos 927890 Area in HA
WQ1e		Total Quantity of sewage and industrial discharge in District	[Automatic] (SW1a+IW1b)	Automatic - 3819 MLD
	Control of Groundwater Water Quality			
WQ2a		Estimated number of bore-wells	[Nos]	1252685 Nos
WQ2b		No of permissions given for extraction of groundwater	[Nos]	252303 Nos
WQ2c		Number of groundwater polluted areas	[Nos]	36
WQ2d		Groundwater Availability	[adequate] / [not adequate]	Adequate
WQ3	Availability of Water Quality Data			

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
WQ3a		Creation of monitoring cell	[Yes] / [No]	Yes - 7 No - 6
WQ3b		Access to Surface water and groundwater quality data at DM office	[Available] or [Not available]	Available - 9 Not available - 4
WQ4	Control of River side Activities			
WQ4a	Control of River side Activities	River Side open defecation	[Fully Controlled] / [Partly controlled] / [no Measures taken]	Full Controlled - 10 Partially - 2 Measures taken - 1
WQ4b		Dumping of SW on river banks	[Fully Controlled] / [Partly controlled] / [no Measures taken]	Full Controlled - 10 Partially - 2 Measures taken - 1
WQ4c		Control measures for idol immersion	[Measures taken] / [Measures taken post immersion] / [No Measures taken]	Measures taken - 13
WQ5	Control of Water Pollution in Rivers			
WQ5a		Percentage of untreated sewage	[%] (automatic SM1g/SM1a)	100% - 2 Automatic - 11
WQ5b		Monitoring of Action Plans for Rejuvenation of Rivers	[Monitored] / [Not monitored] / [not applicable]	Monitored - 10 Not Monitored - 1 Not applicable - 2
WQ5c		No of directions given to industries for Discharge of Untreated industrial wastewater in last 12 months	[Nos]	42 Nos

Sl. No.	Action Areas	Details of Data Requirement	Units of Measurable Outcome	Total in the State
WQ6	Awareness Activities			
WQ6a		District level campaigns on protection of water quality	[Nos in previous year]	1040 Nos in previous year
WQ6b	Oil Spill Disaster Contingency Plan			
WQ6a		Creation of District Oil Spill Crisis Management Group	[Created] / [Not Created]	Created - 6 Not Created - 7
WQ6b		Preparation District Oil Spill Disaster Contingency Plan	[Prepared] / [Not Prepared]	Prepared - 6 Note prepared - 7
WQ7	Protection of Flood plains			
WQ7a		Encroachment of flood plains is regulated.	[Yes] / [No]	Yes - 11 No - 2
	Rainwater Harvesting			
WQ8a		Action plan for Rain water harvesting	[Implemented] / [Not implemented]	Implemented

Annexure VIII**3.0 Domestic Sewage Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Measurable Outcome for District	Total in the State
SM1	Inventory of Sewage Management				
SM1a		Total Quantity of Sewage generated in District from Class II cities and above	[MLD]		1463.2
SM1b		No of Class-II towns and above	[Nos]		146
SM1c		No of Class-I towns and above	[Nos]		499
SM1d		No of Towns needing STPs	[Nos]		120
SM1e		No of Towns STPs installed	[Nos]		39
SM1f		Quantity of treated sewage flowing into Rivers (directly or indirectly)	[MLD]		52.4
SM1g		Quantity of untreated or partially treated sewage (directly or indirectly)	[Automatic] (MLD)		931.75
SM1h		Quantity of sewage flowing into lakes	[MLD]		34.81
SM1i		No of industrial townships	[Nos]		28
SW2	Adequacy of Available Infrastructure for Sewage Treatment				

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Measurable Outcome for District	Total in the State
SM2a		% sewage treated in STPs	[Automatic]		25.97
SM2b		Total available Treatment Capacity	[MLD]		531.45
SM2c		Additional treatment capacity required	[MLD]		931.068
SM3	Adequacy of Sewerage Network				
SM3a		No of ULBs having partial underground sewerage network	[Nos]		12
SM3b		No of towns not having sewerage network	[Nos]		91
SM3c		% population covered under sewerage network	[Automatic]		

Annexure IX**4.0. Industrial Wastewater Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
IWW1	Inventory of industrial wastewater Generation in District			
IWW1a		No of Industries discharging wastewater	[Nos]	1050
IWW1b		Total Quantity of industrial wastewater generated	[MLD]	4494.33
IWW1c		Quantity of treated IWW discharged into Nalas / Rivers	[MLD]	760.16
IWW1d		Quantity of un-treated or partially treated IWW discharged into lakes	[MLD]	0.046
IWW1e		Prominent Type of Industries	[Agro based] / [Chemical – Dye etc.] / [Metallurgical] / [Pharma] / [Pesticide] / [Power Plants] / [Mining] / [Automobile]. Multiple selection based on size of operation and number	Nil
IWW1f		Common Effluent Treatment Facilities	[Nos] / [No CETPs]	6
IWW2	Status of compliance by Industries in treating wastewater			

IWW2a		No of Industries meeting Standards	[Nos]	1093
IWW2b		No of Industries not meeting discharge Standards	[Automatic]	109
IWW2c		No of complaints received or number of recurring complaints against industrial pollution in last 3 months	[Nos]	80
AWW4	Status of Action taken for not meeting discharge standards			
IWW4a		Status of Action taken for not meeting discharge standards	[Nos]	27
IWW4b		No of industries where Environmental Compensation was imposed By SPCBs	[Nos]	1

Annexure X**5.0. Air Quality Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
AQ1	Availability of Air Quality Monitoring Network in District			
AQ1a		Manual Air Quality monitoring stations of SPCBs /CPCB	[Nos] / [None]	74
AQ1c		Automatic monitoring stations Operated by SPCBs / CPCB	[Nos] / [None]	7
AQ2	Inventory of Air Pollution Sources			
AQ2a		Identification of prominent air polluting sources	[Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln] / [Industrial Estate] / [Others] (Multiple selection)	Small Industry, Unpaved Roads, Burning of waste stubble, Industrial Estate, Others (Multiple selection)
AQ2b		No of Non-Attainment Cities	[Nos] / [None]	13
AQ2c		Action Plans for non-attainment cities	[Prepared] / [Not yet prepared]	Prepared
AQ3	Availability of Air Quality Monitoring Data at DMs Office			
AQ3a		Access to air quality data from SPCBs & CPCB through Dashboard	[Available] / [Not yet Available]	Available
AQ4	Control of Industrial Air Pollution			

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
AQ4a		No of Industries meeting Standards	[Nos]	5530
AQ4b		No of Industries not meeting discharge Standards	[Nos]	280
AQ5	Control of Non-industrial Air Pollution sources			
AQ5a		Control open burning of Stubble – during winter	[Nos of fire incidents]	Nil
AQ5b		Control Open burning of Waste – Nos of actions Taken	[Nos]	3
AQ5c		Control of forest fires	[SOP available] / [No SoP]	SOP available
AQ5d		Vehicle pollution check centers	[% ULBs covered]	79.7%
AQ5e		Dust Suppression Vehicles	[% ULBs covered]	34%
AQ6	Development of Air Pollution complaint redressal system			
AQ6a		Mobile App / Online based air pollution complaint redressing system of SPCBs.	[Available] / [Not available]	Available

Annexure XI**6.0. Mining Activity Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
MI1a	Inventory of Mining in District			
MI1a		Type of Mining Activity	[Sand Mining] / [Iron Ore] / [Bauxite] / [Coal] / Other [specify] Multiple selection in order of magnitude of operations	The State consists of Mining activity color granite, lime stone, laterite, beach sand minerals, manganese, quartz, barytes, mica, vermiculate, silica sand, dolomite, road metal & sand mines etc.
MI1b		No of Mining licenses given in the District	[Nos]	6960
MI1c		Area covered under mining	[Sq Km]	562.71
MI1d		Area of District	[Sq Km]	162182
MI1e		Sand Mining	[Yes] / [No]	Yes - 11 No - 1
MI1f		Area of sand Mining	[River bed] / [Estuary] / [Non -river deposit]	River Bed - 158.684 Non-River Bed - 126.235
MI2	Compliance to Environmental Conditions			

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
MI2a		No of Mining areas meeting Environmental Clearance Conditions	[Nos]	1640
MI2b		No of Mining areas meeting Consent Conditions of SPCBs / PCCs	[Nos]	1564
MI3a	Mining related environmental Complaints			
MI3b		No of pollution related complaints against Mining Operations in last 1 year	[Nos]	35
MI4	Action against non-complying mining activity			
MI4a		No of Mining operations suspended for violations to environmental norms	[Nos]	918
MI4b		No of directions issued by SPCBs	[Nos]	158

Annexure XII**7.0 Noise Pollution Management Plan**

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
NP1	Availability Monitoring equipment			
NP1a		No. of noise measuring devices with district administration	Nos / None	-
NP1b		No. of noise measuring devices with SPCBs	Nos / None	1. Portable hand-held devices: 14 nos. 2. Real time noise monitoring stations: 4 nos.
NP2	Capability to conduct noise level monitoring by State agency / District authorities			
NP2a		capability to conduct noise level monitoring by State agency / District authorities	Nos.	APPCB has got the ability to monitor noise levels as per the regulatory requirements.
NP2	Management of Noise related complaints			
NP2a		No of complaints received on noise pollution in last 1 year	Nos.	1 No. (by Central Laboratory)
NP2b		No of complaints redressed	Nos.	1 No.

Sl. No.	Action Areas	Details of Data Requirement	Measurable Outcome	Total in the State
NP3	Compliance to ambient noise standards			
NP3a		Implementation of Ambient noise standards in residential and silent zones	Regular activity / occasional / never	1. APPCB is carrying out continuously on real time basis at 4 stations (Visakhapatnam, Vijayawada and Tirumala). 2. During Deepavali festival at all the district headquarters. 3. Attending complaints on noise pollution.
NP3b		Noise monitoring study in district	Carried out / Not carried out	1. During Deepavali festival at all the district headquarters. 2. Attending complaints on noise pollution.
NP3c		Sign boards in towns and cities in silent zones	Installed / Partial / Not installed	Partial