BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH

AT

NEW DELHI

IN THE MATTER OF

ORIGINAL APPLICATION NO. 606 OF 2018

STATUS REPORT

BY THE

STATE OF CHHATTISGARH

APRIL 30, 2019

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI O.A. No. 606/2018

Compliance of Municipal Solid Waste Management Rules, 2016 Order dated 16.01.2019

STATUS OF COMPLIANCE

- 1. The National Green Tribunal directed the Chief Secretaries of all States to review the progress of compliance on various issues related to the environment and personally appear before the National Green Tribunal on 30/04/2019 with the status report of compliance and future action plans as per Para 40 of the order dated 16/01/2019 in O.A. No. 606/2018.
- 2. Compliance status on points mentioned in Para 40 of the order dated 16/01/2019, are as follows:
- (a) Status of compliance of Solid Waste Management Rules, 2016, Plastic Waste Management Rules, 2016 and Bio-Medical Waste Management Rules, 2016 in their respective areas:

<u>Solid Waste Management Rules, 2016</u> – There are 168 ULBs in the state. Total quantity of municipal solid waste generated from 168 ULBs having 3217 wards is 1650 tonnes/day. Status of compliance of different provisions are as follows:-

- State Solid Waste Management Policy and Action Plan for Solid Waste Management has been prepared in the state as per Rule 11 (1) (a).
- For implementation of Rule 12, District Collectors are reviewing the performance of ULBs. Latest review meetings were held by all 27 District Collectors in the month of April 2019. Reports have been submitted to UAD.
- For implementation of Rule 15, the Mission Clean City Guidebook (Plan and Strategy) for 166 ULBs have been prepared. The strategy has been approved and issued for implementation on 07/09/2016. The necessary bye laws for levying of spot fine for littering of waste etc. have been framed and notified on Chhattisgarh gazette. Annual report for the year 2017-18 has been submitted by local bodies vide letter dated 27/08/2018. Total Rs. 31,57,941/- fine have been collected from 18667 nos. of violators.

 A time frame has been specified under Rule 22 for the activities required to be undertaken for implementation of these rules. Action taken for the different activities against given time frame is as below:-

S. No.	Activity	Time limit (from the date of notification of Rules)	Status
1.	Identification of suitable sites for setting up solid waste processing facilities.	1 year	Identified sites in all 168 ULBs completed.
2.	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or standalone sanitary landfill facilities by all local authorities having a population of 0.5 million or more.	1 year	There are 166 ULBs under 0.5 million population having SLRM facility with zero landfill facility. Hence, identification of separate sanitary landfill facilities is not required. Site identified for 01 ULB i.e. Bilaspur under 0.5 million population having facility based on Composting and RDF with landfill.
3.	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities.	2 years	Procurement of sites in all 168 ULBs completed.
4.	Enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source.	2 years	Complete. Total ULBs – 168 Total wards – 3217 Total wards covered – 3217 Total solid waste generation – 1650 TPD Total segregated solid waste collected on door to door basis – 1650 TPD
5.	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years	Complete. As stated in point no. 4. Transportation is being done in covered vehicles. There are total 3335 covered vehicles for 168 ULBs.
6.	Ensure separate storage, collection and transportation of construction and demolition wastes.	2 years	Suitable lands have been identified and necessary mechanisms have been established for separate storage, collection and transportation in all 168 ULBs. However, strengthening of

			collection and transportation facilities are in progress. Total quantity of construction and demolition waste generation–210 TPD. Chhattisgarh C & D waste management policy has been framed and published on 15 th September 2017. SOP for C & D waste management has been prepared and same has been shared with ULBs vide letter dated 04/12/2018 to implement the same.
lo lo	retting up solid waste rocessing facilities by all ocal bodies having 100000 r more population.	2 years	There are total 09 ULBs having 100000 or more population. Out of which, 07 ULBs are having waste management facilities based on SLRM. Remaining 02 ULBs (Raipur and Bilaspur) have waste management facilities of capacity more than 05 TPD, which is based on composting and RDF (Refused Derived Fuel) with landfill. Waste Management facility at Bilaspur has been commissioned on 06/03/2019. Waste management facility at Raipur shall be commissioned by 31st December 2019. In 07 ULBs, 86 SLRM centers have already been established. To strengthen the existing facility, additional 17 SLRM centers will be commissioned on or before 31st December 2019. After completion of these, 522 SLRM centers will be operational in the state for all 166 ULBs. Till now every ULBs have SLRM centers/waste processing mechanism and these are running successfully and after completion of rest SLRM centers, the SWM model in the State will be improved and service delivery on SWM will be enhanced.
lo to	Tetting up solid waste rocessing facilities by ocal bodies and census owns below 100000 opulation.	3 years	There are total 159 ULBs having population below 100000. In 159 ULBs, 391 SLRM centers have already been established. To strengthen the existing facility,

			additional 28 SLRM centers will be commissioned on or before 31st December 2019. After completion of these, 522 SLRM centers will be operational in the state for all 166 ULBs. Till now every ULBs have SLRM centers/waste processing mechanism and these are running successfully and after completion of rest SLRM centers, the SWM model in the State will be improved and service delivery on SWM will be enhanced.
9.	Setting up common or standalone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules.	3 years	In progress. There are 02 ULBs i.e. Raipur and Bhilai having population more than 0.5 million. 01 ULB (Raipur) has waste management facilities of capacity more than 05 TPD, which is based on composting and RDF (Refused Derived Fuel) with landfill. Waste management facility at Raipur shall be commissioned by 31st December 2019. 01 ULB (Bhilai) has SLRM centers with zero landfill facility.
10.	Setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules.	3 years	The need for landfill is eliminated, as zero landfill model has been adopted in the state. 01 ULB (Bilaspur) has waste management facility of capacity more than 05 TPD, which is based on composting and RDF (Refused Derived Fuel) with landfill. Waste Management facility at Bilaspur has been commissioned on 06/03/2019
11.	Bio-remediation or capping of old and abandoned dump sites.	5 years	Legacy waste remediation in Raipur to be completed by March 2021. Legacy waste remediation completed – 160 ULBs. Legacy waste remediation in – 07 ULBs (Bhilai, Jagdalpur, Korba, Raigarh, Dhamtari, Durg, Bilaspur) to be completed by March 2021.

 There are 10,977 gram panchayats in the state. For implementation of Rule 13, guidelines regarding SLRM have been prepared and circulated by Panchayat and Rural Development Department vide letter dated 04/09/2018. For implementation of Rule 15, there are total 10,977 SLRM centers proposed in Gram Panchayats. Out of which, 49 SLRM centers are in operation. Total solid waste generation from these 49 gram panchayats is 35.63 TPD, out of which 22.45 TPD is being converted to compost by low cost technology at house hold level and rest 13.18 TPD is being collected from door to door and processed in SLRM centers. Action plan of Rs. 476.43 crores for proposed SLRM centers in 2703 gram panchayats in the year 2019-20 has been approved by Government of India.

- For implementation of Rule 23, the State Level Advisory Body has been constituted vide order dated 17/03/2017. Meetings were held on 16/04/2018, 05/09/2018, 30/10/2018 and 22/04/2019.
- For implementation of Rule 24 (2), Annual Report of 141 ULB's for the year 2017-18 has been submitted by ULBs through State Urban Development Authority vide letter dated 27/08/2018 to CECB.
- For implementation of Rule 16, inspections of SLRM centers and integrated waste management facility at Bilaspur are carried out by CECB from time to time. As on date inspections of 139 SLRM centers have been done. 20 SLRM centers have been asked to take necessary measures for improvement. Two ULBs (Raipur and Bilaspur) have waste management facilities of capacity more than 05 TPD, which is based on composting and RDF with landfill.
- Waste Management facility based on compost and RDF at Bilaspur has been commissioned on 06/03/2019. Waste Management facility based on compost and RDF at Raipur is under construction and shall be commissioned before 31st December, 2019. For implementation of Rule 18, CECB has directed the industries situated in the state to make use of RDF in their plant. It will be ensured that generated RDF be used by the industries especially by cement plants.
- For implementation of Rule 24 (3), Annual Report of 141 ULB's for the year 2017-18 has been submitted to CPCB vide letter dated 29/09/2018.

Action proposed

 Establishment and commissioning of Integrated Solid Waste Management Plant of Raipur with capacity 300 TPD RDF and 50 TPD compost with landfill on or before 31st December, 2019. Presently the plant is under construction.

- 2. Establishment and commissioning of remaining 45 SLRM centers on or before 31st December, 2019 to strengthen the existing facility.
- 3. The legacy waste remediation in 160 ULB's have been completed out of total 168 ULB's. Remediation of legacy waste in Bhilai, Jagdalpur, Korba, Raigarh, Dhamtari, Durg and Bilaspur is under progress, which will be complete by March, 2021. Remediation of legacy waste in Raipur shall be completed by March, 2021. The process of removing the legacy waste and reclaiming the land shall continue.
- 4. Notification of buffer zone for the solid waste processing and disposal facility of more than 05 tonnes/day by competent authority on or before 31st August, 2019.
- 5. Establishment of waste management system by providing financial assistance to ULBs for collecting packaging waste generated due to production from manufacturers or brand owners of disposable products in the State on or before 31st December, 2019.
- 6. UAD has directed CSIDC to comply with provision of Rule 11 (1) (h) vide letter dated 19/04/2018 for making provision in all industrial park, industrial estate, SEZ etc. to earmark at-least five percent of the total area of the plot or minimum five plots or sheds for recovery and recycling facility. The same shall be ensured within 06 months.
- 7. To comply with provision of Rule 11 (1) (k), notification of buffer zone for the solid waste processing and disposal facilities of Raipur, Bilaspur and SLRM centers having more than 05 tonnes/day shall be issued within 03 months.
- 8. For implementation of Rule 17, UAD issued notification dated 14/12/2018 to collect the packaging waste generated from manufacturer or brand owners of disposable products and to collect fund from them for the same. After adoption of above byelaws, EPR system will be applicable to all ULBs. Modalities for the implementation of above clause as discussed in the meeting dated 22/04/2019 of the State Level Advisory Committee will be implemented on or before 31st December 2019.
- 9. Strengthening of existing mechanism for collection and transportation of construction and demolition wastes in all 168 ULB's shall be done within 12 months.
- 10. As per approved action plan of Rs. 476.43 crores by Government of India, SLRM centers in 2703 gram panchayats shall be established in the year 2019-20.

<u>Plastic Waste Management Rules, 2016</u> – Total quantity of plastic waste generated from 168 ULBs is 130 tonnes/day. Status of compliance of different provisions are as follows:-

- State Government vide notification dated 27/09/2017 has banned manufacture, store, import, sell, transport and use of plastic carry bags, short-life PVC and chlorinated plastics i.e. advertising and publicity materials (banners, flexes, hoardings, foam boards etc. of PVC) and plastic items used for catering (cups, glasses, plates, bowls and spoons). All 11 nos. of carry bags manufacturing units have been close down.
- In addition to above, "Chhattisgarh Non-Biodegradable (Control) Bill, 2019" has been proposed to prohibit throw/disposal of biodegradable and non-biodegradable garbage in public drains and sewage, natural or manmade lake, wetlands etc. The aforesaid act provides restriction or prohibition on use of non-biodegradable material, or any other material harmful to environment. The proposed act also provides penalties and compounding of offences.
- For implementation of Rule 6 (1), 323 SLRM centers have the provision and infrastructure for segregation, collection, storage, disposal of the recyclable plastic waste, which are working efficiently through SHGs.
- For implementation of Rule 6 (2) (c), arrangement to provide recyclable plastic waste to recycler has been made. Recyclable plastic waste segregated and sold to local plastic dealers (Kabadiwalas) with the condition that the waste bought would be handed over to the registered plastic waste recyclers only, who will recycle the plastic as per Indian Standard: IS 14534:1998. Channelization of recyclable plastic waste fraction is done through 08 registered recyclers having total capacity of 3420.25 Metric Tonnes Per Year.
- For implementation of Rule 6 (2) (d), processing and disposal of non-recyclable fraction of plastic waste as per guidelines of CPCB is being ensured. Non-recyclable plastics (Thermoset Plastics, Multilayer Packaging and Laminates, Bakelite, Polycarbonate, Nylon SMC, FRP etc.) are being stored separately and will be sold as alternate fuel and raw material (AFR) to cement plants authorized by CECB. Draft SOP regarding disposal of plastic waste in cement kilns has been received on 05/03/2019. Finalization of SOP is under process. The 04 numbers of cement plants of the state have been granted consent for co-processing of plastic waste in their cement kilns totaling 505 metric tonnes per day. Hence, cement plants of the state are not only capable of disposing total plastic waste generated, but also plastic waste from other states.

- For implementation of Rule 6 (2) (f), 8935 members of Women Community based Organization (SHGs) are being engaged in the Mission Clean City Model across the State.
- For implementation of Rule 6 (2) (g), UAD has issued notification dated 28/01/2019 for imposition of fine for open burning of solid waste including plastic waste. Total Rs. 9,71,961/- fine have been collected and 2553 nos. of court cases have been filed against violators of the rules.
- For implementation of Rule 6 (3), EPR byelaws has been published by UAD on 14/12/2018 for ensuring setting up system for plastic waste management with assistance of producers.
- For implementation of Rule 6 (4), the Municipal Corporation Plastic Waste Management byelaws have been prepared by UAD. All MCs have been directed to publish their byelaws in the respective work area.
- For implementation of Rule 7, for setting up of infrastructure for segregation, collection, storage, transportation, processing and disposal of plastic waste, creating awareness and no open burning of plastic waste in rural areas, Panchayat and Rural Development Department has issued guidelines regarding SLRM vide letter dated 22/03/2019.
- For implementation of Rule 9 (1), action is being taken to work out modalities for waste collection system based on Extended Producer Responsibility (EPR). EPR byelaws have been published by UAD on 14/12/2018. Discussions with large producers of waste is going on to rope in extended producer responsibility. The system will be implemented on or before 31st December 2019.
- No Multilayer Plastic Manufacturing Unit is operating in the Chhattisgarh State in compliance of the provision of Rule 9 (3).
- For implementation of Rule 16, State Level Monitoring Committee has been formed in the state by UAD. Meetings of the committee were held on 05/09/2018 and 22/04/2019.
- For implementation of Rule 17 (2), Annual Report of 124 ULBs out of 168 ULBs for the year 2017-18 has been submitted by ULBs through State Urban Development Authority vide letter dated 18/09/2018 to CECB and same is forwarded to CPCB.

- For implementation of Rule 13, no carry bag manufacturing, recycled plastic bag and multilayer plastic manufacturing unit is operating in the Chhattisgarh State. In the state there are 08 producers and 08 recyclers, which have been registered by CECB.
- For implementation of Rule 17 (3), CECB has submitted annual report of the year 2017-18 vide letter dated 17/10/2018 to CPCB.

Action proposed

- Ensuring ban on sachet using plastic materials. Sachet using plastic material shall not be used for storing, packing or selling gutkha, tobacco and pan masala by proposed "Chhattisgarh Non-Biodegradable (Control) Bill, 2019" on or before 31st October 2019.
- Chhattisgarh Environment Conservation Board shall ensure co-processing of plastic waste by cement plants in their kilns on or before 31st October 2019.
- 3. Efforts shall be made for use of plastic waste in road construction as per IRC guidelines by local bodies. The Government road construction agencies shall incorporate the provision of above in their Schedule of Rates (SOR) to ensure use of plastic waste in road construction. 02 ULBs namely Ambikapur and Rajnandgaon have started use of plastic wastes in road construction.
- 4. All 168 Local bodies will set-up system for plastic waste management with assistance of producers, brand owners and work out modalities for waste collection system on or before 31st December 2019.

Bio-Medical Waste Management Rules, 2016 – There are 1014 nos. of Government HCFs and 2917 nos. of private HCFs in the state. CECB has issued 1878 nos. of authorizations to the HCFs. Out of which 316 nos. of authorizations have been issued to Government HCFs and 1562 nos. of authorizations to private HCFs (including 190 nos. of one time authorizations). Total Bio-medical wastes generation from HCFs granted authorization is about 15 TPD. Status of compliance of different provisions are as follows:-

• As per Rule 4 (a) necessary steps are being taken to ensure handling of bio-medical waste from all authorized HCFs without any adverse effect to human health and the environment. HCFs send their bio-medical wastes to CBWTF for treatment and disposal. Details are as below:-

Name of CBWTF	No. of Associated HCFs
M/s SMS Watergrace Enviroprotect Pvt. Ltd., Siltara, Raipur	910
M/s Envirocare International (CG), Bilaspur	750
M/s Envirocare International (CG), Korba	72
M/s Aroma Social Services, Bade Rampur, Raigarh	211
Total	1943

There is no CBWTFs at Bastar and Surguja Division. Hence, HCFs located at Bastar and Surguja division dispose off their wastes through deep burial within the premises. Two CBWTFs at Kondagaon and Surguja are in the process of establishment.

Govt. HCFs generating 6.7 TPD wastes, out of which, 0.88 TPD is being disposed through CBWTFs and rest 5.82 TPD wastes is being disposed off through deep burial by their own. Private HCFs generating 8.3 TPD wastes, out of which, 6.05 TPD is being disposed through CBWTFs and rest 2.25 TPD wastes is being disposed off through deep burial by their own.

- As per Rule 4 (k) treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 by providing effluent treatment plant has to be ensured. 55 nos. of HCFs have provided effluent treatment plant as on date. As per notification dated 16/03/2018 issued by MoEF&CC time limit for the compliance is up-to 31/12/2019. All remaining HCFs shall provide effluent treatment plant before 31/12/2019.
- As per Rule 4 (n), out of four CBWTFs operators, two operators are maintaining register and record for bio-medical wastes quantity and are displaying monthly records on their websites. As per notification dated 16/03/2018 issued by MoEF&CC time limit for the compliance is up-to 16/03/2020 for remaining HCFs and two CBWTFs operators.
- As per Rule 4 (p) all HCFs have to upload annual report on the website. As per notification dated 16/03/2018 issued by MoEF&CC time limit for the compliance is up-to 16/03/2020 for all HCFs. To facilitate each HCFs, online portal with facility of uploading of data and annual report will be developed.
- As per Rule 4 (s) all operators of a common bio-medical waste treatment facilities at Raipur, Bilaspur, Korba and Raigarh are maintaining record for operation of incineration/hydro/autoclaving/deep burial.

- As per Rule 5 (a) all necessary steps such as segregation as per categories, storage in colored bins and bags, transportation in covered vehicles etc. are being taken by HCFs and CBWTFs operators ensuring the bio-medical waste disposal without any adverse effect on human health and environment.
- As per Rule 7 (3) and Rule 7 (4) occupier (HCFs) have established their own disposal facility where services of the common bio-medical waste treatment facilities are not available. Accordingly HCFs located at Bastar and Surguja division disposed off their wastes through deep burial within the premises, as presently there is no CBWTFs in these areas.
- As per Rule 7 (10) operators of a common bio-medical waste treatment facilities at Raipur, Bilaspur, Korba and Raigarh are maintaining record of recyclable wastes.
- As per Rule 5 (c) operators of a common bio-medical waste treatment facilities at Raipur and Bilaspur have established bar coding and global positioning system for handling of bio- medical waste. Remaining 02 operators at Korba and Raigarh are in process of providing the same. As per Rule 5 (j) log books for each of its treatment equipment have been provided by all operators. As per Rule 5 (I) operators at Raipur and Bilaspur are displaying details of authorization, treatment and annual report etc. on their web-site. Remaining 02 operators at Korba and Raigarh are in process of developing the website. As per Rule 5 (m) all operators are giving the recyclables from the treated bio-medical wastes such as plastics and glass after mutilation/shredding to the registered recyclers. As per Rule 5 (n) non-chlorinated plastic coloured bags are being provided by operators to all associated HCFs. All bio-medical wastes are being collected from HCFs by operators regularly. As per Rule 5 (q) operators of common bio-medical waste treatment facilities at Raipur and Bilaspur have provided incinerator as per specification. Action is being taken to upgrade existing deep burial method to incineration method in CBWTFs at Korba and Raigarh.
- As per Rule 13 (1) out of 1878 authorized HCFs, 265 HCFs have submitted annual report to the CECB for the year 2017. All 04 CBWTFs operators have submitted annual report to the CECB for the year 2017.
- As per Rule 11 (3) Advisory Committee constituted under sub-rule (1) and (2) by Govt. of Chhattisgarh. The meetings also have been conducted on 13/04/2016, 16/11/2017 and 27/04/2019 by State Advisory Committee.

- As per Rule 17 (1) land has been allocated at Kondagaon (Bastar Division) and Ambikapur (Surguja Division) for proposed CBWTF. Action has been initiated for establishment of above CBWTFs.
- Chhattisgarh Environment Conservation Board keeps strict vigil on the handling of bio-medical waste by inspections and taking action against defaulting HCFs under Environment (Protection) Act, 1986. 09 nos. of court cases have been filed against the defaulter HCFs. The CBWTF at Bhilai run by M/s E-tech Project Pvt. Ltd. has been issued closure order under section '5' of Environment (Protection) Act, 1986 on 23/04/2018 for violation of Bio-Medical Waste Management Rules, 2016.
- As per Rule 17 (1) annual report for the year 2017 was sent to CPCB vide letter dated 23/8/2018. CECB has uploaded annual report in its website.
- Chhattisgarh Environment Conservation Board has established online system for receipt of application from HCFs for grant of authorization. Authorizations to HCFs are issued online.
- Two CBWTFs at Raipur and Bilaspur have established online continuous emission monitoring system. The real time monitoring data may be captured through ID and Password given by CBWTFs. This facilitates in monitoring the performance of air pollution control device installed in the incinerator. The above continuous emission monitoring system shall be installed in remaining two CBWTFs at Korba and Raigarh after upgradation of existing deep burial method to incineration method.
- Awareness and training programs have been conducted from time to time for HCFs for implementation of various provisions of Bio-Medical Waste Rules, 2016 by CMHO and IMA etc.

Action proposed

- Total 2053 HCFs (698 Government HCFs and 1355 private HCFs) shall be granted authorization under the Bio-Medical Waste Rules, 2016 within 03 months. Action against HCFs operating without authorization shall be initiated.
- 2. Establishment and commissioning of CBWTFs each at Kondagaon and Surguja based on incinerator facility on or before 31st July 2020.
- 3. HCFs which do not have Effluent Treatment Plant, shall provide the same on or before 31st December 2019.

- 4. Existing CBWTFs at Korba and Raigarh shall be up-graded on or before 31st March 2020.
- 5. To check the pilferage of bio-medical waste during collection and transportation, bar-code system shall be developed in the HCFs through CBWTFs operator on or before 31st October 2019.
- 6. Creation of own website by CBWTFs at Korba and Raigarh on or before 31st July 2019 to display details of authorization, treatment and annual report etc.
- 7. Remaining two CBWTFs operators shall provide arrangement for maintaining register and record for bio-medical wastes quantity and display of monthly records on their websites within 03 months prior to time limit of 16/03/2020 fixed by MoEF&CC as per notification dated 16/03/2018.
- 8. Development of online portal with facility of uploading of data and annual reports by all HCFs within 06 months prior to time limit of 16/03/2020 fixed by MoEF&CC as per notification dated 16/03/2018.

(b) Status of functioning of Committees constituted by this order

- State Government vide order dated 05.02.2019 constituted 'State Level Committee' under the Chairmanship of Hon'ble Retired Justice Dhirendra Mishra.
- Three meetings of the committee were held on 13/02/2019, 13/03/2019 and 25/04/2019.
- An integrated solid waste management facility consisting of Refused Derived Fuel (RDF) Plant of 100 TPD and Compost Plant of 150 TPD has been recently commissioned at Village-Kachhar, District-Bilaspur. The Committee inspected the above plant on 18/03/2019. Committee observed that a large quantity of legacy waste has been dumped within the plant premises. This legacy waste is being treated in the above plant. The combustible portion of waste segregated from above plant is being stored separately and shall be made available to the cement plants. The compost obtained is being used as manure. Committee directed operator of above facility to make RDF processing unit i.e. magnetic separator and shredder (as per requirement) shortly and make available RDF to cement plants regularly. Committee also visited solid waste management and Bio-Mining facility of legacy waste of Indore city on 10/04/2019, so that implementation of legacy waste management may be improved in Chhattisgarh.

- (c) Status of the Action Plan in compliance vide order dated 20.09.2018 in the News Item published in "The Hindu" authored by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (OA No. 673/2018)
 - Central Pollution Control Board has identified five polluted river stretches in Chhattisgarh. Four river stretches are in category - IV and one river stretch is in category - V. Details are as below:-
 - i. River Hasdeo From Korba to Urga (Category-IV, length 20 km, BOD range 3.6-7.0)
 - ii. River Kharun From Bhatagaon to Bendari (Category-IV, length 20 km, BOD range 3.3-7.2)
 - iii. River Mahanadi From Sihawa to Arang (Category-IV, length 70 km, BOD range 3.3-8.0)
 - iV.River Seonath From Bemta to Simga (Category-IV, length 10 km, BOD range 3.4-8.4)
 - V. River Kelo From Raigarh to Kankatora (Category-V, length 15 km, BOD range 3.8)

The main objective of the action plan is to bring polluted river stretches to be fit at least for bathing purposes (i.e. BOD < 3 mg/l and Fecal Coliform < 500 MPN/100 ml). Hon'ble National Green Tribunal, Principal Bench, New Delhi in the same matter vide order dated 08/04/2019 extended the timeline for execution of the action plans up-to 31/03/2021.

- State Government vide order dated 22/11/2018 constituted 'River Rejuvenation Committee'.
- The River Rejuvenation Committee, in its meeting dated 29/01/2019 approved revised action plan for the polluted river stretches of Hasdeo, Kharun, Mahanadi, Shivnath and Kelo. The Revised action plan was submitted to CPCB, Delhi vide letter dated 30/01/2019.
- Four sewage treatment plants i.e. 75 MLD at Chandandih, 35 MLD at Kara, 90 MLD at Nimora and 06 MLD at Bhatagaon have been proposed for Raipur and these sewage treatment plants are under construction. Two sewage treatment plants i.e. 25 MLD at Bade Atarmuda and 07 MLD at Banjipali have been proposed for Raigarh and construction of these sewage treatment plants will be started shortly. One sewage treatment plant of 35 MLD has been proposed for Korba and DPR has already been prepared. In addition to above, DPRs are under preparation for construction of sewage treatment plants at Kanker (7.8 MLD), Dhamtari (7.5 MLD), Nawapara (7.5 MLD), Rajim (2.8 MLD) and Simga (2.8 MLD).
- Disposal of municipal solid waste and plastic waste in river as well as municipal drains have been prohibited and provision for levy of fine in case of violation has been made. No. of cases registered are Raipur-384, Korba-07, Raigarh-280, Kanker-25, Dhamtari-23, Nawapara-02, Rajim-08 and Simga-04.

- Rain water harvesting (RWH) system has been set-up in all 425 large and medium scale industries. Rain water harvesting (RWH) system in commercial and other institutions is in progress.
- Flood zones and its area at Raipur, Kanker, Nawapara, Rajim, Simga and Raigarh have been identified. Identification of flood zone at Korba is under process. There is no flood zones in Dhamtari. Estimate for plantation in identified flood zones i.e. Raipur (8500 nos.), Kanker (400 nos.), Nawapara (1200 nos.), Rajim (320 nos.), Simga (250 nos.) and Raigarh (10000 nos.) has been prepared and plantation shall be carried out as per plan.
- Out of 05 Rivers, 02 Rivers namely Sheonath and Hasdeo have flow throughout the year. Accordingly, it fulfills e-flow requirement. Rest 03 Rivers namely Mahanadi, Kharun and Kelo are non-perennial rivers having flow till November-December month. For maintaining e-flow in the River Mahanadi, Kharun and Kelo during non-monsoon period about 48 cumec, 0.17 cumec and 03 cumec water respectively are released from the structures constructed along the rivers.
- CECB is keeping regular watch on the industries falling in the catchment area of the above rivers. The water polluting industries in the catchment area of polluted stretches of these rivers are as follows:
 - i. River Hasdeo 04 (All 04 industries have provided ETP)
 - ii. River Kharun 26 (24 industries have provided ETP. 02 industries have not installed ETP; hence, CECB issued closure direction /disconnection of electricity supply under section 33A of the Water (Prevention and Control of Pollution) Act, 1974.)
 - iii. River Mahanadi 143 (118 industries have provided ETP. 25 industries have not installed ETP; hence, CECB issued closure direction /disconnection of electricity supply under section 33A of the Water (Prevention and Control of Pollution) Act, 1974.)
 - iv. River Seonath Nil
 - v. River Kelo 12 (All 12 industries have provided ETP)
- (d) Status of functioning of Committees constituted in News Item Published in "The Times of India' Authored by Shri Vishwa Mohan Titled "NCAP with Multiple timelines to Clear Air in 102 Cities to be released around August 15" dated 08.10.2018 (OA 681/2018)

- Central Pollution Control Board has identified 102 cities as "Non-Attainment Cities" which does not meet the National Ambient Air Quality Standards (NAAQS). Three cities namely Raipur, Bhilai and Korba of Chhattisgarh are included in above mentioned 102 cities.
- State Government vide order dated 28/11/2018 constituted 'Air Quality Monitoring Committee' for the State of Chhattisgarh.
- The Air Quality Monitoring Committee, in its meeting dated 01/12/2018 approved the action plan for the non-attainment cities of Raipur, Korba and Bhilai. The action plan was submitted to CPCB, Delhi vide letter dated 06/12/2018. CPCB vide letter dated 12/02/2019 intimated about the approval of Raipur action plan and directed to revise the action plan of Korba and Bhilai incorporating the recommendations of three members committee. Accordingly, revised action plan has been sent to CPCB vide letter dated 15/03/2019. Approval of the revised action plans is awaited.
- There are 189 vehicle emission monitoring centers in the State. Regular checking of vehicle emission and issuance of Pollution Under Control Certificate is being carried out. The action taken against the violating vehicles are as follows:-

Year	Area	Without PUC Certificate		Transport of Materials	
				without covering	
		Nos. of Fine		Nos. of	Fine
		Challans Collected		Challans	Collected
			(Rs.)		(Rs.)
03 Years	Raipur	15809	6519300=00	_	-
(2016-17,	Durg	4384	4866500=00	100	198000=00
2017-18,	(Bhilai)				
2018-19)	Korba	6153	5731600=00	30	95500=00

• State Government is promoting use of E-rickshaws by providing 100% rebate on payable tax for five years after registration. No permit is required for operation of E-rickshaws. Inspection and Certification Center for issuing computerized fitness checking certificates of vehicles is being established in the State. There are 600, 91 and 129 nos. of E-rickshaws in operation in Raipur, Korba and Bhilai respectively. This will enable issuance of automatic challan to the defaulter for violation of traffic rules. No permit is being issued to the autos older than 10 years in urban areas and 12 years in rural areas. Regular action is being taken against the overloading vehicles. An amount of Rs. 10,21,79,005/- has been collected as fine from the 6267 defaulting vehicle in the state in the year 2018.

- Regular cleaning of roads is being practiced twice a day. Mechanized sweeping for 35 km is being practiced in Korba and DPR is being prepared for additional 35 km. DPR for mechanized sweeping is being prepared for Raipur and Bhilai. Tankers are being used for water spraying on roads. Road patches have been repaired. Plantation at different locations at Raipur, Bhilai and Korba will be carried out during monsoon. Water fountains will be installed at major traffic intersection/circle. There are 615, 1091 and 519 construction sites have been identified at Raipur, Korba and Bhilai respectively. Out of which, 127, 456 and 210 construction sites have ensured covering at Raipur, Korba and Bhilai respectively. Transportation of municipal solid wastes, construction materials and debris in covered system is being ensured through 52, 27 and 35 vehicles in Raipur, Korba and Bhilai respectively and all transportation vehicles are covered.
- All air polluting industries (major, medium and small) in Raipur, Korba and Bhilai are 610, 14 and 194 respectively have provided air pollution control systems and operating the same regularly. CECB is keeping regular watch on the emissions of industries. The defaulting industries such as emission from stack(s) beyond limit, fugitive dust emission from process / equipments, non-functioning of air pollution control systems, improper management of solid wastes etc. are issued directions to close down the production/disconnection of electricity supply under section 31A of the Air (Prevention and Control of Pollution) Act, 1981. In the year 2018-19, 19 defaulting industries in Raipur, 06 industries in Bhilai and 06 industries in Korba have been issued direction as above. Regular awareness programs for prevention and control of pollution and environmental conservation is being organized by involving schools and other academic institutions. 6,750 ECO clubs in schools are functioning in the State. Government of Chhattisgarh has provided portal for redressal of public complaints under the name 'Jan Shikayat'. CECB Head Office and all seven Regional Offices have been linked with the above portal.
- (e) Status of action plan with regard to identification of polluted industrial cluster 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
 - In compliance of order dated 13/12/2018 of Hon'ble National Green Tribunal, Principal Bench, New Delhi in O.A. No. 1038/2018, State Government vide order dated 24/01/2019 constituted a six Member Committee for preparation and finalization of action plan of industrial clusters namely Urla, Siltara, Korba and Bhilai.

- Major industries located in the Urla, Siltara, Bhilai and Korba Industrial Cluster are Integrated Steel Plants, Sponge Iron Plants, Power Plants, Ferro Alloys Plants, Induction Furnaces, Rolling Mills, Solvent Extraction Units etc. The nos. of water/air polluting industries (major, medium and small) in Urla, Siltara, Korba and Bhilai industrial cluster is 450, 160, 14 and 194 respectively. Water polluting industries have provided effluent treatment plants and the treated effluent is being used within the premises for different purposes. Air polluting industries have provided air pollution control systems and operating the same regularly. CECB is keeping regular watch on the effluent discharge and emissions of industries.
- The defaulting industries such as discharge of effluent, non-functioning of ETP, heavy emission from stack(s), fugitive dust emission from process / equipments, non-functioning of air pollution control systems, improper management of solid wastes etc. are being directed to close down the production/disconnection of electricity supply u/s 33A of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 31A of the Air (Prevention and Control of Pollution) Act, 1981. Installation of CAAQMS in industrial cluster area and installation of CWQMS in Rivers shall be installed with the help of industrial units.
- (f) Status of the work in compliance of the directions passed in O.A. No. 173 of 2018, Sudarsan Das v. State of West Bengal &Ors. Order dated 04.09.2018
 - Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of Sudarsan Das Vs. State of W.B., O.A. No. 173/2018 vide order dated 04/09/2018 has highlighted the issue of large scale unchecked and illegal mechanized sand mining in certain states of India. Accordingly, Hon'ble NGT has issued direction for compliance of "Sustainable Sand Mining and Management Guidelines 2016", particularly in view of the points highlighted in Para 15 of the aforesaid order. Condition regarding compliance of "Sustainable Sand Mining and Management Guidelines 2016" issued by Ministry of Environment, Forest and Climate Change, New Delhi is being incorporated in the environment clearance for sand mining. Directions given in para 15 shall be followed.
 - No sump-pump and heavy machinery in the sand mining area are used in the State. As per approved mining plan loading of sand by semi mechanized system is being permitted only. Most of the permissions given is for manual sand mining. The transportation of sand is being ensured after issuance of transport permit, which is printed in Government Printing Press. Installation of CCTV camera in sand mining

areas, provision for transport permit based on computer, internet, barcode, RF ID, GPS in vehicles and online uploading of records in the server are under consideration. Royalty received from mining of minor minerals is being alloted through DMF to the concerned gram panchayats for carrying out the development works within 05 km from the mining areas.

(g) Total amount collected from erring industries on the basis of 'Polluter Pays' principle, 'Precautionary principle' and details of utilization of funds collected

CECB had received Rs. 34,69,900/- as penalty imposed in compliance of order of Hon'ble NGT from various violators through Directorate of Geology and Mining in environment compensation fund. As per Hon'ble NGT order dated 07/02/2017, 25% of the aforesaid amount i.e. Rs. 8,67,475/- has been sent to CPCB. Balance amount of Rs. 26,02,425/- is remaining with CECB, which is being utilized for the functioning of State Level Committee as directed in the order dated 16/01/2019 in the matter of O.A. No. 606/2018. Rs. 21,52,425/- remains with CECB as on date.

(h) Status of the identification and development of Model Cities and Towns in the State in the first phase which can be replicated later for other cities and towns of the State

- Ambikapur's Mission Clean City Model has been adopted for disposal of municipal solid waste management, except 02 cities of Raipur and Bilaspur. Raipur and Bilaspur are following landfill based waste disposal facility and "Waste to RDF & Compost" model through 'Integrated Solid Waste Management' (ISWM).
- Urban Administration and Development Department has proposed draft list of model towns, one in each districts as follows:-
 - i. Raipur Division 05 City/Town (Birgaon, Dhamtari, Kasdol, Bagbahra and Chhura)
 - ii. Bilaspur Division 05 City/Town (Dipka, Sirgitti, Raigarh, Akaltara and Mungeli)
 - iii. Durg Division 05 City/Town (Saja, Kawardha, Kumhari, Balod, Dongargarh)
 - iv. Surguja Division –05 City/Town (Ambikapur, Rajpur, Jashpur Nagar, Bishrampur, Baikunthpur)
 - v. Bastar Division 07 City/Town (Narayanpur, Bastar, Konta, Bijapur, Geedam, Charama and Farasgaon)

(i) Status of the setting-up and functioning of STP/CETP/ETP in Chhattisgarh

- Directions under section 33A of Water (Prevention and Control of Pollution) Act, 1974 were issued to 549 industries which were running without ETP after the prescribed timeline of 21/05/2017 for closure of the plant / disconnection of electricity supply.
- Latest status of the setting-up and functioning of STP/CETP/ETP in the state is as below:-
 - No. of industries which require ETP 943
 - No. of industries having functional ETP 804
 - No. of industries complying ETP 791
 - No. of industries non-complying ETP 13

Compliance status of municipal STPs

- No. of municipal STP 03
- No. of municipal complying STP 02
- No. of municipal non-complying STP 01
- No. of proposed municipal STP 87
- Out of 87 municipal STP, no. of STP under construction 05
- Out of 87 municipal STP, no. of STP for which construction will start shortly–03
- Out of 87 municipal STP, no. of STP for which DPRs being prepared—
 06
- Out of 87 municipal STP, no. of STP for which DPRs to be prepared–73
- Targeted time period February 2020
- There is no CETP in the state, as there is no industrial cluster of water polluting industries running without ETP. Therefore, the setting-up of CETP is not required.
- As per the directions of the CPCB, it is mandatory for the 17 type of highly polluting category industries to install 'online emission/effluent monitoring system' and link it with the server of CPCB and CECB. There are 165 industries which fall under the category of 17 type of highly polluting industries, out of which 05 industries have not been in operation since a very long time. The remaining 160 industries have installed 'online

emission/effluent monitoring system'. CECB has provided IDs and passwords for accessing the results of 'online emission/effluent monitoring system' installed by these industry in its website. General public may access real time online data of particular industry with the help of ID and password provided in the CECB website.

Hon'ble Tribunal may kindly be pleased to take the status report submitted by the State of Chhattisgarh on record.

Submitted on behalf of State of Chhattisgarh

Date: 30/04/2019 Chief Secretary
Government of Chhattisgarh