

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

Principal Bench, New Delhi

Original Application No. 360 of 2018

Shree Nath Sharma

Applicant(s)

Vs.

Union of India & Ors.

Respondent(s)

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(V.P. Yadav)

Scientist-F

Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi- 110032.

Date: 12.01.2022

Place: Delhi

**Status Report on Preparation of District Environment
Plan**

In Compliance to order dated 05.07.2021 of

Hon'ble National Green Tribunal

(in O.A. No. 360 of 2018 in the matter of Shree Nath
Sharma vs. Union of India & Ors.)



Central Pollution Control Board
(Ministry of Environment Forest & Climate Change)

1. Background:

Hon'ble National Green Tribunal (herein after will be referred as Hon'ble NGT) has heard the matter of O.A. 360 of 2018 on 05.07.2021 passed following directions:

- a. Chief Secretaries of all the States/UTs may ensure completion of District Environment Plans (DEPs) for all the Districts, in the light of orders of this Tribunal dated 26.09.2019, 19.03.2020. 29.01.2021 and the observations in the present order and upload the same on their respective websites positively by 31.10.2021.
- b. The DEPs may contain data on each environmental issue covering each city, town and village. Data may show the extent of gap in compliance of laid down norms for
 - i. Waste Management - Municipal Solid, Plastic, Bio- Medical, Electric and Electronic, Hazardous and Construction and Demolition waste
 - ii. Sewage treatment and utilisation
 - iii. Water quality – Rivers, Water bodies, Ground Water, Coastal waters and Rain water harvesting,
 - iv. Industries Pollution Control including industrial clusters
 - v. Air Quality management includes pollution due to dust
 - vi. Regulating mining/ Sand mining
 - vii. Noise pollution
 - viii. Any other issues significant in the area
 - ix. The DEP must give timelines for accomplishment of tasks backed up with budgetary support and the officers entrusted with the job, with contact details of the nodal officer at various levels in the District
 - x. Scope for public participation on remedial measures like plantations

- c. DEPs may also contain mechanism for review at different levels.
- d. The District Magistrates may accordingly execute the action plans by reviewing the progress on various targets at least once in a month.
- e. All the States may accordingly consolidate the DEPs and prepare their respective State Environment Plans and upload the same on their respective websites.
- f. CPCB may consolidate the information and file a tabular statement by 30.11.2021.

Copy of the said order dated 05.07.2021 is given at **Annexure I**.

2. Action Taken by CPCB:

- (i) Central Pollution Control Board has been following up the matter with State Pollution Control Boards as well as State Environment Departments regarding preparation of District Environment Plan and State Environment Plan.
- (ii) In order to facilitate the District Magistrates, CPCB has prepared a data template and report template for District Environment Plan covering thematic areas as mentioned by Hon'ble Tribunal.
- (iii) The data template and report template were forwarded to every District Magistrates and Chief Secretaries to ensure preparation of District Environment Plan.
- (iv) CPCB has uploaded the afore-said templates at CPCB website i.e. www.cpcb.ni.in.
- (v) CPCB vide letter dated 20.11.2019 requested all State Pollution Control Boards (herein after will be referred as SPCBs) / Pollution Control Committees (hereinafter will be called as PCCs) and Principal Secretary, Environment Department of every State/UT to coordinate the above matter with District Magistrates and for submission of SEP within stipulated time so that CPCB can compile the same. Further, a reminder letter dated 10.01.2020 was also issued by CPCB to Principal Secretaries of States / UTs requesting submission of SEPs. Copies of CPCB letters dated 20.11.2019 and 10.01.2020 are given at **Annexure II & Annexure III**.

- (vi) CPCB selected five Districts namely Baharaich, UP; Bokaro, Jharkhand; Pune, Maharashtra; Chamrajnagar, Karnataka; and Panchkula, Haryana based on their geographical profile to make model District Environment Plan for reference. CPCB helped in the preparation of plans of said 05 Districts by hand holding.
- (vii) The progress in DEPs was reviewed by CPCB in afore-said 05 Districts and for this purpose CPCB convened meetings with officers involved in preparation of DEPs in afore-said 05 Districts to discuss the gaps identified by CPCB for upgradation of DEPs prepared. Up graded reports are placed at CPCB website.
- (viii) CPCB last conducted the meeting on 11.11.2021 with officers involved in preparation of District Environment Plan through Video Conferencing to review the DEPs prepared for afore-said five Districts. Minutes of the meeting is given at **Annexure IV**.
- (ix) CPCB issued following letters for compliance to Hon'ble orders:
 - a. CPCB vide letter dated 19.08.2021 forwarded Hon'ble NGT order dated 05.07.2020 to State Environment Department of all States and UTs for ensuring compliance;
 - b. CPCB vide letter dated 22.11.2021 requested State Environment Department of all States and UTs to ensure preparation of District Environment Plan and State Environment Plan.

Copies of afore-said letters are given at **Annexure V & Annexure VI**.

3. District Environment Plans – Progress

As on July, 2021, 471 District Environment Plans were prepared as informed by 33 nos. of States and Union Territories. Further, in light of the COVID-19 pandemic situation, State Governments submitted that there has been a delay in preparation and implementation of District Environment Plan.

Further, as per the updated information received by CPCB there has been an increase from 471 to 616 in number of District Environment Plans prepared. State-wise status on preparation of DEPs is given below:

S.No.	Name of State	No. of Districts	No. Of DEPs prepared
1.	Andaman & Nicobar	3	1
2.	Assam	33	30
3.	Andhra Pradesh	13	13
4.	Arunachal Pradesh	25	0
5.	Bihar	38	1
6.	Chandigarh	1	1
7.	Chhattisgarh	27	27
8.	DD & DNH	3	1
9.	Delhi	11	9
10.	Goa	2	1
11.	Gujarat	33	33
12.	Haryana	22	22
13.	Himachal Pradesh	12	12
14.	Jammu & Kashmir	20	12
15.	Jharkhand	24	22
16.	Karnataka	30	30
17.	Ladakh	2	DEP Awaited
18.	Kerala	14	14
19.	Lakshadweep	1	1
20.	Madhya Pradesh	52	52
21.	Maharashtra	36	36
22.	Manipur	16	16
23.	Meghalaya	11	4
24.	Mizoram	8	8
25.	Nagaland	11	1
26.	Odisha	30	30
27.	Pudducherry	4	4
28.	Punjab	22	22
29.	Rajasthan	33	33
30.	Sikkim	4	4
31.	Tamil Nadu	38	38
32.	Telangana	33	33
33.	Tripura	8	3
34.	Uttarakhand	13	4
35.	Uttar Pradesh	75	75
36.	West Bengal	23	23
	Total	731	616

Further, the DEPs have been uploaded on the websites of District Administration / State Boards. State-wise details of website links is given at **Annexure VII**.

4. State Environment Plan:

As per the available information with CPCB, 13 State Environment Plan have been prepared

S.No.	Name of States/UTs	Status of State Environment Plan
1	Andaman & Nicobar	Information yet to be submitted (information may be submitted by State Government / UT Administration)
2	Andhra Pradesh	SEP prepared
3	Arunachal Pradesh	Information yet to be submitted (information may be submitted by State Government / UT Administration)
4	Assam	
5	Bihar	
6	Chandigarh	SEP prepared
7	Chhattisgarh	Information yet to be submitted (information may be submitted by State Government / UT Administration)
8	DD & DNH	
9	Delhi	
10	Goa	
11	Gujarat	
12	Haryana	
13	Himachal Pradesh	
14	Jammu and Kashmir	SEP prepared
15	Jharkhand	Information yet to be submitted (information may be submitted by State Government / UT Administration)
16	Karnataka	SEP prepared
17	Kerala	Information yet to be submitted (information may be submitted by State Government / UT Administration)
18	Lakshadweep	SEP prepared
19	Madhya Pradesh	Information yet to be submitted (information may be submitted by State Government / UT Administration)
20	Maharashtra	SEP prepared
21	Manipur	Information yet to be submitted (information may be submitted by State Government / UT Administration)
22	Meghalaya	
23	Mizoram	SEP prepared
24	Nagaland	Information yet to be submitted

25	Odisha	(information may be submitted by State Government / UT Administration)
26	Puducherry	SEP prepared
27	Punjab	Information yet to be submitted (information may be submitted by State Government / UT Administration)
28	Rajasthan	
29	Sikkim	SEP prepared
30	Tamil Nadu	SEP prepared
31	Telangana	SEP prepared
32	Tripura	SEP prepared and submitted to CPCB
33	Uttarakhand	Information yet to be submitted (information may be submitted by State Government / UT Administration)
34	Uttar Pradesh	
35	West Bengal	SEP prepared

5. District Environment Plans of 05 Districts:

As mentioned in earlier paragraphs, CPCB selected five Districts namely Baharaich, Uttar Pradesh; Bokaro, Jharkhand; Pune, Maharashtra; Chamrajnagar, Karnataka and Panchkula, Haryana for the preparation and implementation of DEPs. For further review, CPCB conducted a consultative meeting with officers involved in preparation of DEPs on 11.11.2021. After deliberation, it came into the notice that implementation of plans is already under process by the concerned department at District level.

District Environment Plan for 5 district have been uploaded on their respective websites. Details of link of websites is given below:

S. No.	Name of District	Website link
1.	Baharaich	https://bahraich.nic.in/notice/district-environment-management-plan/
2.	Bokaro	https://cdn.s3waas.gov.in/s3a760880003e7ddedfef56acb3b09697f/uploads/2020/12/2020120193.pdf
3.	Pune	https://mpcb.gov.in/sites/default/files/environment-actionplan/Pune23062021.pdf

4.	Chamrajnagar	https://cdn.s3waas.gov.in/s3959a557f5f6beb411fd954f3f34b21c3/uploads/2021/07/2021071512.pdf
5.	Panchkula	http://hareenvironment.gov.in/sites/default/files/District%20Environmental%20Plan%20final%20pdf%20with%20rural_compressed.pdf

Above District Environment Plans are also placed at CPCB website at <https://cpcb.nic.in/district-environmental-plan/> as sample DEPs for reference of other District and State Department and Administration.

Copies of District Environment Plans for afore-said 05 Districts are enclosed at **Annexure VIII to Annexure XII.**

6. It is humbly submitted that the matter of preparation of District Environment Plan as directed by Hon'ble National Green Tribunal has been taken at most of the places at the level of District. About **305** DEPs are uploaded on their respective website as well (Details given in Annexure VII). However, as per the information available with Central Pollution Control Board, State Environment Plan is still under the process of preparation in many States and Union Territories.

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Item No. 02

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 360/2018
(arising from SLP (Civil) No. 2959/2014)

(With report dated 02.07.2021)

Shree Nath Sharma

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 05.07.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE M. SATHYANARAYANAN, JUDICIAL MEMBER
HON'BLE MR. JUSTICE BRIJESH SETHI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondent: Mr. Mukesh Kumar, Advocate with Ms. Youthika Puri, Scientist-D
for CPCB
Mr. Pradeep Misra, Advocate and Mr. Daleep Dhyani, Advocate for
UPPCB

ORDER

The Background and the Issue

1. This matter was originally filed before the Rajasthan High Court for direction to check pollution of Sujanganga River at Bharatpur. The High Court directed taking of remedial measures - removing encroachment, preventing dumping of waste and fixing accountability of the concerned officers for failing to protect the environment. On 26.09.2013, the High Court directed that the matter be transferred to this Tribunal which order was affirmed by the Hon'ble Supreme Court on 19.03.2018.

2. The Tribunal directed taking of remedial measures vide order dated 31.07.2018 and on such measures having been taken, the issue initially

raised closed vide order dated 26.09.2019. However, it was observed that one time action to remedy pollution was not enough. There was need for an effective and functional mechanism for continuous planning and monitoring in terms of mandate of the Constitution inter alia under Articles 243 G, 243 W, 243 ZD, read with 11th and 12th Schedules. The Constitution envisages plans for environment conservation and protection at the level of Panchayats and other local bodies, which are to be consolidated in the form of a District Plan. Accordingly, following an earlier order dated 15.7.2019 in OA 710/2017, direction for preparation of District Environment Plans for all Districts on which basis State and National Environmental Plans could be prepared and executed was reiterated. The Tribunal made a particular mention of certain specific thematic areas, required to be covered in such plans. It was further mentioned that the plans must contain current status on these issues, desirable level of compliance to be achieved, identified gaps in current status and desired levels, methodology and means to address such gaps and persons responsible for compliance. It will be appropriate to reproduce relevant part of the said order which is as follows:

“ 6. *This Tribunal in O.A. No. 606/2018, while dealing with the compliance of Municipal Solid Waste Management Rules, 2016 also flagged other issues and required monitoring at the level of the Chief Secretaries and the District Magistrates. **The Chief Secretaries of all the States/UTs have appeared before this Tribunal, including the Chief Secretary of State of Rajasthan and directions have been issued for continuous monitoring and filing of further reports.***

7. *Vide order dated 12.09.2019, while fixing a schedule for further appearance of the Chief Secretaries of all the States/UTs, direction has been issued to compile information with reference to the following specific thematic areas viz.:*

- *Compliance to Solid Waste Rules including Legacy Waste.*
- *Compliance to Bio-medical Waste Rules.*
- *Compliance to Construction & Demolition Waste. Compliance to Hazardous Waste Rules.*

- Compliance to E-waste Rules.
 - 351 Polluter Stretches in the country.
 - 122 Non-attainment cities.
 - 100 industrial clusters.
 - Status of STPs and re-use of treated water.
 - Status of CETPs/ETPs including performance.
 - Ground water extraction/contamination and re-charge.
 - Air pollution including noise pollution.
 - Illegal sand mining.
 - Rejuvenation of water bodies.
8. Such information is to be furnished to the CPCB by the Chief Secretaries of all the States/UTs indicating:
- Current status
 - Desirable level of compliance in terms of statutes.
 - Gap between current status and desired levels.
 - Proposal of attending the gap with time lines.
 - Name and designation of designated officer for ensuring Compliance to provisions under statute.
9. Since CPCB is to file updated report by 15.11.2019, the Chief Secretaries of all the States/UTs may furnish such information by 31.10.2019.
10. We may also refer to order dated 15.07.2019 in O.A. No. 710/2017, Shailesh Singh vs. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors. directing as follows:
- “We find it necessary to add that in view of Constitutional provisions under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016, it is necessary to have a District Environment Plan to be operated by a District Committee (as a part of District Planning Committee under Article 243 ZD) with representatives from Panchayats, Local Bodies, Regional Officers, State PCB and a suitable officer representing the administration, which may in turn be chaired and monitored by the District Magistrate. Such District Environment Plans and Constitution of District Committee may be placed on the website of Districts concerned. The monthly report of monitoring by the District Magistrate may be furnished to the Chief Secretary and may be placed on the website of the District and kept on such websites for a period of one year. This may be made operative from 1.08.2019. Compliance of this direction may also be seen by the Chief Secretaries of the States/UTs. This may not only comply with mandate of law but provide an institutional mechanism for effective monitoring of environment norms.”*
11. To facilitate preparation of such District Environment Plan, **it will be appropriate that CPCB prepares a Model/Models and places the same on its website which may be adopted with**

suitable changes as per local requirements for all Districts in the country and monitored by the Chief Secretaries with reports to the Tribunal in O.A. No. 606/2018.

- 12. The Department of Environment of all States and Union Territories may collect such District Environment Plans of their respective States and finalize the 'State Environment Plan' covering the specific thematic areas referred in Para-7 including information as contained in Para-8 and template of Model/Models District Environment Plan provided by the CPCB. The action for preparation of State's Environment Plan shall be monitored by the respective Chief Secretaries of States and Administration of UTs. Let this action be completed by 15.12.2019 and compliance be reported to the Tribunal by 31.12.2019.**
- 13. Based on States and UTs Environment Plans, MoEF&CC and CPCB shall prepare country's Environment Plan accordingly. Let the Secretary, MoEF&CC and Chairman, CPCB steer the preparation of country's Environment Plan. Let their action be completed by 31.01.2020 and compliance be reported to the Tribunal by 15.02.2020."**

1st Review of Compliance

3. The matter was thereafter considered on 19.03.2020 in the light of report of the CPCB dated 14.02.2020 mentioning the steps taken and giving information in a tabular form about the status of such plans. After noting the said information, the Tribunal gave further directions and sought a further report. The relevant part of the order is reproduced below:

"5. While we note the steps taken, completion of environmental plans in terms of order of this Tribunal cannot be unduly delayed having regard to implications of such steps for protection of environment and public health. Some of the handicaps pointed out can be overcome by pro-active role of CPCB in ensuring preparation of at least one model District Environment Plan in every State in the first instance which can thereafter be replicated for all the Districts in the States/UTs and so on. For this purpose, State PCB and concerned District Magistrate may assist the CPCB. This step may be completed by simultaneous initiative in all the States within three months. In the last nine months, some work may have already been done in the States/UTs. Thus, it should be possible to finalize a model action plan at least for one District each in all States/UTs in the next three months. Thereafter, the exercise may be replicated with regard to all the Districts followed by State Environmental Plan and then a National Environmental Plan in further three months. CPCB is at liberty

to utilize compensation funds and involve any individuals/organizations in the process. This exercise will be without prejudice to monitoring mechanism in terms of earlier directions. Wherever exercise has been completed and found to be satisfactory, further steps for execution may be taken accordingly. Status report of progress in this regard may be furnished before the next date by email at judicial-ngt@gov.in.”

2nd Review of Compliance

4. The matter was thereafter reviewed on 29.01.2021 in the light of further report filed by the CPCB dated 28.01.2021 which also gave updated status of compliance. Having regard to significance of the issue and inadequacy in compliance, the Tribunal issued directions and sought a further report in the matter. The operative part of the order is reproduced below:

“5. xxx.....xxx.....xxx

(iii.) As per the assessment made by CPCB, it is observed that District / UT Environment Plan prepared by Chandigarh, UT Environment Department is satisfactory, as it covers all thematic areas including action plan along with timelines for respective implementing agencies. Further, the State Environmental Plan (SEP) prepared by West Bengal State is also satisfactory, wherein the district level plans and action points are comprehensively addressed.

5. Proposed Follow-up Action

(i) Since State have already prepared 220 DEPs, it is submitted that, these plans may be implemented by respective States after verification to ensure all the thematic points are adequately covered as per data templates and time-bound action plans are identified with respective agencies at District and State level. These Plans also need to be integrated with State Environment Plans. State may also take help of any expert agency or institution to streamline all DEPs. Adequate budgetary provision may be made by States for preparation of DEPs and SEPs.

(ii) 5 selected DEPs for 5 Districts namely Baharaich, UP; Bokaro, Jharkhand; Pune,

Maharashtra; Chamrajnagar, Karnataka; and Panchkula, Haryana to be verified and improved by CPCB in 03 months and the same may be shared with every State and UT as model DEPs for information and reference of other Districts.

(iii) States namely Andaman and Nicobar Islands, Telangana, Uttarakhand, Arunachal, Mizoram and Sikkim, including the other States who have not yet completed DEPs all Districts may complete the same in time bound manner.”

6. We have perused the report filed by the Oversight Committee for the State of UP, giving the compliance status in UP, which is on same lines as the report of the CPCB.

7. From the above, it is seen that out of 739 Districts, DEPs have been prepared in 220 Districts, out of which CPCB has data for 115 Districts. CPCB has selected five representative models having regard to social and geographical considerations.

8. In view of above, having regard to the significance of the issue and inadequate progress, **we direct the Chief Secretaries of all the States/UTs to oversee and monitor compliance by the concerned District Magistrates for preparing the requisite plans and execute the plans already prepared. Further steps for preparation and execution of State and National plans may also be taken in the interest of scientific and effective protection of environment and public health.**

9. Vide orders dated 22.01.2021 in OA 916/2018, *Sobha Singh & Ors. vs. State of Punjab & Ors.* and OA 496/2016, *Tribunal on its own motion vs. Govt. of NCT of Delhi & Ors.*, we have requested the Monitoring Committees, constituted by this Tribunal for certain environmental issues in Punjab and Delhi, to oversee compliance of preparation and execution of DEPs in Punjab and Delhi and furnish compliance status as on 31.3.2021.

10. We make similar request to the Monitoring Committee in UP, headed by Justice SVS Rathore, a former Judge of Allahabad High Court, the Oversight Committee for compliance of directions of this Tribunal for rejuvenation of river Ghaggar, headed by Justice Pritam Pal, former Judge of the Punjab and Haryana High Court to oversee compliance on this aspect for Haryana, the Committee headed by Justice Prakash Tatia, former Chief Justice of Jharkhand High Court, for compliance in Rajasthan, Justice B.C. Patel, former Chief Justice, Delhi High Court for compliance in Gujarat, Justice V.M. Kanade, former Judge, Bombay High Court, who has earlier monitored compliance of certain directions of this Tribunal relating to environmental issues, for compliance in Maharashtra. They may send status report as on 31.3.2021 by 15.4.2021. For all other States/UTs, the Chief Secretaries concerned may conduct such oversight and furnish the status of compliance as on 31.03.2021 to CPCB. CPCB may file a consolidated report before this Tribunal on or before

30.04.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF (and not in the form of Image PDF). State PCBs may also provide necessary assistance in coordination.”

3rd review of Compliance – today’s hearing

5. In pursuance of above, CPCB has filed a further status report on 02.07.2021. Also, Monitoring Committees constituted by this Tribunal for Uttar Pradesh, Punjab and Haryana and some District Magistrates have also filed their reports. There are also reports from Hon’ble former judges assigned this work in Gujrat, Maharashtra and Rajasthan to which reference will be made in later part of this order. We may briefly refer to the said reports.

CPCB report of compliance status

6. The CPCB in its report has mentioned the steps taken by it – preparation of data-template for model plan, indicative template for plan, shortlisting of one district in every States/UTs, meetings with the concerned officers and directions for implementation. CPCB further mentions the need for critical gap analysis and action plan with timelines and financial aspects for addressing such gaps. Status of compliance as given in the report is that out of 738 District, plans have been prepared for 471 districts. The status of compliance in a tabular form is as follows:

S. No	Name of State	No. of District	No. of DEPs prepared	Name of District for which DEP is prepared	No. of Monitoring Committees constituted
1.	Andaman & Nicobar	3	1	South Andaman	Information not available
2.	Assam	34	2	Dhemaji, Dhubri	1
3.	Andhra Pradesh	13	13	Anantapur, Chittoor, East Godavari, Guntur, Krishna, Kurnool, Prakasam, Srikakulam, Sri Potti Sriramulu, Vellore, Visakhapatnam, Vizianagaram, West Godavari, YSR District, Kadapa (Cuddapah)	13

4.	<i>Arunachal Pradesh</i>	25	<i>Not prepared</i>	-	<i>Information not available</i>
5.	<i>Bihar</i>	38	1	<i>Sheikhpura</i>	<i>Information not available</i>
6.	<i>Chandigarh</i>	1	1	<i>Chandigarh</i>	<i>Information not available</i>
7.	<i>Chhattisgarh</i>	28	27	<i>Balod, Baloda Bazar, Balrampur, Bastar, Bemetara, Bijapur, Bilaspur, Dantewada (South Bastar), Dhamtari, Durg, Gariyaband, Janjgir-Champa, Jashpur, Kabirdham, Kanker (North Bastar), Kondagaon, Korba Korea (Koriya), Mahasamund, Mungeli, Narayanpur, Raigarh, Raipur, Rajnandgaon, Sukma, Surajpur, Surguja</i>	<i>Information not available</i>
8.	<i>DD & DNH</i>	3	1	<i>Daman</i>	<i>Information not available</i>
9.	<i>Delhi</i>	11	9	<i>Central Delhi, East Delhi, New Delhi, North Delhi, Shahdara, South Delhi, South East Delhi, South West Delhi, West Delhi</i>	2
10.	<i>Goa</i>	2	1	<i>South Goa</i>	1
11.	<i>Gujarat</i>	33	33	<i>Ahmedabad, Amreli, Anand, Aravalli, Banaskantha (Palanpur), Bharuch, Bhavnagar, Botad, Chhota Udepur, Dahod, Dangs (Ahwa), Devbhoomi Dwarka, Gandhinagar, Gir Somnath, Jamnagar, Junagadh, Kachchh, Kheda (Nadiad), Mahisagar, Mehsana, Morbi, Narmada (Rajpipla), Navsari Panchmahal (Godhra), Patan, Porbandar, Rajkot, Sabarkantha (Himmatnagar), Surat, Surendranagar, Tapi (Vyara), Vadodara, Valsad</i>	33
12.	<i>Haryana</i>	22	22	<i>Ambala, Bhiwani, Charkhi Dadri, Faridabad, Fatehabad, Gurugram, Hisar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendragarh, Nuh, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa, Sonapat, Yamunanagar</i>	22
13.	<i>Himachal Pradesh</i>	12	12	<i>Bilaspur, Chamba, Hamirpur, Kangra, Kinnaur, Kullu, Lahaul & Spiti, Mandi, Shimla,, Sirmaur (Sirmour), Solan, Una</i>	12

14.	Jammu & Kashmir	20	3	Jammu, Bandipore, Doda, Ganderbal, Srinagar, Udhampur	1
15.	Jharkhand	24	3	Bokaro, Godda, East Singhbhum However, Only Bokaro DEP received by CPCB	3
16.	Karnataka	31	31	Bagalkot, Ballari (Bellary), Belagavi (Belgaum), Bengaluru (Bangalore), Rural Bengaluru (Bangalore), Urban Bidar, Bijapur, Chamarajanagar, Chikballapur, Chikkamagaluru (Chikmagalur), Chitradurga, Dakshina Kannada, , Davangere, Dharwad, Gadag, Hassan, Haveri, Kalaburagi (Gulbarga), Kodagu, Kolar, Koppal, Mandya, Mysuru (Mysore), Raichur, Ramanagara, Shivamogga (Shimoga), Tumakuru (Tumkur), Udupi, Uttara Kannada (Karwar), Vijayapura (Bijapur), Yadgir	31
17.	Kerala	14	1	Wayanad	Information not available
18.	Ladakh	2	Not prepared	Not prepared	Information not available
19.	Lakshadweep	1	1	Lakshadweep	1
20.	Madhya Pradesh	52	52	Agar Malwa, Alirajpur, Anuppur, Ashoknagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Katni, Khandwa, Kargone, Mandla, Mandsaur, Morena, Narsinghpur, Neemuch, Niwari, Panna, 36Raisen, Rajgarh, Ra1tlam, Rewa, Sagar, Satna, Sehore, Seoni, Shabdol, Shajapur, Sheopur, Shivpuri, Sidhi, Singrauli, Tikamgarh, Ujjain, Umaria, Vidisha	52
21.	Maharashtra	36	36	Ahmednagar, Akola, Amravati, Aurangabad, Beed, Bhandara, Buldhana, Chandrapur, Dhule, Gadchiroli, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Mumbai City, Mumbai, Suburban, Nagpur,	36

				Nanded, Nandurbar, Nashik, Osmanabad, Palghar, Parbhani, Pune, Raigad, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Thane, Wardha, Washim, Yavatmal	
22.	Manipur	16	16	Bishnupur, Chandel, Churachandpur, Imphal East, Imphal West, Jiribam, Kakching, Kamjong, Kangpokpi, Noney, Pherzawl, Senapati, Tamenglong, Tengnoupal, Thoubal, Ukhrul	1
23.	Meghalaya	11	9	East Garo Hills, East Jaintia Hills, East Khasi Hills, Ri Bhoi, South Garo Hills, South West Khasi Hills, West Garo Hills, West Jaintia Hills, West Khasi Hills	2
24.	Mizoram	11	1	Aizawl	Information not available
25.	Nagaland	12	1	Kohima However, DEP not received by CPCB	1
26.	Odisha	30	30	Angul, Balangir, Balasore, Bargarh, Bhadrak, Boudh, Cuttack, Deogarh, Dhenkanal, Gajapati, Ganjam, Jagatsinghapur, Jajpur, Jharsuguda, Kalahandi, Kandhamal, Kendrapara, Kendujhar (Keonjhar), Khordha, Koraput, Malkangiri, Mayurbhanj, Nabarangpur, Nayagarh, Nuapada, Puri, Rayagada, Sambalpur, Sonapur, Sundargarh	30
27.	Puducherry	4	4	Karaikal, Mahe, Puducherry, Yanam	4
28.	Punjab	22	22	Amritsar, Barnala, Bathinda, Faridkot, Fatehgarh Sahib, Fazilka, Ferozepur, Gurdaspur, Hoshiarpur, Jalandhar, Kapurthala, Ludhiana, Mansa, Moga, Muktsar, Nawanshahr (Shahid Bhagat Singh Nagar), Pathankot, Patiala, Rupnagar, Sahibzada Ajit Singh Nagar (Mohali), Sangrur, Tarn Taran	22
29.	Rajasthan	33	22	Ajmer, Banswara, Baran, Barmer, Bharatpur, Bhilwara, Bundi, Chhitorgarh, Dausa,	22

				Dungarpur, Jaisalmer, Jalore, Jhalawar, Jhunjhunu, Jodhpur, Kota, Pali, Pratapgarh, Sawai Madhopur, Sirohi, Tonk, Udaipur	
30.	Sikkim	1	1	East Sikkim	Information not available
31.	Tamil Nadu	38	38	Ariyalur, Chengalpattu, Chennai, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kallakurichi, Kanchipuram, Kanyakumari, Karur, Krishnagiri, Madurai, Nagapattinam, Namakkal, Nilgiris, Perambalur, Pudukkottai, Ramanathapuram, Ranipet, Salem, Sivaganga, Tenkasi, Thanjavur, Theni, Thoothukudi (Tuticorin), Tiruchirappalli, Tirunelveli, Tirupathur, Tiruppur, Tiruvallur, Tiruvannamalai, Tiruvarur, Vellore, Viluppuram, Virudhunagar	Information not available
32.	Telangana	33	27	Adilabad, Bhadradi Kothagudem, Jagtail, Jangaon, Kamareddy, Jayashankar Bhoopalpally, Jogulamba Gadwal, Karimnagar, Khammam, Komaram Bheem Asifabad, Mahabubabad, Mahabubnagar, Mancherial, Medak, Medchal, Mulugu Nagarkurnool, Narayanapet, Nirmal, Nizamabad, Peddapalli Rajanna Sircilla, Rangareddy, Sangareddy, Siddipet, Warangal (Rural), Warangal (Urban)	27
33.	Tripura	8	1	Individual DEP prepared for West Tripura. However, SEP is prepared	8
34.	Uttarakhand	13	Not prepared	Not prepared	Information not available
35.	Uttar Pradesh	75	49	Agra, Aligarh, Allahabad, Ambedkar Nagar, Amethi (Chatrapati Sahuji Mahraj Nagar), Amroha (J.P. Nagar), Auraiya, Azamgarh, Baghpat, Bahraich, Barabanki, Bareilly, Bijnor, Budaun, Bulandshahr, Deoria, Etah, Etawah, Faizabad, Fatehpur, Gautam Buddha Nagar, Ghaziabad, Gonda,	75

				Gorakhpur, Hathras, Jalaun, Jhansi, Kanpur Dehat, Kanpur Nagar, Kanshiram Nagar (Kasganj), Kushinagar (Padrauna), Lakhimpur – Kheri, Lucknow, Mainpuri, Mathura, Mau, Meerut, Muzaffarnagar, Pilibhit, Pratapgarh, Saharanpur, Shahjanahnpur, Siddharth Nagar, Sitapur, Sonbhadra, Sultanpur, Unnao, Varanasi	
36.	West Bengal	23	Separate DEPs not yet prepared	Individual DEP is not prepared. However, SEP is prepared	23
	Total	738	471		420

Monitoring Committee reports on compliance status:

Uttar Pradesh

7. We may now refer to the reports of three Monitoring Committees referred to earlier. The report of the Monitoring Committee for Uttar Pradesh is dated 21.01.2021. The report shows that on most points the State authorities are non compliant. Progress is slow and unsatisfactory in qualitative terms. The status of compliance is mentioned as follows:

S. No.	Directions by Hon'ble Tribunal	Concerned Department	Compliance status
1.	Status of preparation of District Environment Plan in the State.	UPPCB	Non-compliant On 31.01.2020, UPPCB had directed all Divisional Forest Officers to prepare and submit the District Environment Management Plan of their respective Districts immediately to UPPCB. Letter was sent to Principal Secretary, Department of Environment, Forest and Climate Change, U.P. dated 16.09.2020 mentioning that all District Forest Officers are directed to prepare and submit District Environment Management Plan of their respective Districts as per the model template. Till date only Bahraich, Varanasi, Ghaziabad and Siddharth Nagar Districts have prepared and sent the District Environment Management Plan to UPPCB.

2.	Status of finalization of State Environment Plan covering the specific thematic areas referred in Para-7 including information as contained in Para-8.	UPPCB	Non-compliant On 31.01.2020, UPPCB had directed all Divisional Forest Officers to prepare and submit the District Environment Management Plan of their respective Districts immediately to UPPCB. UPPCB has sent letters to Principal Secretary, Department of Environment, Forest and Climate Change, U.P. dated 16.09.2020 mentioning that all District Forest Officers are directed to prepare and submit District Environment Management Plan of their respective Districts as per the model template.
3.	Status of preparation of template of Model District Environment Plan by CPCB.	CPCB	Non-compliant On 05.08.2020, CPCB has sent letter to Principal Secretary, Environment and Forest Department and Member Secretary of State Pollution Control Board regarding the preparation of District Environment Plan by all States. CPCB has also enclosed a template for preparation of District Environment Plan (DEP) by all the States.
4.	Status of finalization of model action plan at least for one District in the State.	UPPCB	Non-compliant Till date UPPCB has received District Environment Plan from Bahraich, Varanasi, Ghaziabad and Siddharth Nagar Districts only.

8. The Committee has made the following recommendations by way of remedial steps to be taken:

“7. RECOMMENDATIONS BY OVERSIGHT COMMITTEE

In view of the above, we recommend as follows:

- i. **The progress of preparation of District Environment Plans is very slow.** After more than 6 months of close follow up, out of 75 Districts in the State only Bahraich, Ghaziabad, Varanasi and Siddharth Nagar Districts have prepared the District Environment Management Plan. UPPCB has not taken any actions against the Districts who have not submitted District Environment Management Plan yet. The Secretary, UPPCB may be directed to take stringent measures and direct all the Districts to prepare the District Environment Management Plan within a month and also fix the responsibility of inaction.
- ii. **The action plans submitted by four Districts represent blank templates without any monitorable targets.** Monitoring would mean breaking the goals into specific activities, setting quantified targets, posting monthly progress against those targets, identifying problem areas

and action taken report against each. The plans submitted just show broad activities rather than specifics. The Secretary, UPPCB may be directed to direct the concerned District authorities to prepare and submit the action plans with current details and proper monitorable targets. Moreover, instead of each District having its own template, UPPCB should standardize a model template to be followed in all Districts. This will ensure uniformity and result in ease of monitoring. UPPCB may also provide training to all the concerned officers in regard to the preparation of District Environment Management Plan.

- iii. **The District Environment Management Plan of Varanasi represents only gross numbers rather than complete information of the specific projects undertaken, their current status and future proposals. Such plans are difficult to monitor.** The Secretary, UPPCB may be directed to direct District Forest Officer, Varanasi to restructure the action plan in respect of current status and future proposals.
- iv. In the Uttar Pradesh Environmental compliance portal, the details of meeting conducted by District Environmental Committee at District level is provided. While no information regarding the meetings conducted at State Level by SPCB has been provided. The State PCB may be directed to upload the details of the meetings conducted in this regard
- v. The SPCB may be directed to implement a uniform timeline to the action plans for all thematic areas in the District Environment Management Plan for all the Districts.
- vi. The State PCB may be directed to expedite the process of finalization of the model action plan for at least one District in the State within two months
- vii. CPCB has prepared the template for model District Environment Plan for all the States and has sent the same to Principal Secretary, Environment and Forest Department and Member Secretary of State Pollution Control Boards. CPCB has not taken any further actions in this regard. CPCB may be directed to take necessary actions and expedite the process of preparation of National Environment Plan and also fix the responsibility of inaction.
- viii. The State PCBs may be directed to harness active participation of all stakeholders in planned environment conservation actions.
- ix. **While preparation of District Environment Management Plan, the District Level Authorities/SPCBs may be directed to assess, mitigate and monitor adverse impacts of various environmental pollution sources at district levels and also suggest steps that are required to address those issues.**
- x. The State PCBs/ UDDs may be directed to harness inter departmental coordination for implementation of action plans at District/ National Level.
- xi. **For proper implementation of action plans prepared by Districts, a micro-monitoring system may be developed at District level by UDD/State PCBs.**
- xii. **The Oversight Committee expresses its concern at the slow progress in regard to the preparation of DEMPs.**

The Chief Secretary should review the progress of preparation of DEMPs in his monthly meetings to ensure timely and effective action in the Districts.”

Punjab

9. The report of Monitoring Committee for Punjab dated 01.07.2021 is almost on same pattern. The authorities in the State of Punjab have also not addressed the deficiencies in the plans - revising timelines and complying with the observations in the meetings particularly incorporating complete information. Relevant extracts from the report are reproduced below:

“11. Timelines for completion of various activities as mentioned under 7 thematic areas

It was informed that as per the directions of the Hon'ble National Green Tribunal in OA No. 360 of 2018 in the matter of Shree Nath Sharma Vs Union of India and others, the following 7 thematic areas have been selected where the management of the waste is to be accomplished

i. Waste Management Plan:

- Solid Waste Management***
- Plastic Waste Management***
- C&D Waste Management***
- Bio medical Waste Management***
- Hazardous Waste Management***
- E-Waste Management***

- ii. Water Quality Management***
- iii. Domestic Sewage Management***
- iv. Industrial Waste Management***
- v. Air Quality Management***
- vi. Mining Activity Management***
- vii. Noise Pollution Management***

The Chairman of the Monitoring Committee observed and directed as under as under:

- i. Fresh templates w.r.t preparation of District Environmental Plan and implementation thereof have been received from CPCB vide letter No. B31011/ BMW(42.55)2021/WMD-1 dated 24.5.2021 and the same has been addressed to the Principal Secretary, Department of Science, Technology & environment. These fresh templates provided by CPCB also need to be considered while finalizing the District Environmental Plans.***

- ii. **No timelines for completion of activities, as mentioned in the said waste management areas, have been mentioned and all the information, which is desired to be inserted in the plan need to be provided by the concerned departments so that complete and comprehensive District Environmental Plan of district Ludhiana may be prepared.**
- iii. **District Environmental Plan of district Ludhiana after incorporating the observations of the Monitoring Committee as mentioned above shall be submitted on 15.7.2021.**

12. Other areas for management of liquid and solid waste:

- i. **Nothing has been mentioned about management of carcasses in rural areas and treatment of leachate generated from legacy waste dump site. These points may be mentioned in the District Environmental Plan.**
- ii. **It has been desired that w.r.t all the activities as found mentioned in the guidelines/templates issued by CPCB, details regarding timelines, sources of funds (whether under center funded scheme/state funded/private funding system), responsible officers to execute the said works, may be mentioned in the District Environmental Plan.**
- iii. **The Monitoring Committee has observed that nothing has been mentioned about scientific disposal of RDF to be recovered from the processing of solid waste. The timelines for its scientific disposal may be mentioned in the District Environmental Plan.**

It is further submitted that the Monitoring Committee has scheduled its next meeting with District level Officers of District Jalandhar on 2.7.2021 to finalize the District Environmental Plan of District Jalandhar and thereafter, the Monitoring Committee shall hold subsequent meetings with District level Officers of major Districts mainly Amritsar, Bathinda, Patiala, Ropar and Ferozepur to finalize their District Environmental Plans based on the observations of the Monitoring Committee raised in its 2nd meeting held on 30.3.2021 and fresh templates sent by Central Pollution Control Board vide letter No. B31011/BMW (42.55)/2021/WMD-I dated 24.5.2021.”

Other States

10. The report of the Monitoring Committee for Haryana is dated 01.07.2021 to the effect that plans were prepared for 21 Districts but the same required to be revised. According to letter dated 02.07.2021 received from the Gujarat State PCB, District Environment Plans have been prepared for all the 33 Districts and implementation is being reviewed for

which time was required. According to letter dated 02.07.2021 received from Justice Prakash Tatia, former Chief Justice of Jharkhand who was requested to oversee preparation of such plans, nobody from the State has briefed in the matter. According to the letter from Justice VM Kanade dated 5.7.2021, work is in progress but could not be completed because of covid situation.

11. Since the report of CPCB covers the matter for the entire country, it is not necessary to refer to the reports received from some individual districts.

12. We proceed to consider the matter in above background with the material available.

Analysis and observations

13. As already noted, it is the Constitutional obligation of the States/UTs to ensure compliance of the mandate under Articles 243 G, 243 W and 243 ZD read with 11th and 12th Schedules. Clean environment is part of right to life under Article 21 of the Constitution and also fundamental in governance under Articles 37 read with 47 and 48A. Environment is also a subject covered by the definition of disaster under Section 2(b) of the Disaster Management Act, 2005. Thus, effective administrative machinery equipped to deal with the matter is required at all levels. The existing machinery should be able to meet the challenge and should be revamped from time to time. As repeatedly observed by this Tribunal, degradation of air, water and soil cause large number of deaths and diseases, apart from loss of livelihood. Environment find prominent mention in the “Sustainable Development Goals” (SDGs) which are planned and coordinated at international levels also. Appreciable initiatives taken include Swachh Bharat Mission, Clean water, restoration

of water bodies - ponds, rivers, lakes, protection of eco-sensitive zones but success depends on vibrant monitoring. The reports discussed above are not re-assuring. There seems to be huge gap in responsibility entrusted to the authorities and action on the ground, as shown by the reports quoted earlier. Damage to the environment is a criminal offence under various statutes. Deaths and diseases attributable to non-compliance of environmental norms cannot be disputed but adequate remedial action remains to be seen. Effect of deaths and diseases due to pollution is no less than homicides or hurts to human beings. Major failure of State authorities in compliance of waste management norms, which management is vested in the State authorities but no accountability is fixed for such failures. Such unsatisfactory state of affairs needs to be checked by involvement of senior functionaries in the Government, committed to the welfare of citizens, the Constitution and the Rule of law. We hope the concerned authorities will not fail the citizens. Remedies need to be provided at grassroot level with as high priority as opening of primary health centres or police stations for protection of basic right to clean environment, health and hygiene. This requires identification of challenges at every level, starting from Panchayat level upto the national level. The identified issues need to be compiled and placed in public domain which may help in public participation which is a recognized strategy for protection of the environment.

14. The 73rd and 74th amendments to the Constitution covering the requirement of having a plan for protection of environment upto Panchayat level, coming in force in the year 1993 which, consistent with the international conventions, including the Stockholm and Rio conferences, to which India is a party, seek to promote protection of environment at the grass root level. It is a matter of regret that the mandate of law remains

practically dead letter when even after 28 years, such plans are not in place at many places and where plans have been prepared, the same are incomplete. As found by the Oversight Committees in the reports quoted above, such plans must clearly identify the challenges in terms of gaps in current status of environment and desirable situation and compliance status to be achieved. Making of plans is only a first step which will not by itself be complete unless there are budgetary provisions, timelines and effective monitoring mechanism. There has to be flow of information from the lowest level upto the national level to enable making of appropriate policies and also flow of directions/guidelines from the national level upto the Panchayat level based to help tackling the complex issues and suitable -holding. It is only based on grass root level information and plans that an effective and meaningful State level plan and thereafter national level plan can be prepared. This is not merely a wish but the Constitutional mandate and situational imperative as shown by factual situation depicted in orders of this Tribunal dealing with the situation.

15. There is dire need for compiling information on vital environmental issues and planning to address the gaps in compliances. Current monitoring is inadequate. In OA No. 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.*, vide order dated 05.02.2021, this Tribunal considered the status of performance of statutory regulators – State PCBs, based on consolidated report of the CPCB and found the situation far from satisfactory. The Tribunal also noted challenges posed by pollution due to violation of environmental norms. The Tribunal concluded:

“10. We have given due consideration to the report, which shows startling state of affairs tested on the touchstone of ‘Sustainable Development’ principle, accepted in Stockholm conference and which has been held to be part of right to life under article 21 of the Constitution in *Vellore Citizens’ Welfare Forum v. Union of India*, (1996) 5 SCC 647.

11. **Some of the significant observations include failure to fill up key positions, to acquire necessary equipment, to arrange continuous training, to prepare State Environment policy, to specify industries-siting criteria, making inventory of grossly polluting industries, not specifying standards of inlet to the CETPs and hazardous waste, inaction against identified polluters, taking steps for bridging gaps in law and enforcement with regard to liquid and solid waste (of different kinds), including non-functional and noncompliant ETPS, STPs and CETPs, inadequate monitoring of environmental compliance in Class II towns and coastal areas, failure to compile and analyse data and filing annual reports, inefficiency shown by inaction against serious violations of environmental norms. Needless to say that such sorry state of affairs is reflection of poor governance, making environmental rule of law far from reality.**

12. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – ‘sustainable development’, ‘precautionary’ and ‘polluter pays’. In *Hanuman Laxman*, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. **This requires filling of gap between law and enforcement.** In *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606, at page 621, it was observed that the State has to

“forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, **hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.** Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment.”

13. In *A.P. Pollution Control Board v. Prof. M.V. Nayudu*, (1999) 2 SCC 718, at page 732, it was observed “..**Good governance is an accepted principle of international and domestic laws.It includes the need for the State to take the necessary “legislative, administrative and other actions” to implement the duty of prevention of environmental harm...**”. In *Techi Taga*

Tara, supra, the Hon'ble Supreme Court referred to several Committees on **need for revamping the regulatory bodies by appointing persons of outstanding ability and high reputation to the State PCBs and equipping them with laboratories and other equipment for performing statutory functions.** Apart from the Tribunal being approached under sections 14 and 15 by aggrieved parties, pointing out degradation of environment and inaction of the statutory regulators, the Hon'ble Supreme Court has required this Tribunal to monitor compliance of such statutory obligations for protecting environment. This is not possible unless the statutory regulators are effective. Significant issues so referred by the Hon'ble Supreme Court include a) liquid waste management, (2017) 5 SCC 326, Paryavaran Suraksha vs. Union of India & Ors. wherein it was directed that requisite STPs, ETPs, CETPs must be set up by 31.3.2018, failing which coercive measures may be taken against concerned authorities, to enforce statutory mandate of the Water (Prevention and Control of Pollution) Act enacted in 1974, prohibiting any water pollution, making it a criminal offence. b) compliance of solid waste management rules. Vide order dated 2.9.2014 in WP 888/1996, Almitra H. Patel Vs. Union of India & Ors. on the file of the Supreme Court, the issue has been referred to this Tribunal for monitoring compliance of Solid Waste Management Rules. c) In (2015) 12 SCC 764, MC Mehta v. UOI, issue of rejuvenation of Ganga stands referred to this Tribunal. d) Vide order dated 24.7.2017 in WP 725/1994, 'And quite flows Yamuna', rejuvenation of Yamuna stands referred to this Tribunal. It is not necessary to refer to several other orders. Finding that statutory regulators were not effective and serious damage was continuing, the Tribunal has appointed independent monitoring Committees¹ on several issues.

In substance, monitoring of the enacted environmental laws including the Water Act, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 and Rules framed thereunder needs to be reviewed and made effective in the interest of protection of environment and public health. This is not possible unless the regulatory bodies are duly manned and equipped and function efficiently. The report shows that it is not happening and there are huge gaps. With such gaps, it is only a dream to expect clean environment – fresh water or fresh air. Irreversible degradation of environment is bound to result in avoidable deaths and diseases and loss of scarce and good quality water, air and soil and biodiversity.

¹ To monitor compliances with regard to:

- (i) River Ghaggar in OA No. 138/2016 (TNHRC), Stench Grips Mansa's Sacred Ghaggar River
- (ii) River Sutlej in OA 916/2018, Sobha Singh v. State of Punjab & Ors.
- (iii) River Yamuna in OA 06/2012, Manoj Mishra v. UOI & Ors.
- (iv) River Musi in OA 426/2018, Mohammed Nayeem Pasha & Anr. v. State of Telangana & Ors.
- (v) River Ganga in OA 200/2014, M.C. Mehta v. Union of India & Ors.
- (vi) River Jojari in OA 329/2015, Gram Panchayat Araba v. State of Rajasthan & Ors.
- (vii) CETP in Taloja District in OA 125/2018, Arvind Pundalik Mhatre v. Ministry of Environment, Forest and Climate Change & Ors.
- (viii) District Environment Plan in OA 360/2018 Shree Nath Sharma v. Union of India & Ors.
- (ix) 'Rat Hole' coal mining in OA 110(THC)/2012, Threat to Life Arising Out of Coal Mining in South Garo Hills District v. State of Meghalaya & Ors.
- (x) Solid waste management rules in OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.

14. The findings in the report showing gaps resulting in large scale non-compliances in enforcement of environmental laws are supported by observations of this Tribunal, which include the following:

- (I) OA 593/2017, *Paryavaran Suraksha Samiti & Anr. vs. Union of India & Ors.*², involves monitoring of liquid waste management in terms of orders of the Hon'ble Supreme Court in (2017) 5 SCC 326. We have found that as a result of continuing failure of the statutory authorities to ensure compliance, industrial as well as municipal liquid waste is being discharged **resulting in pollution of groundwater as well as surface water, including water bodies, drains, streams, rivers and coastal areas. The Tribunal has noted that as per data compiled by the CPCB, 351 river stretches are declared polluted. Comprehensive Environment Pollution Index (CEPI) prepared by the CPCB shows that 100 industrial clusters are polluted.** The Tribunal is also dealing with the remedial action for restoration of the 351 stretches in OA 673/2018³, *In Re: News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"* for which the Tribunal has directed **preparation and execution of action plans for each of such stretches by constituting River Rejuvenation Committees (RRCs) for all States/UTs headed by Environment Secretaries which action needs to be overseen by the Chief Secretaries at the State level and by a Central Monitoring Committee (CMC) headed by Secretary, Jal Shakti alongwith NMCG and CPCB at the national level.** OA 829/2019⁴, *Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.* deals with the remedying of **coastal pollution for which directions have been issued on the same pattern for preparation and execution of action plans by the RRCs to be overseen by the Chief Secretaries at the State level and by the CMC at the national level.** The same order also deals with utilisation of treated water, being OA 148/2016, *Mahesh Chandra Saxena vs South Delhi Municipal Corporation & Ors.* and OA 325/2015⁵, *Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.*, dealing with the issue of restoration of water bodies by removing encroachments and preventing pollution has been dealt with by this Tribunal. OA 176/2015, *Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.*⁶, the Tribunal has directed monitoring of groundwater extraction to give effect to the mandate in Hon'ble Supreme Court judgment in *M.C. Mehta v. Union of India & Ors.* (1997) 11 SCC 312.
- (II) Apart from water pollution, air pollution the issue air pollution has been dealt with by this Tribunal by separate

² Vide order dated 21.09.2020

³ Vide order dated 21.09.2020

⁴ Vide order dated 21.09.2020

⁵ Vide order dated 18.11.2020

⁶ Vide order dated 20.07.2020

order in OA 681/2018⁷, News item published in "The Times of India" Authored by Shri Vishwa Mohan titled "**NCAP with multiple timelines to clean air in 102 cities to be released around August 15**" requiring constituted **Air Quality Monitoring Committees in all States/UTs to prepare and execute action plans for control of air pollution in 122 non-attainment cities (where air quality is normally beyond the prescribed norms).**

- (III) The issue of solid waste management has been dealt with by this Tribunal in OA 606/2018 in pursuance of directions of the Hon'ble Supreme Court in Writ Petition No. 888/1996, Almitra H. Patel & Anr. v. Union of India & Ors. In the said matter, the Chief Secretaries of all States/UTs were required to remain present before this Tribunal⁸ and after interaction with them, separate orders for all States/UTs referring to the individual issues in such States/UTs,⁹ particularly **issue of legacy waste dump sites and remediation of current waste on scientific basis were dealt with and the Chief Secretaries were directed to monitor compliance every month by creating a monitoring cell, directly under them, in terms of directions of the Hon'ble Supreme Court and the District Magistrates monitoring such compliances every fortnight. It has been found that there are more than 3000 dump sites where legacy waste has accumulated over the years but the remedial action has not been taken except at very few places. This is resulting in water and air pollution and soil degradation on continuous basis, to the detriment of the environment and the public health.** The statutory timelines have come to an end. Reference is made in this regard also to order dated 29.01.2021 in OA No. 519/2019, In re: News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and order dated 28.02.2020 in OA No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. It was directed, vide order dated 10.01.2020, that compensation will be payable for failure to comply with the requirement of taking steps mentioned in Rule 22 of the SWM Rules, 2016 at scales mentioned therein, depending on the size of local bodies, from 01.04.2020 till compliance. Compensation was also directed to be recovered at the laid down scale for delay in commencing and completing the legacy waste remediation measures.
- (IV) With regard to **bio-medical waste**, the matter has been dealt with in OA 710/2017, Shailesh Singh, v. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors.¹⁰, with regard to **hazardous waste**, matter has been dealt with in OA 804/2017, Rajiv Narayan v. Union of India & Ors.¹¹,

⁷ Vide order dated 21.08.2020

⁸ Vide order dated 16.01.2019

⁹ Vide order dated 18.07.2019 (last such order is in respect of Jammu & Kashmir)

¹⁰ Vide order dated 18.01.2021

¹¹ Vide order dated 29.01.2021

with regard to **e-waste**, matter has been dealt with in OA 512/2017, *Shailesh Singh v. State of UP*¹², with regard to **plastic waste**, matter has been dealt with in EA 13/2019 in OA 247/2017, *Central Pollution Control Board v. State of Andaman & Nicobar & Ors.*¹³ for laying down liability to pay compensation for non-compliance.

15. The failure of monitoring has been found to have direct nexus to atleast 10 industrial accidents ¹⁴ which have taken place in the recent past which have been dealt with by this Tribunal.

16. Vide order dated 03.02.2021 in OA No. 85/2020, **Yashyashvi Rasayan Pvt. Ltd.**, the Expert Committee, appointed to suggest means to prevent disasters, recommended strengthening the monitoring mechanism by making appointments against all vacant posts to ensure that onsite and offsite emergency plans are in place and mock drills take place, to prevent any such incidents and medical facilities are available at the nearest point in case such incident takes place to save lives of the victims. This aspect has also been dealt with vide order dated 01.02.2021 in OA No. 837/2018, *Sandeep Mittal v. Ministry of Environment, Forests & Climate Change & Ors.* on the subject of monitoring the EC conditions.

17. As earlier observed, damage to environment is directly linked to the public health and neglecting compliance of environmental norms results in deaths and injuries. Violation of environmental norms needs to be taken as seriously as preventing crimes of homicides and assaults. It is more serious as the victims may be wide spread and unidentified. The consequences may even affect future generations. **The compliance status is directly linked to effectiveness of monitoring which requires that the key office bearers of statutory regulators and oversight bodies are qualified, competent and reputed and exclusively dedicated to such work, instead of devoting part time, while simultaneously holding other positions.Adequate and well-equipped laboratories and effective machinery for implementation of "Polluter Pays" principle for assessment and collection of compensation is another important aspect of environmental governance.**

18. It is seen that several State PCBs do not even have constraint of funds. Still, the requisite manpower and the equipment are not being arranged. **Moreover, due application of "Polluter Pays" principle, in exercise of regulatory powers under the Air, Water and EP Acts to compensate the environment, enables them to have requisite funds for hiring experts, installing monitoring equipment and taking other remediation and restoration measures, including restoration of contaminated sites.** The quality and quantity of key manpower cannot be compromised, if environmental governance is to improve to achieve the sustainable

¹² Vide order dated 15.01.2021

¹³ Vide order dated 08.01.2021

¹⁴

development goals. It is well known that most of the key environmental laws have been enacted in the wake of Stockholm Conference (1972) under Entry 13 of List-I read with Article 253 of the Constitution, with a view to achieve 'sustainable development' of which the 'Precautionary' principle, "Polluter Pays" principle, Intergenerational Equity and Public Trust Doctrine principles are integral part. **Sad part is that even after 47 years of Water Act and 40 years of Air Act, water and air pollution is rampant, without serious adverse action. Though there are criminal offences with minimum prescribed sentence, hardly any punishment is handed down. Hardly any compensation is recovered from the violators. Victims continue to suffer and so does the environment. This requires attention of all concerned at higher levels in governance.**

19. In view of above, the recommendations in the CPCB report need to be urgently implemented by all concerned for revamping and upgrading the regulatory bodies and their equipment which needs to be a continuous exercise. **The Chief Secretaries of all States/UTs, in coordination with the Secretary Environment and Chairman State PCB/PCCs in their respective jurisdiction, need to forthwith study and address the issues emerging from the report, prepare and execute their respective action plans.** This will include filling up all vacant posts by competent persons and procuring the requisite equipment. The CPCB may assist and monitor all the States for compliance of these directions. It will be open to the CPCB to prepare a format which may contain qualifications, minimum eligibility criteria, required experience for the key positions and the specifications of equipment. It is suggested that if some of the State PCBs find it difficult to select/recruit suitable candidates, a designated Committee of the MoEF&CC and CPCB, in consultation with such State PCBs, may explore possibility of the central selection mechanism so that the talent pool so selected can be made available for posting at appropriate locations, where recruitment is found to be otherwise difficult. We have noted the observations in the report that at some places administrative manpower is more than technical manpower which may not be a desirable situation. Such situation may be reviewed and remedied by the concerned States. The observations that the work of regulators should be exclusive for the incumbents appointed applies to all key positions, including Chairman/Member Secretary, Regional Officers, Engineers and Scientists of PCBs/PCCs.

20. Further, **for improving monitoring and planning, authentic data needs to be compiled at all levels. Initiative will have to be taken consistent with Digital India initiatives by the MoEF/MoJS/MoUD/CPCB and based on such policy decisions, the Environment departments of all States/UTs will have to compile data in their respective jurisdiction, preferably Districtwise. On that basis District Environment Data Grid (DEDG), State Environment Data Grid (SEDG) and National Environment Data Grid (NEDG) can be set up and continuously updated. The Grid can be connected to online monitoring systems. Comprehensive Environment Pollution Index (CEPI) is being prepared limited to the Industrial Area but the Grid can cover larger areas and aspects and can be source of research**

and planning. It can also facilitate monitoring of and be in sync with other government initiatives such as National Mission for Clean Ganga, Swachh Bharat and Jalshakti Abhiyan etc. Based on such data, it may also be easier to study 'carrying capacity' of different areas to plan siting policy for various activities.

21. Further, there is need to study the extent of environmental loss and the contributors to the same. Though environment is priceless, normative parameters are now available to determine the compensation for the loss caused for failure to observe laid down rules and regulations such as not clearing legacy waste as per Solid Waste Management Rules, causing air/water pollution. Environment is wealth which needs protection from being plundered by law violators, for their monetary interests, by adequate monitoring and stringent vigilance. Its scientific management, including enforcement of polluter pays principle, requires study of level of pollution and contributors thereto and cost of restoration to be recovered by an efficient machinery. Such steps will advance the environmental rule of law and lead to sustainable development.

22. The directions on the subject are summed up as follows:

- i. The Chief Secretaries of all States/UTs, in coordination with their respective Secretary Environment and Chairman State PCB/PCCs, need to forthwith study and address the issues emerging from the CPCB report, prepare and execute their respective action plans which will include filling up all vacant posts by competent persons and procuring the requisite equipment, including commissioning and upgradation of all laboratories and recognition under the EP Act, 1986. The CPCB may assist and monitor all the States for compliance of these directions. The steps in this regard be initiated and completed as far as possible within six months. In view of Section 33 of the NGT Act, 2010, whereunder the NGT Act has overriding powers over other statutes, any restriction placed by any administrative order will not stand in the way of carrying out this direction.**
- ii. We direct the CPCB to prepare a format which may contain qualifications, minimum eligibility criteria, required experience for the key positions and the specifications of equipment. All States/UTs may act accordingly.
- iii. MoEF&CC and CPCB may design a mechanism for annual performance audit of all the State PCBs/PCCs.
- iv. It is suggested that if some of the State PCBs find it difficult to select/recruit suitable candidates, a designated Committee of the MoEF&CC and CPCB, in consultation with such State PCBs, may explore possibility of the central selection mechanism so that the

talent pool so selected can be made available for posting at appropriate locations, where requirement is found to be otherwise difficult. A plan be prepared for continuous training of the incumbents at regional levels periodically.

- v. In view of the findings in the report that at some places administrative manpower is more than technical manpower, such situation may be reviewed and remedied by the concerned States.*
- vi. The observations that the work of regulators should be fulltime for the incumbents appointed applies to all key positions, including Chairman/Member Secretary and Regional Officers, Engineers, Scientists of PCBs/PCCs. Such incumbents may not be given any other additional charge. Only exception can be in States where there are no significant environmental issues so as to provide the incumbents fulltime work. Such States may seek exemption in respect of this direction from CPCB, giving relevant information justifying such exemption.*
- vii. CPCB and State PCBs/PCCs, as directed earlier, may utilise EC funds on laboratory set up/upgradation, and on the mentioned areas in the report as well as on approved District Environment Plans. No approval of Central/State Government will be necessary in this regard in view of section 33 of the NGT Act, supra.*
- viii. Consistent with Digital India initiatives, MoEF&CC/MoJS/CPCB may consider setting up and periodically updating National Environment Data Grid (NEDG) linked to the State Environment Data Grids (SEDGs) DEDGs and further linked to available portals like online air/water quality, Sameer and other monitoring stations to facilitate analysis, research and planning on the subject. It may be further interlinked to initiatives like NMCG/Swachh Bharat/Jal Jeevan Mission.*
- ix. To assess the extent of monetary loss caused to the environment on account of violation of environmental norms by failure to scientifically manage waste, violating Water/Air/EP/Forest (Conservation) Acts and other specified Acts for fixing accountability, for improving efficiency and better enforcement of 'Polluter Pays' principle.*
- x. To monitor the extent of carrying capacity for particular activities at different locations for planning suitability of siting of particular activities for giving effect to 'Precautionary' and 'Sustainable Development' principles"*

16. On various thematic areas mentioned above, which are expected to be the components of District Environment Plans such as waste management, air pollution, water pollution, protection of eco sensitive areas, protection of rivers, water bodies, conservation of groundwater, use of treated water, rainwater harvesting, preventing dust pollution, noise pollution etc, this Tribunal has dealt with the issues and finding huge gaps in compliances, issued directions, which include following:

I. **Waste Management:**

- **Bio-medical waste:** O.A. No. 710/2017, *Shailesh Singh v. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors.*, Order dated 18.01.2021.
- **Legacy waste:** O. A. No. 519/2019, *News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes"*, Order dated 29.01.2021.
- **Hazardous waste:** O.A. No. 804/2017, *Rajiv Narayan & Anr. v. UOI & Ors.*, Order dated 29.01.2021.
- **Solid Waste Management:** O.A. No. 606/2018, *Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues*, Orders dated 22.07.2019, 28.02.2020 and 14.12.2020.
- **E-waste:** O.A. No. 512/2018, *Shailesh Singh v. State of UP & Ors.*, Order dated 15.01.2021.
- **Plastic waste:** EA No. 13/2019, *Central Pollution Control Board v. State of Andaman & Nicobar & Ors.*, Order dated 08.01.2021.

II. **Rainwater harvesting:** O.A. No. 496/2016, *Tribunal on its own motion v. GNCD & Ors.*, Order dated 22.01.2021.

III. **Water bodies restoration:** O.A. No. 325/2015, *Lt. Col. Sarvadaman Singh Oberoi v. UOI & Ors.*, Order dated 18.11.2020.

IV. **Management of Carcasses:** O.A. No. 465/2019, *Kulwinder Singh Sandhu & Ors. v. Ram Murti & Ors.*, Order dated 15.04.2021.

- V. **Management of Dairies:** Original Application No. 46/2018, *Nuggehalli Jayasimha v. Government of NCT of Delhi*, Order dated 08.10.2020.
- VI. **Environmental compliance - Brick kilns:** Original Application No. 1016/2019, *Utkarsh Panwar v. Central Pollution Control Board & Ors.*, Order dated 17.02.2021.
- VII. **Sustainable Mining:** O.A. No. 360/2015, *National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)*, Order dated 26.02.2021.
- VIII. **Management of Railway siding:** O.A No. 141/2014, *Saloni Singh & Anr. v. UOI & Ors.*, Order dated 16.03.2021.
- IX. **Categorisation for effective monitoring - Red, Orange, Green:** OA 639/2018, *Shailesh Singh v. State of Haryana & Ors.*, Order dated 23.03.2021.
- X. **Air pollution control in Non-Attainment Cities:** OA 681/2018, *In Re: News item published in "The Times of India" Authored by Shri Vishwa Mohan Titled "NCAP with multiple timelines to clean air in 102 cities to be released around August 15"*, Order dated 08.04.2021.
- XI. **Water Pollution control by preventing discharge of untreated sewage/effluents:** OA 593/2017, *Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors.* and OA 148/2016, *Mahesh Chandra Saxena v. South Delhi Municipal Corporation & Ors.*, Orders dated 21.09.2020 and 22.02.2021.
- XII. **Ground Water Regulation:** OA No. 176/2015, *Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.*, Order dated 20.07.2020.
- XIII. **Remedying Polluted Industrial Clusters:** OA No. 1038/2018, *News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels"*, Order dated 14.11.2019.
- XIV. **Restoring Pollution of River Stretches:** OA No. 673/2018, *In Re: News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"*, Orders dated 21.09.2020 and 22.02.2021.

- XV. **Controlling Coastal Pollution:** OA No. 829/2019, *Lt. Col. Sarvadaman Singh Oberoi v. Union of India & Ors.*, Orders dated 21.09.2020 and 22.02.2021.
- XVI. **Regulating Pollution by restaurants/hotels/motels/banquets:** OA No. 400/2017, *Westend Green Farms Society v. Union of India & Ors.*, Order dated 04.02.2021.
- XVII. **Preventing Industrial Accidents by safety norms and providing relief to victims:** (i) OA No. 85/2020, *Aryavart Foundation through its President vs. Yashyashvi Rasayan Pvt. Ltd. & Anr.*, Order dated 03.02.2021 (ii) OA No. 60/2021, *In re: News item published in The Hindu dated 23.02.2021 titled "Two dead, 5 missing in fire at UPL Plant"*, Order dated 11.06.2021 (iii) OA No. 134/2021, *In re: News item published in The Hindustan Times dated 17.06.2021, titled "Blast in firecracker unit in Maharashtra's Palghar, at least 10 injured"*, Order dated 25.06.2021.

17. We may mention that several issues have been directed to be monitored by this Tribunal by the Hon'ble Supreme Court such as ensuring installation of requisite treatment equipments – STPs, ETPs, CETPs, to prevent discharge of untreated sewage/trade effluents in water bodies¹⁵, solid waste management¹⁶, remedying the pollution of river Yamuna¹⁷ and river Ganga¹⁸. There are also various other issues which are being dealt with by this Tribunal to give effect to the directions of the Hon'ble Supreme Court. Tackling of challenges presented by these issues requires action plans and monitoring of execution at every level. DEPs, taking cognizance of all such issues, should result in holistic steps to address the problem in the interest of health of citizens. We may mention by way of illustration particulars of some of the orders relevant for the purpose (can be accessed on the NGT website):

¹⁵ Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors. - (2017) 5 SCC 326

¹⁶ Order dated 02.09.2014, in W.P. No. 888/1996, Almitra H. Patel vs. Union of India & Ors.

¹⁷ O.A. No. 06/2012, Manoj Mishra v. UOI & Ors.

¹⁸ O.A. No. 200/2014, M.C. Mehta v. UOI & Ors.

Sl. No.	Date of Order	OA/EA/Appeal No. and Party Name	Issue dealt
1.	18.01.2021	O.A. No. 710/2017, <i>Shailesh Singh v. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors.</i>	Bio-medical waste
2.	29.01.2021	O.A. No. 804/2017, <i>Rajiv Narayan & Anr. v. UOI & Ors.</i>	Hazardous waste
3.	22.07.2019, 28.02.2020 and 14.12.2020	O.A. No. 606/2018, <i>Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues,</i>	Solid Waste Management
4.	15.01.2021	O.A. No. 512/2018, <i>Shailesh Singh v. State of UP & Ors.</i>	E-waste
5.	08.01.2021	EA No. 13/2019, <i>Central Pollution Control Board v. State of Andaman & Nicobar & Ors.</i>	Plastic waste
6.	18.11.2020	O.A. No. 325/2015, <i>Lt. Col. Sarvadaman Singh Oberoi v. UOI & Ors.</i>	Water bodies restoration
7.	26.02.2021	O.A. No. 360/2015, <i>National Green Tribunal Bar Association v. Virender Singh (State of Gujarat)</i>	Sustainable Mining
8.	08.04.2021	OA 681/2018, <i>In Re: News item published in "The Times of India" Authored by Shri Vishwa Mohan Titled "NCAP with multiple timelines to clean air in 102 cities to be released around August 15"</i>	Air pollution control in Non-Attainment Cities
9.	21.09.2020 and 22.02.2021	OA 593/2017, <i>Paryavaran Suraksha Samiti & Anr. v. Union of India & Ors.</i> and OA 148/2016, <i>Mahesh Chandra Saxena v. South Delhi Municipal Corporation & Ors.</i>	Water Pollution control by preventing discharge of untreated sewage /effluents
10.	20.07.2020	OA No. 176/2015, <i>Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.</i>	Ground Water Regulation
11.	21.09.2020 and 22.02.2021	OA No. 673/2018, <i>In Re: News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"</i>	Restoration of the Polluted River Stretches
12.	11.06.2021	OA No. 60/2021, <i>In re: News item published in The Hindu dated 23.02.2021 titled "Two dead, 5 missing in fire at UPL Plant"</i>	Preventing Industrial Accidents by safety norms and providing relief to victims
13.	25.06.2021	OA No. 134/2021, <i>In re: News item published in The Hindustan Times dated 17.06.2021, titled "Blast in firecracker unit in Maharashtra's Palghar, at least 10 injured"</i>	

18. We may also note that this Tribunal discussed the above aspects with 35 Chief Secretaries of all States/UTs, in their personal presence and issued directions to handle serious violations of law and failure of the administrative authorities, requiring continuous monitoring by District Magistrates at District level and by Chief Secretaries at State level, with

the assistance of fulltime environment cells, to assist in coordination with different departments and to provide technical inputs to address the gaps and governance deficits on the subject. It is not necessary to repeat the directions already issued except to say that satisfactory steps remain to be taken. Wherever DEPs have not been prepared, the same need to be expedited and wherever they have been prepared the same need to be continuously updated and compliance monitored.

19. Since the above is a continuous process, it is for the concerned Governments to take initiatives. However, having regard to the significance of the subject, we are of the opinion that further monitoring will be necessary by this Tribunal in the light of compliance status which may be provided on the next date.

20. We are unhappy to note that all the States/UTs have not taken the matter as seriously as the subject requires. We hope that the Chief Secretaries of all the States/UTs will provide due attention to the subject in the larger public interest and in the interest of health, safety of the citizens and rule of law to effectuate basis fundamental rights of the citizens.

21. Accordingly, in view of long-time failure to comply the mandate of the Constitution adversely affecting the public health and the environment and repeated failures to comply with the earlier directions on the subject, we direct

- a. Chief Secretaries of all the States/UTs may ensure completion of District Environment Plans (DEPs) for all the Districts, in the light of orders of this Tribunal dated 26.9.2019, 19.3.2020. 29.1.2021 and the observations in the present order and upload the same on their respective websites positively by 31.10.2021.

- b. The DEPs may contain data on each environmental issue covering each city, town and village. Data may show the extent of gap in compliance of laid down norms for
 - i. Waste Management - Municipal Solid, Plastic, Bio-Medical, Electric and Electronic, Hazardous and Construction and Demolition waste
 - ii. Sewage treatment and utilisation
 - iii. Water quality – Rivers, Water bodies, Ground Water, Coastal waters and Rain water harvesting,
 - iv. Industries Pollution Control including industrial clusters
 - v. Air Quality management includes pollution due to dust
 - vi. Regulating mining/ Sand mining
 - vii. Noise pollution
 - viii. Any other issues significant in the area
 - ix. The DEP must give timelines for accomplishment of tasks backed up with budgetary support and the officers entrusted with the job, with contact details of the nodal officer at various levels in the District
 - x. Scope for public participation on remedial measures like plantations
- c. DEPs may also contain mechanism for review at different levels.
- d. The District Magistrates may accordingly execute the action plans by reviewing the progress on various targets at least once in a month.
- e. All the States may accordingly consolidate the DEPs and prepare their respective State Environment Plans and upload the same on their respective websites.
- f. CPCB may consolidate the information and file a tabular statement by 30.11.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF (and not in the form of Image PDF).

List for further consideration on 08.12.2021.

A copy of this order be forwarded to MoEF&CC, CPCB and Chief Secretaries of all the States/UTs, all State PCBs/PCCs/all District Magistrates by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

M. Sathyanarayanan, JM

Brijesh Sethi, JM

Dr. Nagin Nanda, EM

July 5, 2021
Original Application No. 360/2018
(SLP (Civil) No. 2959/2014)
DV

F.No. B-31011/2019/WMD-I

Speed Post

November 20, 2019

To,

Principal Secretary
(State Environment Department)

Sub: Compliance to order dated 26.09.2019, passed by Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of O.A. No. 360/2018 – Preparation of District Environment plan – reg.

Sir,

This has reference to the order dated 26.09.2019 passed by Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi in the matter of O.A. No. 360 of 2018, whereby Hon'ble NGT has directed that District Environment Plan (DEP) and State Environment Plan (SEP) shall be prepared at District and State level, respectively and National Environment Plan (NEP) at Central level.

In this regard, CPCB has prepared a model DEP and the same is uploaded on CPCB website. The Data templates provided in the model plan has also been shared by e-mail to District Magistrates to facilitate preparation of DEPs. The SEP is required to be finalised by State Environment Department which has to be monitored by Chief Secretaries and the outcome to be completed by 15.12.2019 for submission to Hon'ble Tribunal by 31.12.2019. A copy of the finalised SEP be forwarded to CPCB and MoEF &CC.

In view of the above, it is requested to kindly coordinate the above matter with District Magistrates and finalize the SEP after review by Chief Secretary of the State as the compliance need to be reported to Hon'ble Tribunal by 31.12.2019. Further, kindly arrange to forward a copy of the finalised SEP to CPCB and MoEF &CC, so that National Environmental Plan can be compiled for review by Secretary, MoEF&CC and Chairman, CPCB for further submission before Hon'ble NGT by 15/02/2020.

Yours faithfully

(B. Vinod Babu)
AD & DH WMD-I

Copy to:

(i) PS to 'MS'

: For kind information of 'MS' please

(ii) All Regional Directorates CPCB

: With a request to follow up with Environment Department of States falling under your jurisdiction.

AA S to
WMD-I
27/11/19

(B. Vinod Babu)

F.No. B-31011/2019/WMD-I

8995
8955
Speed Post

November 20, 2019

To,
The Chairman
(SPCBs)

Sub: Compliance to order dated 26.09.2019, passed by Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of O.A. No. 360/2016 – Preparation of District Environment plan – reg.

Sir,

This has reference to the order dated 26.09.2019 passed by Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi in the matter of O.A. No. 360 of 2018, whereby Hon'ble NGT has directed that District Environment Plan (DEP) and State Environment Plan (SEP) shall be prepare at District and State level respectively and National Environment Plan (NEP) at Central level.

In this regard, CPCB has prepared a model DEP and the same is uploaded on CPCB website. The Data templates provided in the model plan has also been shared by e-mail to District Magistrates to facilitate preparation of DEPs. The SEP is required to be finalised by State Environment Department which has to be monitored by Chief Secretaries and the outcome to be completed by 15.12.2019 for submission to Hon'ble Tribunal by 31.12.2019. A copy of the finalised SEP be forwarded to CPCB and MoEF &CC.

In view of the above, it is requested to kindly coordinate the above matter with District Magistrates and State Environment Department for submission of SEP within stipulated time so that CPCB can compile the same to prepare National Environmental Plan for review by Secretary, MoEF & CC and Chairman, CPCB for finalization of the same by 31/01/2020.

Yours faithfully

(B. Vinod Babu)
AD & DH WMD-I

MS for
WMD-I 25/11/19

Copy to:

- (i) PS to 'MS' : For kind information of 'MS' please
- (ii) All Regional Directorates CPCB : With a request to follow up with District Magistrates of States falling under your jurisdiction.

(B. Vinod Babu)

F. No. B-31011/BMW/2019/WMD-I

Speed Post

To

11287-11316

January 10, 2020

Principal Secretary
(State Environment Department)

Sub.: Compliance to order dated 26.09.2019, passed by Hon'ble National Green Tribunal, Principal Bench, New Delhi in the matter of O.A No. 360/2018- preparation of State Environment Plan-reg.

Sir,

This has reference to order dated 26.09.2019 passed by Hon'ble NGT in the matter of 360/2018 and subsequent CPCB letter dated 20.11.2019, whereby it was requested to prepare State Environmental Plan (SEP) based on District Environmental Plan (DEP) pertaining to your State and forward the same to CPCB and MoEF&CC, so that National Environmental Plan (NEP) can be compiled for review by Secretary, MoEF & CC and Chairman CPCB. In this regard, said SEP for the State of is not yet received by this office.

In view of the above, it is requested of kindly arrange to forward a copy of SEP to MoEF& CC and CPCB so that NEP can be prepared and submitted to Hon'ble NGT before 15.02.2020. Copy of SEP may also be forward by email at dep.cpcb@gov.in.

Yours faithfully


(B. Vinod Babu)
AD & DH, WMD-I

Copy to.

: For kind information, please.

(i) PS to 'MS


(B. Vinod Babu)

प्रतिपत्र प्रेषण नियंत्रण कक्ष

दिनांक: 15.01.2020

संख्या: 19.01.2020/C

**Central Pollution Control Board,
Waste Management Division-I**

Minutes of the meeting for review of District Environment Plan in compliance to the order dated 05.07.2021 passed by Hon'ble NGT in the matter of O.A. No. 360/2018

Hon'ble NGT heard the matter of O.A. 360 of 2018 on 05.07.2021 which is regarding preparation of District Environmental Plan and passed following direction:

1. Chief Secretaries to ensure completion of DEPs;
2. DEPs may contain data on each environmental issue covering each city, town and village
3. DEPs must contain mechanism for review at different level;
4. District Magistrates to execute the DEPs by reviewing the progress atleast in a month;
5. State may consolidate the DEPs to prepare SEP further.
6. CPCB to consolidate the reports and directed to submit the report to Hon'ble Tribunal.

CPCB already reviewed DEPs for 05 Districts namely Baharaich, UP; Bokaro, Jharkhand; Pune, Maharashtra; Chamrajnagar, Karnataka; and Panchkula, Haryana and already communicated the gaps for improvement. CPCB convened a meeting on 09.05.2021 with said 05 Districts to explain the gaps identified by CPCB and the revision of DEP in line with the report template prepared by CPCB for preparation of DEPs.

CPCB conducted another meeting with officers involved in preparation of District Environment Plan and officials from respective CPCB Regional Directorate on 11.11.2021 through Video Conferencing to review the DEPs already prepared for afore-said five Districts. List of participants is given at **Annexure I.**

Shri V. P. Yadav, Additional Director, CPCB welcomed to all participants and requested for round of introduction. Representatives from Bahraich (Uttar Pradesh), Chamrajnagar (Karnataka), Pune (Maharashtra), Panchkula (Haryana) attended the meeting. However, representative from Bokaro (Jharkhand) could not attended the meeting. Further, he requested Ms. Youthika, Sc. 'D' to give presentation to explain the order dated 05.07.2021 passed by Hon'ble NGT alongwith the follow-up action taken by CPCB. Based on the review of DEPs, she further explained about few following gaps need to be addressed in the Plans:

1. Budgetary information,
2. Department responsible for execution of DEPs,
3. Identification of teams/officers for monitoring of implementation of DEPs,
4. Preparation of State Environment Plan.

Sh. V. P. Yadav requested other District representatives to share their experience and issue if any.

1. Sh. Manish Singh, DFO, Bahraich informed that as per the earlier observations of CPCB are now covered in the revised DEP however above suggestions will also be covered and accordingly updated DEP will be submitted to CPCB.
2. Sh. Raghuram, Regional Officer, Chamrajnagar, KSPCB informed that being Chamrajnagar is a

very small District they have already covered all the aspects in DEPs related to the thematic area. Further, budgetary details shall also be covered in the plan and shall submit the revised DEP.

3. Sh. Puniya, RO, Panchkula, HSPCB suggested that budgetary information should be decided on State level and one budget for one plan should be decided.
4. Representative of Pune stated that DEPs for every District in Maharashtra have been prepared already and about the review meeting chaired by Hon'ble Justice V. M. Kanade, on monitoring of compliance of DEPs for all Districts of Maharashtra.

It was further communicated by CPCB officials to submit the revised DEPs by 20.11.2021 and it was also requested to incorporate the details of uploading DEPs on their respective website and also to share the link of the same. Shri V. P. Yadav gave vote of thanks to all participants.

List of participants

S. No.	Name of Participants
1.	Sh. V. P. Yadav, DH, WM-I, CPCB
2.	Ms. Youthika, Sc.'D', WM-I Division, CPCB
3.	RO, Chamrajnagar, Karnataka State Pollution Control Board, Karnataka
4.	Shri Virendra Puniya, Panchkula, Haryana
5.	Sh. Manish Singh, DFO, Bahraich, UP
6.	Dr. Y. B. Sontakke, Maharashtra Pollution Control Board, Maharashtra
7.	Dr. Devendra Kumar Soni, Sc. 'D', CPCB, Regional Directorate, Lucknow
8.	Ms. Anjana, CPCB, Regional Directorate, Bengaluru
9.	Sh. Nischal, Sc. 'D' CPCB, Regional Directorate, Pune
10.	Dr. Varsha Sharma, RA, WM-I Division, CPCB

By Speed Post

F.No. B-31011/BMW (42.55)/2021/WMD-I 5299-5334

August 19, 2021

To,

✓ Principal Secretary,
Environment & Forest Department,
(As per list)

Sub: Compliance to the Order dated 05.07.2021 passed by Hon'ble National Green Tribunal in the matter of O.A. No. 360/2018 – reg.

Sir,

Kindly refer the order passed by Hon'ble National Green Tribunal on 05.07.2021 in the matter of O.A. 360 of 2018 regarding preparation of District Environment Plan (DEP) and State Environment Plan (SEP). Hon'ble Tribunal passed the following directions:

- Chief Secretaries of all the States/UTs may ensure completion of District Environment Plans (DEPs) for all the Districts, in the light of orders dated 26.9.2019, 19.3.2020, 29.1.2021 in this matter and the observations in the present order and upload the same on their respective websites positively by 31.10.2021.
- The DEPs may contain data on each environmental issue covering each city, town and village. Data may show the extent of gap in compliance of laid down norms for i.e. waste Management, Sewage treatment and utilisation, Water quality, Industries Pollution, Air Quality management, Regulating mining/ Sand mining, Noise pollution, Any other issues significant in the area. Further, the DEP must give timelines for accomplishment of tasks backed up with budgetary support and the officers entrusted with the job, with contact details of the nodal officer at various levels in the District and scope for public participation on remedial measures like plantations.
- The DEPs may also contain mechanism for review at different levels.
- The District Magistrates may accordingly execute the action plans by reviewing the progress on various targets at least once in a month.
- All the States may accordingly consolidate the DEPs and prepare their respective State Environment Plans (SEPs) and upload the same on their respective websites.

Copy of afore-said order is enclosed herewith for ready reference.

In view of above, it is requested to kindly ensure compliance with the said order and expedite the process of preparation/execution of DEPs and SEP and also to ensure uploading of same on the website by 31.10.2021. It is also requested to forward the final District Environment Plan and State Environment Plan to this office by 10.11.2021 through email at dep.cpcb@gov.in.

Yours faithfully


(V. P. Yadav)

Additional Director & Head
Waste Management -I Division

Encl. As above

Copy to:

- ✓ (i) Member Secretary : With a request to ensure compliance to afore-said order of Hon'ble State Pollution Control Board : and for further follow-up with concerned District Magistrate for preparation and execution of District Environment Plan.
- ✓ (ii) PS to 'Chief Secretary' : For kind information & follow-up, please (As per the list)
- (iii) PS to 'MS' : For kind information of 'MS', please

हिंदी रूपांतरण हेतु कृपया पेज पलटें

o/c

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

मिनि. MS/...

दिनांक 26/08/2021


(V. P. Yadav)

By Speed Post

November 22, 2021

F. No. B-31011/BMW (705/ 42.55)/2021/WMD-I

8952-8986

To,

The Principle Secretary,
(All State Environment Department)

Sub: Follow up action on District Environment Plan in compliance to the order dated 05.07.2021 passed by Hon'ble Green Tribunal in the matter of O. A. 360/2018 -reg.

Sir,

This has reference to order dated 05.07.2021 passed by Hon'ble National Green Tribunal in the matter of Original Application No. 360 of 2018 regarding preparation of District Environment Plan (DEP). In this regard, CPCB is in process of compiling the status of preparation of District Environment Plans and State Environment Plans (SEPs) to submit the same to Hon'ble NGT.

In view of above, it is requested to submit the status on preparation and execution of DEPs and SEPs to CPCB on or before 24.11.2021 so that CPCB may file the report before next date of hearing that is 08.12.2021. The information may also be submitted through email at youthika.cpcb@nic.in & dep.cpcb@gov.in.

Yours faithfully,



(V.P. Yadav)

Add. Director & Head
Waste Management Division -I

Copy to:

(i) PS to 'MS'

: For kind information of 'MS' please



(V.P. Yadav)

Handwritten notes and stamps at the bottom left of the page, including a date stamp: 23/11/2021.

O/C

Annexure VII

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
1	Andaman Nicobar	3	Nicobar	Yet to be upload on website. https://greentribunal.gov.in/sites/default/files/news_updates/Submission%20by%20South%20Andaman%20District,%20ANI%20in%20O.A%20No.%20360%20of%202018%20(Shree%20Nath%20Sharma%20Vs.%20UOI%20&%20Ors.).pdf
2			North Middle Andaman	
3			South Andaman	
4	Andhra Pradesh	13	Anantapur	Yet to be upload on website.
5			Chittoor	
6			East Godavari	
7			Guntur	
8			Kadapa	
9			Krishna	
10			Kurnool	
11			Nellore	
12			Prakasam	
13			Srikakulam	
14			Visakhapatnam	
15			Vizianagaram	
16			West Godavari	
17	Arunachal Pradesh	25	Anjaw	Yet to be upload on website.
18			Changlang	
19			Dibang Valley	
20			East Kameng	
21			East Siang	
22			Kamle	
23			Kra Daadi	
24			Kurung Kumey	
25			Lepa Rada	
26			Lohit	
27			Longding	
28			Lower Dibang Valley	
29			Lower Siang	
30			Lower Subansiri	
31			Namsai	
32			Pakke Kessang	
33			Papum Pare	
34	Shi Yomi			

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
35			siang	
36			Tawang	
37			Tirap	
38			Upper Siang	
39			Upper Subansiri	
40			West Kameng	
41			West Siang	
42			Assam	
43	Barpeta			
44	Biswanath			
45	Bongaigaon			
46	Cachar			
47	Charaideo			
48	Chirang			
49	Darrang			
50	Dhemaji	https://dhemaji.gov.in/resource/district-environment-plan		
51	Dhubri	https://dhubri.gov.in/resource/district-environment-plan		
52	Dibrugarh	https://dibrugarh.gov.in/portlets/district-environment-plan		
53	Dima Hasao	Yet to be upload on website.		
54	Goalpara	http://goalpara.gov.in/data/notice/DEPG.pdf		
55	Golaghat	Yet to be upload on website.		
56	Hailakandi			
57	Hojai	https://hojai.assam.gov.in/frontimpotentdata/district-environment-plan		
58	Jorhat	Yet to be upload on website.		
59	Kamrup			
60	Kamrup Metropolitan			
61	Karbi Anglong			
62	Karimganj			
63	Kokrajhar			
64	Lakhimpur			
65	Majuli			
66	Morigaon			
67	Nagaon			https://nagaon.gov.in/documents-detail/district-environment-plan-nagaon-district
68	Nalbari	Yet to be upload on website.		
69	Sivasagar			
70	Sonitpur			

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
71			South Salmara-Mankachar	
72			Tinsukia	
73			Udalguri	
74			West Karbi Anglong	
75	Bihar	38	Araria	Yet to be upload on website.
76			Arwal	
77			Aurangabad	https://aurangabad.bih.nic.in/notice/district-environment-plan-of-aurangabad-bihar/
78			Banka	Yet to be upload on website.
79			Begusarai	
80			Bhagalpur	
81			Bhojpur	
82			Buxar	
83			Darbhanga	
84			East Champaran	
85			Gaya	
86			Gopalganj	
87			Jamui	
88			Jehanabad	
89			Kaimur	
90			Katihar	Yet to be upload on website.
91			Khagaria	
92			Kishanganj	
93			Lakhisarai	
94			Madhepura	
95			Madhubani	
96			Munger	
97			Muzaffarpur	
98			Nalanda	
99			Nawada	
100			Patna	
101			Purnia	
102			Rohtas	
103			Saharsa	
104			Samastipur	
105			Saran	
106			Sheikhpura	
107			Sheohar	
108			Sitamarhi	

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
109			Siwan	
110			Supaul	
111			Vaishali	
112			West Champaran	
113	Chandigarh	1	Chandigarh	https://chandigarhdistrict.nic.in/document/district-environment-plan-dep-of-u-t-chandigarh/
114	Chhattisgarh	27	Balod	https://balod.gov.in/notice_category/announcements/?sortby=end_date
115			Baloda Bazar	https://enviscecb.org/District_Environment_Plan.htm
116			Balrampur	https://enviscecb.org/District_Environment_Plan.htm
117			Bastar	https://enviscecb.org/District_Environment_Plan.htm
118			Bemetara	https://enviscecb.org/District_Environment_Plan.htm
119			Bijapur	https://enviscecb.org/District_Environment_Plan.htm
120			Bilaspur	https://enviscecb.org/District_Environment_Plan.htm
121			Dantewada	https://enviscecb.org/District_Environment_Plan.htm
122			Dhamtari	https://enviscecb.org/District_Environment_Plan.htm
123			Durg	https://enviscecb.org/District_Environment_Plan.htm
124			Gariaband	https://enviscecb.org/District_Environment_Plan.htm
125			Janjgir Champa	https://enviscecb.org/District_Environment_Plan.htm
126			Jashpur	https://enviscecb.org/District_Environment_Plan.htm
127			Kabirdham	https://enviscecb.org/District_Environment_Plan.htm
128			Kanker	https://enviscecb.org/District_Environment_Plan.htm
129			Kondagaon	https://enviscecb.org/District_Environment_Plan.htm
130			Korba	https://enviscecb.org/District_Environment_Plan.htm
131			Koriya	https://enviscecb.org/District_Environment_Plan.htm
132			Mahasamund	https://enviscecb.org/District_Environment_Plan.htm
133			Mungeli	https://enviscecb.org/District_Environment_Plan.htm
134			Narayanpur	https://enviscecb.org/District_Environment_Plan.htm
135			Raigarh	https://enviscecb.org/District_Environment_Plan.htm
136			Raipur	https://raipur.gov.in/district-environment/
137			Rajnandgaon	https://enviscecb.org/District_Environment_Plan.htm
138			Sukma	https://enviscecb.org/District_Environment_Plan.htm
139			Surajpur	https://surajpur.nic.in/en/notice/district-environment-plan/
140			Surguja	https://enviscecb.org/District_Environment_Plan.htm
141	Dadra Nagar Haveli	3	Dadra Nagar Haveli	Yet to be upload on website.
142			Daman	
143			Diu	
144	Delhi	11	Central Delhi	Yet to be upload on website.
145			East Delhi	
146			New Delhi	
147			North Delhi	

State wise details of DEPs uploaded on website					
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan	
148			North East Delhi		
149			North West Delhi		
150			Shahdara		
151			South Delhi		
152			South East Delhi		
153			South West Delhi		
154			West Delhi		
155			Goa		2
156	South Goa	https://southgoa.nic.in/document/district-environment-plan/			
157	Gujarat	33	Ahmedabad		
158			Amreli		
159			Anand		
160			Aravalli		Yet to be upload on website.
161			Banaskantha		https://cdn.s3waas.gov.in/s38ebda540cbcc4d7336496819a46a1b68/uploads/2020/01/2020012249.pdf
162			Bharuch		
163			Bhavnagar		
164			Botad		
165			Chhota Udaipur		Yet to be upload on website.
166			Dahod		https://dahod.gujarat.gov.in/news/district-environment-plan-dahod
167			Dang		Yet to be upload on website.
168			Devbhoomi Dwarka		
169			Gandhinagar		
170			Gir Somnath		
171			Jamnagar		
172			Junagadh		
173			Kheda		
174			Kutch		
175			Mahisagar		
176			Mehsana		https://cdn.s3waas.gov.in/s3c361bc7b2c033a83d663b8d9fb4be56e/uploads/2020/01/2020012791.pdf
177	Morbi				
178	Narmada		Yet to be upload on website.		
179	Navsari	https://navsari.nic.in/document/district-environment-plan-navsari/			
180	Panchmahal				
181	Patan				
182	Porbandar				
183	Rajkot		Yet to be upload on website.		

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
184			Sabarkantha	
185			Surat	
186			Surendranagar	
187			Tapi	
188			Vadodara	
189			Valsad	
190	Haryana	22	Ambala	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
191			Bhiwani	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
192			Charkhi Dadri	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
193			Faridabad	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
194			Fatehabad	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
195			Gurugram	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
196			Hisar	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
197			Jhajjar	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
198			Jind	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
199			kaithal	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
200			karnal	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
201			kurukshetra	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
202			Mahendragarh	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
203			Nuh	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
204			Palwal	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
205			Panchkula	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
206			Panipat	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
207			Rewari	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
208			Rohtak	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
209			Sonipat	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
210			Sirsa	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
211			Yamunanagar	http://hareenvironment.gov.in/en/district-environment-plan-for-the-state
212	Himachal Pradesh	12	Bilaspur	https://hpbilaspur.nic.in/notice/district-environment-plan-approval/
213			Chamba	https://hpchamba.nic.in/document/district-environment-plan-2021/
214			Hamirpur	https://hphamirpur.nic.in/hi/document/%E0%A4%9C%E0%A4%BF%E0%A4%B2%E0%A4%BE-%E0%A4%AA%E0%A4%B0%E0%A5%8D%E0%A4%AF%E0%A4%BE%E0%A4%B5%E0%A4%B0%E0%A4%A3-%E0%A4%AF%E0%A5%8B%E0%A4%9C%E0%A4%A8%E0%A4%BE-%E0%A4%B9%E0%A4%AE%E0%A5%80%E0%A4%B0/
215			Kangra	https://hpkangra.nic.in/notice/district-environment-plan-for-district-kangra-in-himachal-pradesh/
216			Kinnaur	https://cdn.s3waas.gov.in/s3766ebcd59621e305170616ba3d3dac32/uploads/2019/12/2019123135.pdf
217			Kullu	https://hpkullu.nic.in/document/district-environment-plan/
218			Lahaul Spiti	https://cdn.s3waas.gov.in/s37647966b7343c29048673252e490f736/uploads/2021/10/2021102758.pdf
219			Mandi	https://hpmandi.nic.in/document/district-environmental-plan/
220			Shimla	https://hpshimla.nic.in/notice/district-environment-plan-of-shimla-district-in-compliance-to-orders-passed-by-honble-ngt-in-oa-no-710-2017-o-a-no-360-2018/
221			Sirmaur	https://hpsirmaur.nic.in/document/district-environment-plan/
222			Solan	https://cdn.s3waas.gov.in/s3b534ba68236ba543ae44b22bd110a1d6/uploads/2020/01/2020012075.pdf
223			Una	https://hpuna.nic.in/document/implementation-of-district-environment-plan/
224	Jammu Kashmir	20	Anantnag	https://anantnag.nic.in/document/district-environment-plan-2021-district-anantnag/
225			Bandipora	https://bandipore.nic.in/notice/district-environment-plan/

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
226			Baramulla	https://baramulla.nic.in/document/district-environment-plan/
227			Budgam	https://budgam.nic.in/document/revised-district-environment-plan/
228			Doda	https://doda.nic.in/document/district-environment-plan-2019/
229			Ganderbal	https://ganderbal.nic.in/documents/district-environment-plan/
230			Jammu	https://jammu.nic.in/notice/district-environment-plans-deps-in-respect-of-district-jammu/
231			Kathua	https://kathua.nic.in/document-category/district-environment-plan/
232			Kishtwar	https://kishtwar.nic.in/district-environment-plan-of-kishtwar/
233			Kulgam	Yet to be upload on website.
234			Kupwara	https://kupwara.nic.in/document-category/district-environment-plan/
235			Poonch	https://poonch.nic.in/document/district-environment-plan-poonch-2/
236			Pulwama	https://pulwama.gov.in/document/district-environment-plan-district-pulwama/
237			Rajouri	https://cdn.s3waas.gov.in/s31aa48fc4880bb0c9b8a3bf979d3b917e/uploads/2021/11/2021110285.pdf
238			Ramban	https://ramban.gov.in/district-environment-plan/
239			Reasi	https://reasi.nic.in/document/district-environment-plan-reasi-2021/
240			Samba	https://samba.gov.in/document/district-environmental-plan-for-district-samba-2021-3/
241			Shopian	https://shopian.nic.in/document/district-environmental-plan-shopian/
242			Srinagar	https://srinagar.nic.in/notice/district-environmental-plan-2021-srinagar/
243	Udhampur	https://udhampur.nic.in/notice/district-environment-plan-udhampur/		
244	Jharkhand	24	Bokaro	https://cdn.s3waas.gov.in/s3a760880003e7ddefef56acb3b09697f/uploads/2020/12/2020120193.pdf
245			Chatra	Yet to be upload on website.
246			Deoghar	https://deoghar.nic.in/document/district-environment-plan/
247			Dhanbad	https://cdn.s3waas.gov.in/s337f0e884fbad9667e38940169d0a3c95/uploads/2021032210.pdf
248			Dumka	https://dumka.nic.in/document/district-environment-plan/

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
249	Jharkhand	35	East Singhbhum	https://cdn.s3waas.gov.in/s33dc4876f3f08201c7c76cb71fa1da439/uploads/2020/08/2020081450.pdf
250			Garhwa	https://garhwa.nic.in/notice/garhwa-district-environment-management-plan/
251			Giridih	https://cdn.s3waas.gov.in/s39b72e31dac81715466cd580a448cf823/uploads/2020/11/2020111851.pdf
252			Godda	https://godda.nic.in/notice/district-environment-plan-for-godda-district/
253			Gumla	https://gumla.nic.in/district-environment-plan/
254			Hazaribagh	https://hazaribag.nic.in/document/district-environmental-plan/
255			Jamtara	https://cdn.s3waas.gov.in/s313f320e7b5ead1024ac95c3b208610db/uploads/2021/01/2021010810.pdf
256			Khunti	https://cdn.s3waas.gov.in/s301f78be6f7cad02658508fe4616098a9/uploads/2021/01/2021010522.pdf
257			Koderma	Yet to be upload on website.
258			Latehar	https://latehar.nic.in/document/district-environment-plan-for-latehar-district-jharkhand/
259			Lohardaga	https://lohardaga.nic.in/notice/district-environment-plan-lohardaga-district-jharkhand/
260			Pakur	https://cdn.s3waas.gov.in/s3df877f3865752637daa540ea9cbc474f/uploads/2021/09/2021090890.pdf
261			Palamu	Yet to be upload on website.
262			Ramgarh	https://cdn.s3waas.gov.in/s3e165421110ba03099a1c0393373c5b43/uploads/2021/08/2021082398.pdf
263			Ranchi	https://ranchi.nic.in/notice/district-environment-plan-of-ranchi-district/
264			Sahebganj	https://sahibganj.nic.in/document/district-environment-plan/
265			Seraikela Kharsawan	https://seraikela.nic.in/document/district-environment-plan/
266			Simdega	https://simdega.nic.in/en/forest-division/
267			West Singhbhum	https://chaibasa.nic.in/district-environment-plan/
268	Karnataka	30	Bagalkot	https://cdn.s3waas.gov.in/s3a1d33d0dfec820b41b54430b50e96b5c/uploads/2021/11/2021111579.pdf
269			Bangalore Rural	Yet to be upload on website.
270			Bangalore Urban	https://bengaluruurban.nic.in/en/document/district-environment-plan-in-respect-of-oa-360-of-2018-of-honble-ngt/
271			Belgaum	https://belagavi.nic.in/en/district-environmental-management-plan/
272			Bellary	Yet to be upload on website.

State wise details of DEPs uploaded on website						
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan		
273			Bidar	https://cdn.s3waas.gov.in/s32ca65f58e35d9ad45bf7f3ae5cfd08f1/uploads/2021/11/2021111099.pdf		
274			Chamarajanagar	https://chamrainagar.nic.in/en/district-environment-plan-2/		
275			Chikkaballapur	Yet to be upload on website.		
276			Chikkamagaluru			
277			Chitradurga	https://chitradurga.nic.in/en/demp/		
278			Dakshina Kannada	https://dk.nic.in/en/document/district-environmental-plan/		
279			Davanagere	https://davanagere.nic.in/en/district-environmental-plan-3/		
280			Dharwad	http://dharwad.nic.in/documents/DistrictEnvironmentalPlan.pdf		
281			Gadag	https://gadag.nic.in/en/gadag-district-environmental-plan/		
282			Gulbarga	Yet to be upload on website.		
283			Hassan	https://hassan.nic.in/en/karnataka-state-pollution-control-board/		
284			Haveri	https://cdn.s3waas.gov.in/s3d5cfead94f5350c12c322b5b664544c1/uploads/2021/10/2021101351.pdf		
285			Kodagu	https://kodagu.nic.in/en/document/district-environment-plan/		
286			Kolar	Yet to be upload on website.		
287			Koppal	https://koppal.nic.in/en/koppal-district-environmental-plan2020-21/		
288			Mandya	Yet to be upload on website.		
289			Mysore	https://mysore.nic.in/en/notice/district-environmental-plan/		
290			Raichur	Yet to be upload on website.		
291			Ramanagara			
292			Shimoga			
293			Tumkur			
294			Udupi	https://udupi.nic.in/en/udupi-district-environment-plan/		
295			Uttara Kannada	http://uttarakannada.nic.in/docs/publication/DistrictEnvironmentalPlan20212020.pdf		
296			Vijayapura	https://vijayapura.nic.in/en/document/district-environmental-plan/		
297			Yadgir	Yet to be upload on website.		
298			Kerala	14	Alappuzha	https://alappuzha.nic.in/en/document/district-environment-plan/
299					Ernakulam	https://ernakulam.nic.in/document/ernakulam-district-environment-plan/

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
300			Idukki	https://idukki.nic.in/en/document-category/district-environment-plan/
301			Kannur	Yet to be upload on website.
302			Kasaragod	https://kasargod.nic.in/notice/district-environment-plan-for-kasaragod/
303			Kollam	https://kollam.nic.in/en/notice/district-environment-plan/
304			Kottayam	https://kottayam.nic.in/en/notice/district-environment-plan-for-kottayam/
305			Kozhikode	Yet to be upload on website.
306			Malappuram	https://malappuram.nic.in/en/district-environment-plan/
307			Palakkad	https://palakkad.nic.in/document/district-environment-plan-2021/
308			Pathanamthitta	https://pathanamthitta.nic.in/en/notice/district-environment-plan-dep/
309			Thiruvananthapuram	https://trivandrum.nic.in/en/document/district-environment-plan/
310			Thrissur	https://thrissur.nic.in/document/district-environment-plan/
311			Wayanad	https://wayanad.gov.in/documents/
312	Ladakh	2	Kargil	https://kargil.nic.in/document/environmental-plan-of-kargil-district/
313			Leh	Yet to be upload on website.
314	Lakshadweep	1	Lakshadweep	https://cdn.s3waas.gov.in/s358238e9ae2dd305d79c2ebc8c1883422/uploads/2019/12/2019122450.pdf
315	Madhya Pradesh	52	Agar Malwa	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjNoPrwysb0AhWIT2wGHZY1BvUQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3b1d10e7bafa4421218a51b1e1f1b0ba2%2Fuploads%2F2021%2F10%2F2021100113.pdf&usg=AOvVaw3zPk10V7swIW7z5PrnGRFi
316			Alirajpur	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiO5vKby8b0AhVGzigGHXAsABQQFnoECACQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs33295c76acbf4caaed33c36b1b5fc2cb1%2Fuploads%2F2021%2F09%2F2021092526.pdf&usg=AOvVaw3huMImNnht94rRI3XpehOr
317			Anuppur	Yet to be upload on website.
318			Ashoknagar	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjI8o7WY8b0AhWuwzgGHWONApEQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3a5e00132373a7031000f

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
				d987a3c9f87b%2Fuploads%2F2021%2F09%2F2021092247.pdf&usg=AOvVaw22Sq2lXtoRKxxmQH9lc9Uj
319			Balaghat	Yet to be upload on website.
320			Barwani	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjU8ailzMb0AhVCzTgGHfkiB7gQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs365b9eea6e1cc6bb9f0cd2a47751a186f%2Fuploads%2F2021%2F09%2F2021092131.pdf&usg=AOvVaw3RCVgS_fgKbUjNvi9vHGXh
321			Betul	https://cdn.s3waas.gov.in/s31534b76d325a8f591b52d302e7181331/uploads/2021/10/2021102751.pdf
322			Bhind	
323			Bhopal	Yet to be upload on website.
324			Burhanpur	https://cdn.s3waas.gov.in/s3d81f9c1be2e08964bf9f24b15f0e4900/uploads/2021/09/2021092079.pdf
325			Chhatarpur	Yet to be upload on website.
326			Chhindwara	https://cdn.s3waas.gov.in/s37ef605fc8dba5425d6965fbd4c8fbe1f/uploads/2021/10/2021102699.pdf
327			Damoh	
328			Datia	Yet to be upload on website.
329			Dewas	https://cdn.s3waas.gov.in/s3735b90b4568125ed6c3f678819b6e058/uploads/2021/10/2021100163.pdf
330			Dhar	https://cdn.s3waas.gov.in/s31068c6e4c8051cfd4e9ea8072e3189e2/uploads/2021/10/2021100543.pdf
331			Dindori	http://www.mppcb.nic.in/proc/Tech/DEP%20Dindori.pdf
332			Guna	https://cdn.s3waas.gov.in/s37380ad8a673226ae47fce7bffa8e9c33/uploads/2021/10/2021100563.pdf
333			Gwalior	Yet to be upload on website.
334			Harda	https://cdn.s3waas.gov.in/s3d709f38ef758b5066ef31b18039b8ce5/uploads/2021/10/2021100169.pdf
335			Hoshangabad	https://cdn.s3waas.gov.in/s3c8ffe9a587b126f152ed3d89a146b445/uploads/2021/10/2021100119.pdf
336			Indore	https://cdn.s3waas.gov.in/s31385974ed5904a438616ff7bdb3f7439/uploads/2021/09/2021092948.pdf
337			Jabalpur	Yet to be upload on website.
338			Jhabua	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwikza2yzcb0AhUESGwGHXveAccQFnoECAMQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3d1fe173d08e959397adf34b1d77e88d7%2Fuploads%2F2021%2F09%2F2021092798.pdf&usg=AOvVaw1qljqJGEAHAUPc7pwwGZeV
339			Katni	https://cdn.s3waas.gov.in/s37f1de29e6da19d22b51c68001e7e0e54/uploads/2021/10/2021100838.pdf

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
340			Khandwa	https://cdn.s3waas.gov.in/s33ef815416f775098fe977004015c6193/uploads/2021/09/2021092893.pdf
341			Khargone	https://cdn.s3waas.gov.in/s3698d51a19d8a121ce581499d7b701668/uploads/2021/09/2021093082.pdf
342			Mandla	https://cdn.s3waas.gov.in/s32f2b265625d76a6704b08093c652fd79/uploads/2021/10/2021100199.pdf
343			Mandsaur	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjdpf7jzc b0AhUpSWwGHbcBBlwQFnoECAIQAAQ&url=http%3A%2F%2Fwww.mppcb.nic.in%2Fproc%2FTech%2FDEP%2520Mandsaur.pdf&usg=AOvVaw3lkWLkyPqbvJZ55f03neMN
344			Morena	Yet to be upload on website.
345			Narsinghpur	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwic3 qozs b0AhUdS2wGHW-dCJkQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs366f041e16a60928b05a7e228a89c3799%2Fuploads%2F2021%2F10%2F2021100452.pdf&usg=AOvVaw0V0YmrXF5PgMI2ILNdOV5T
346			Neemuch	https://cdn.s3waas.gov.in/s334173cb38f07f89ddbcb2ac9128303f/uploads/2021/10/2021101290.pdf
347			Niwari	
348			Panna	Yet to be upload on website.
349			Raisen	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjCtICXz8 b0AhVWTmwGHaj9DjMQFnoECAIQAAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3c24cd76e1ce41366a4bbe8 a49b02a028%2Fuploads%2F2021%2F09%2F2021093036.pdf&usg=AOvVaw2twOiU-Q8xBxYvHg7oiwtw
350			Rajgarh	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjlizikz8b 0AhUhzigGHZVSAh4QFnoECAQQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs302e74f10e0327ad868d138f2b 4fdd6f0%2Fuploads%2F2021%2F09%2F2021091611.pdf&usg=AOvVaw3DXXx0iVVMInHdBYus9Xto
351			Ratlam	Yet to be upload on website.
352			Rewa	https://cdn.s3waas.gov.in/s393db85ed909c13838ff95ccfa94cebd9/uploads/2021/09/2021093087.pdf
353			Sagar	Yet to be upload on website.
354			Satna	https://cdn.s3waas.gov.in/s38e6b42f1644ecb1327dc03ab345e618b/uploads/2021/10/2021101194.pdf
355			Sehore	
356			Seoni	Yet to be upload on website.

State wise details of DEPs uploaded on website						
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan		
357			Shahdol	http://www.mppcb.nic.in/proc/Tech/DEP%20Shahdol.pdf		
358			Shajapur	https://cdn.s3waas.gov.in/s37f39f8317fbdb1988ef4c628eba02591/uploads/2021/09/2021092937.pdf		
359			Sheopur	Yet to be upload on website.		
360			Shivpuri	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjzXuKM0Mb0AhW SWwGHWisAEgQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs36c8349cc7260ae62e3b1396831a8398f%2Fuploads%2F2021%2F09%2F2021092133.pdf&usg=AOvVaw1jOFVoR mrv5z5N3P4PMYx		
361			Sidhi	https://cdn.s3waas.gov.in/s36c4b761a28b734fe93831e3fb400ce87/uploads/2021/09/2021093060.pdf		
362			Singrauli	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjr2vSn0Mb0AhVqSmwGHdwTD7cQFnoECAIQAQ&url=http%3A%2F%2Fwww.mppcb.nic.in%2Fproc%2FTech%2FDEP%2520Singrauli.pdf&usg=AOvVaw3jTKbtjmQqsnEQUtkZoa4		
363			Tikamgarh	Yet to be upload on website.		
364			Ujjain			
365			Umaria			
366			Vidisha			
367			Maharashtra	36	Ahmednagar	https://mpcb.gov.in/sites/default/files/environmentactionplan/Ahmednagar23062021.pdf
368					Akola	https://mpcb.gov.in/sites/default/files/environmentactionplan/Akola23062021.pdf
369					Amravati	https://mpcb.gov.in/sites/default/files/environmentactionplan/Amravati23062021.pdf
370	Aurangabad	https://mpcb.gov.in/sites/default/files/environmentactionplan/Aurangabad23062021.pdf				
371	Beed	https://mpcb.gov.in/sites/default/files/environmentactionplan/Beed23062021.pdf				
372	Bhandara	https://mpcb.gov.in/sites/default/files/environmentactionplan/Bhandara23062021.pdf				
373	Buldhana	https://mpcb.gov.in/sites/default/files/environmentactionplan/Buldhana23062021.pdf				
374	Chandrapur	https://mpcb.gov.in/sites/default/files/environmentactionplan/Chandrapur23062021.pdf				
375	Dhule	https://mpcb.gov.in/sites/default/files/environmentactionplan/Dhule23062021.pdf				
376	Gadchiroli	https://mpcb.gov.in/sites/default/files/environmentactionplan/Gadchiroli23062021.pdf				

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
377			Gondia	https://mpcb.gov.in/sites/default/files/environmentactionplan/Gondia23062021.pdf
378			Hingoli	https://mpcb.gov.in/sites/default/files/environmentactionplan/Hingoli23062021_0.pdf
379			Jalgaon	https://mpcb.gov.in/sites/default/files/environmentactionplan/Jalgaon23062021.pdf
380			Jalna	https://mpcb.gov.in/sites/default/files/environmentactionplan/Jalna23062021.pdf
381			Kolhapur	https://mpcb.gov.in/sites/default/files/environmentactionplan/Kolhapur23062021.pdf
382			Latur	https://mpcb.gov.in/sites/default/files/environmentactionplan/Latur23062021.pdf
383			Mumbai City	https://mpcb.gov.in/sites/default/files/environmentactionplan/Mumbai23062021.pdf
384			Mumbai Suburban	https://mpcb.gov.in/sites/default/files/environmentactionplan/Mumbai23062021.pdf
385			Nagpur	https://mpcb.gov.in/sites/default/files/environmentactionplan/Nagpur23062021.pdf
386			Nanded	https://mpcb.gov.in/sites/default/files/environmentactionplan/Nanded23062021.pdf
387			Nandurbar	https://mpcb.gov.in/sites/default/files/environmentactionplan/Nandurbar23062021.pdf
388			Nashik	https://mpcb.gov.in/sites/default/files/environmentactionplan/Nashik23062021.pdf
389			Osmanabad	https://mpcb.gov.in/sites/default/files/environmentactionplan/Osmanabad23062021.pdf
390			Palghar	https://mpcb.gov.in/sites/default/files/environmentactionplan/Palghar23062021.pdf
391			Parbhani	https://mpcb.gov.in/sites/default/files/environmentactionplan/Parbhani23062021.pdf
392			Pune	https://mpcb.gov.in/sites/default/files/environmentactionplan/Pune23062021.pdf
393			Raigad	https://mpcb.gov.in/sites/default/files/environmentactionplan/Raigad2362021.pdf
394			Ratnagiri	https://mpcb.gov.in/sites/default/files/environmentactionplan/Ratnagiri23062021.pdf
395			Sangli	https://mpcb.gov.in/sites/default/files/environmentactionplan/Sangli23062021.pdf
396			Satara	https://mpcb.gov.in/sites/default/files/environmentactionplan/Satara23062021.pdf
397			Sindhudurg	https://mpcb.gov.in/sites/default/files/environmentactionplan/Sindhudurg23062021.pdf

State wise details of DEPs uploaded on website					
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan	
398			Solapur	https://mpcb.gov.in/sites/default/files/environmentactionplan/Solapur23062021.pdf	
399			Thane	https://mpcb.gov.in/sites/default/files/environmentactionplan/Thane23062021.pdf	
400			Wardha	https://mpcb.gov.in/sites/default/files/environmentactionplan/Wardha23062021.pdf	
401			Washim	https://mpcb.gov.in/sites/default/files/environmentactionplan/Washim23062021.pdf	
402			Yavatmal	https://mpcb.gov.in/sites/default/files/environmentactionplan/Yavatmal23062021.pdf	
403	Manipur	16	Bishnupur	Yet to be upload on website.	
404			Chandel		
405			Churachandpur		
406			Imphal East		
407			Imphal West		
408			Jiribam		
409			Kakching		https://cdn.s3waas.gov.in/s39cfd10e8fc047a44b08ed031e1f0ed1/uploads/2021/09/2021090260.pdf
410			Kamjong		Yet to be upload on website.
411			Kangpokpi	Yet to be upload on website.	
412			Noney		
413			Pherzawl		
414			Senapati		
415			Tamenglong		
416			Tengnoupal		
417			Thoubal		
418					Ukhrul
419	Meghalaya	11	East Garo Hills	Yet to be upload on website.	
420			East Jaintia Hills		
421			East Khasi Hills		
422			North Garo Hills		
423			Ri Bhoi		
424			South Garo Hills		
425			South West Garo Hills		
426			South West Khasi Hills	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi4u7nu0sb0AhV4zTgGHTP6CxAQFnoECAIQAAQ&url=https%3A%2F	

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
				%2Fcdn.s3waas.gov.in%2Fs314bfa6bb14875e45bba028a21ed38046%2Fuploads%2F2021%2F04%2F2021041376.pdf&usg=AOvVaw0cFmNFhrZGAD8JWlqTSTaR
427			West Garo Hills	Yet to be upload on website.
428			West Jaintia Hills	
429			West Khasi Hills	
430	Mizoram	8	Aizawl	Yet to be upload on website.
431			Champhai	
432			Kolasib	
433			Lawngtlai	
434			Lunglei	
435			Mamit	
436			Saiha	
437			Serchhip	
438	Nagaland	11	Dimapur	Yet to be upload on website.
439			Kiphire	
440			Kohima	
441			Longleng	
442			Mokokchung	
443			Noklak	
444			Peren	
445			Phek	
446			Tuensang	
447			Wokha	
448			Zunheboto	
449	Odisha	30	Angul	Yet to be upload on website.
450			Balangir	
451			Balasore	
452			Bargarh	
453			Bhadrak	
454			Boudh	
455			Cuttack	
456			Debagarh	
457			Dhenkanal	
458			Gajapati	
459			Ganjam	
460			Jagatsinghpur	
461			Jajpur	
462			Jharsuguda	
463			Kalahandi	
464			Kandhamal	
465			Kendrapara	

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
466			Kendujhar	
467			Khordha	
468			Koraput	
469			Malkangiri	
470			Mayurbhanj	
471			Nabarangpur	
472			Nayagarh	
473			Nuapada	
474			Puri	
475			Rayagada	
476			Sambalpur	
477			Subarnapur	
478			Sundergarh	
479	Puducherry	4	Karaikal	https://cdn.s3waas.gov.in/s3ec8ce6abb3e952a85b8551ba726a1227/uploads/2021/11/2021111141.pdf
480			Mahe	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiE8eSj1sb0AhVJzzgGHcBSDyYQFnoECAIQAQ&url=https%3A%2F%2Fdste.py.gov.in%2FEnvispdy%2Fassets%2Fpdf%2FAction%2520Plan%2FDistrict%2520Environment%2520Plan%2520-%2520Puducherry.pdf&usg=AOvVaw3P7MNCJyRxfeVCbOcfQ0Fo
481			Puducherry	https://dste.py.gov.in/Envispdy/assets/pdf/Action%20Plan/District%20Environment%20Plan%20-%20Puducherry.pdf
482			Yanam	https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiE8eSj1sb0AhVJzzgGHcBSDyYQFnoECAYQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3b4288d9c0ec0a1841b3b3728321e7088%2Fuploads%2F2021%2F11%2F2021111664.pdf&usg=AOvVaw1S6_D8ZOHMmZG5yP3Cpg1o
483	Punjab	22	Amritsar	Yet to be upload on website.
484			Barnala	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjByvCe88b0AhVMyzgGHYLVDX4QFnoECAQQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs32291d2ec3b3048d1a6f86c2c4591b7e0%2Fuploads%2F2021%2F11%2F2021111561.pdf&usg=AOvVaw1GhMPghKUd1GpeiwM-VXur
485			Bathinda	
486			Faridkot	
487			Fatehgarh Sahib	
488			Fazilka	

State wise details of DEPs uploaded on website								
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan				
489			Firozpur					
490			Gurdaspur					
491			Hoshiarpur					
492			Jalandhar		https://cdn.s3waas.gov.in/s30c74b7f78409a4022a2c4c5a5ca3ee19/uploads/2021/11/2021110865.pdf			
493			Kapurthala		https://cdn.s3waas.gov.in/s3274ad4786c3abca69fa097b85867d9a4/uploads/2021/11/2021112273.pdf			
494			Ludhiana		https://cdn.s3waas.gov.in/s363923f49e5241343aa7acb6a06a751e7/uploads/2021/10/2021100848.pdf			
495			Mansa		Yet to be upload on website.			
496			Moga					
497			Mohali					
498			Muktsar					
499			Pathankot					
500			Patiala					
501			Rupnagar					
502			Sangrur					
503			Shaheed Bhagat Singh Nagar					
504			Tarn Taran					
505			Rajasthan			33	Ajmer	Yet to be upload on website.
506							Alwar	
507							Banswara	
508							Baran	
509	Barmer							
510	Bharatpur							
511	Bhilwara							
512	Bikaner							
513	Bundi							
514	Chittorgarh							
515	Churu							
516	Dausa							
517	Dholpur							
518	Dungarpur							
519	Hanumangarh							
520	Jaipur							
521	Jaisalmer							
522	Jalore							
523	Jhalawar							
524	Jhunjhunu							
525	Jodhpur							
526	Karauli							

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
527			Kota	
528			Nagaur	
529			Pali	
530			Pratapgarh	
531			Rajsamand	
532			Sawai Madhopur	
533			Sikar	
534			Sirohi	
535			Sri Ganganagar	
536			Tonk	
537			Udaipur	
538	Sikkim	4	East Sikkim	http://sikenvis.nic.in/WriteReadData/UserFiles/file/DISTRICT%20ENVIRONMENT%20PLAN%20EAST%20FINAL.pdf
539			North Sikkim	http://sikenvis.nic.in/WriteReadData/UserFiles/file/DISTRICT%20ENVIRONMENT%20PLAN%20NORTH%20FINAL.pdf
540			South Sikkim	http://sikenvis.nic.in/WriteReadData/UserFiles/file/DISTRICT%20ENVIRONMENT%20PLAN%20SOUTH%20FINAL.pdf
541			West Sikkim	http://sikenvis.nic.in/WriteReadData/UserFiles/file/DISTRICT%20ENVIRONMENT%20PLAN%20WEST%20FINAL.pdf
542	Tamil Nadu	38	Ariyalur	https://cdn.s3waas.gov.in/s319f3cd308f1455b3fa09a282e0d496f4/uploads/2019/12/2019121687.pdf
543			Chengalpattu	Yet to be upload on website.
544			Chennai	https://cdn.s3waas.gov.in/s313f3cf8c531952d72e5847c4183e6910/uploads/2019/12/2019120999.pdf
545			Coimbatore	
546			Cuddalore	Yet to be upload on website.
547			Dharmapuri	https://cdn.s3waas.gov.in/s366368270ffd51418ec58bd793f2d9b1b/uploads/2019/11/2019112919.pdf
548			Dindigul	https://cdn.s3waas.gov.in/s3f74909ace68e51891440e4da0b65a70c/uploads/2019/10/2019102954.pdf
549			Erode	
550			Kallakurichi	Yet to be upload on website.
551			Kanchipuram	https://cdn.s3waas.gov.in/s31543843a4723ed2ab08e18053ae6dc5b/uploads/2019/11/2019110485.pdf
552			Kanyakumari	
553			Karur	Yet to be upload on website.
554			Krishnagiri	https://cdn.s3waas.gov.in/s37eacb532570ff6858afd2723755ff790/uploads/2019/11/2019112965.pdf
555			Madurai	https://cdn.s3waas.gov.in/s3f5f8590cd58a54e94377e6ae2eded4d9/uploads/2019/08/2019083049.pdf

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
556			Mayiladuthurai	Yet to be upload on website.
557			Nagapattinam	https://cdn.s3waas.gov.in/s3c203d8a151612acf12457e4d67635a95/uploads/2019/09/2019091259.pdf
558			Namakkal	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiirazp9cb0AhUBSmwGHbwJBX8QFnoECAkQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3b9228e0962a78b84f3d5d92f4faa000b%2Fuploads%2F2019%2F11%2F2019112865.pdf&usg=AOvVaw1B4fPpEhWtgg787KXS7F9q
559			Nilgiris	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi9o7Cc9sb0AhXQzDgGHTr2Ak4QFnoECAMQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs339461a19e9eddfb385ea76b26521ea48%2Fuploads%2F2019%2F10%2F2019101735.pdf&usg=AOvVaw2cVMvXLu0PMZo6NvTtSzzh
560			Perambalur	https://cdn.s3waas.gov.in/s3550a141f12de6341fba65b0ad0433500/uploads/2020/01/20200108100.pdf
561			Pudukkottai	https://cdn.s3waas.gov.in/s342e7aaa88b48137a16a1acd04ed91125/uploads/2020/01/2020012033.pdf
562			Ramanathapuram	https://cdn.s3waas.gov.in/s3f9b902fc3289af4dd08de5d1de54f68f/uploads/2019/10/2019101699.pdf
563			Ranipet	Yet to be upload on website.
564			Salem	https://cdn.s3waas.gov.in/s3c81e728d9d4c2f636f067f89cc14862c/uploads/2019/12/2019121759.pdf
565			Sivaganga	Yet to be upload on website.
566			Tenkasi	
567			Thanjavur	
568			Theni	
569			Thoothukudi	
570			Tiruchirappalli	
571			Tirunelveli	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjl9zK_8b0AhWVwjgGHX7ACJAQFnoECAIQAAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs36a9aeddfc689c1d0e3b9ccc3ab651bc5%2Fuploads%2F2019%2F11%2F2019111330.pdf&usg=AOvVaw2RVJWlQpopgZqx7K3KlhOY
572			Tirupattur	Yet to be upload on website.
573			Tiruppur	https://cdn.s3waas.gov.in/s3d1f255a373a3cef72e03aa9d980c7eca/uploads/2020/09/2020092524.pdf
574			Tiruvallur	https://cdn.s3waas.gov.in/s39431c87f273e507e6040fcb07dcb4509/uploads/2019/12/2019120533.pdf
575			Tiruvannamalai	Yet to be upload on website.

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
576			Tiruvarur	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjw7Deg8f0AhWKzDgGHQs4DB8QFnoECAsQAQ&url=https%3A%2F%2Fcdn.s3waas.gov.in%2Fs3e46de7e1bcaaced9a54f1e9d0d2f800d%2Fuploads%2F2019%2F12%2F2019120938.pdf&usg=AOvVaw2b_-E0lUjgoigc5RFDahT9
577			Vellore	Yet to be upload on website.
578			Viluppuram	
579			Virudhunagar	
580	Telangana	33	Adilabad	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjl_OifhMf0AhUTzTgGHV9QBbUQFnoECA8QAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FAdilabad%2520DEP%2520Plan-converted.pdf&usg=AOvVaw1ulUfU55RZHntWlviR0WiA
581			Bhadradi Kothagudem	Yet to be upload on website.
582			Hyderabad	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwirlKK3hMf0AhXijKYKHRrPAYUQFnoECAwQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FHyderabad%2520DEP%2520Plan%2520Non%2520Attainment%2520City-converted.pdf&usg=AOvVaw2L4jBaFfvLzWPAopQ1Wa7V
583			Jagtial	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjK_tfAhMf0AhWwyosBHfNzDD0QFnoECAsQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FJagtial%2520DEP%2520Plan-converted.pdf&usg=AOvVaw3yjaVKxixFPJqtB2i-rrr
584			Jangaon	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjin-8HnhMf0AhWJxDgGHWXHCQYQFnoECAMQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FJangaon%2520DEP%2520Plan-converted.pdf&usg=AOvVaw1iM8Ncr6O6iIHs41sSkUO1
585			Jayashankar	https://tspcb.cgg.gov.in/DEP/Jayashankar%20district%20DEP%20Plan-converted.pdf
586			Jogulamba	https://tspcb.cgg.gov.in/DEP/Jogulamba%20Gadwal%20DEP%20Plan-converted.pdf
587			Kamareddy	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjprPWhcf0AhV7TmwGHcO9DCMQFnoECAkQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FKamareddy%2520DEP

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
				%2520Plan-converted.pdf&usg=AOvVaw3aiBDTaj0dCvXQyD7cNQAY
588			Karimnagar	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiju8jehcf0AhXaT2wGHUP2A4sQFnoECAIQAAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FKarimnagar%2520DEP%2520Plan-converted.pdf&usg=AOvVaw1Pr2CvH3kUK9num6_DUCuN
589			Khammam	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwityJHnhcf0AhUNTmwGHUMUDKkQFnoECAIQAAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FKhammam%2520DEP%2520Plan-converted.pdf&usg=AOvVaw08DE9NEBIPj29Z0FjBZ18M
590			Komaram Bheem	https://tspcb.cgg.gov.in/DEP/Komuram%20bheem%20%20DEP%20Plan-converted.pdf
591			Mahabubabad	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwihmbqChsf0AhX6TWwGHXvCCdMQFnoECACQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FMahabubabadDEP%2520Plan-converted.pdf&usg=AOvVaw1VWE-8oHT00OvkSTYYpY_y
592			Mahbubnagar	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjukfivhcf0AhX8yzgGHWZMCP0QFnoECAoQAQ&url=https%3A%2F%2Ftspcb.cgg.gov.in%2FDEP%2FMahabub%2520Nagar%2520%2520DEP%2520Plan-converted.pdf&usg=AOvVaw0G5szG3xxqbmPlvLVlxroA
593			Mancherial	https://tspcb.cgg.gov.in/DEP/Mancherial%20DEP%20Plan-converted.pdf
594			Medak	https://tspcb.cgg.gov.in/DEP/Medak%20DEP%20Plan-converted.pdf
595			Medchal	https://tspcb.cgg.gov.in/DEP/Medchal%20DEP%20Plan-converted.pdf
596			Mulugu	https://tspcb.cgg.gov.in/DEP/Mulugu%20DEP-converted.pdf
597			Nagarkurnool	https://tspcb.cgg.gov.in/DEP/Nagarkurnool%20%20DEP%20Plan-converted.pdf
598			Nalgonda	https://tspcb.cgg.gov.in/DEP/Nalgonda%20DEP%20Plan%20Non%20Attainment%20City-converted.pdf
599			Narayanpet	https://tspcb.cgg.gov.in/DEP/Narayanpet%20DEP%20Plan-converted.pdf

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
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601			Nizamabad	https://tspcb.cgg.gov.in/DEP/Nizamabad%20DEP%20Plan-converted.pdf
602			Peddapalli	https://tspcb.cgg.gov.in/DEP/Peddapalli%20DEP%20Plan-converted.pdf
603			Rajanna Sircilla	https://tspcb.cgg.gov.in/DEP/Rajanna%20Sircilla%20DEP%20Plan-converted.pdf
604			Ranga Reddy	https://tspcb.cgg.gov.in/DEP/Rangareddy%20DEP%20Plan-converted.pdf
605			Sangareddy	https://tspcb.cgg.gov.in/DEP/Sangareddy%20DEP%20Plan-converted.pdf
606			Siddipet	https://tspcb.cgg.gov.in/DEP/Siddipet%20DEP%20Plan-converted.pdf
607			Suryapet	https://tspcb.cgg.gov.in/DEP/Suryapet%20DEP%20Plan-converted.pdf
608			Vikarabad	https://tspcb.cgg.gov.in/DEP/Vikarabad%20DEP%20Plan-converted.pdf
609			Wanaparthy	https://tspcb.cgg.gov.in/DEP/Wanaparthy%20DEP%20Plan-converted.pdf
610			Warangal Rural	https://tspcb.cgg.gov.in/DEP/Warangal%20Rural%20DEP%20Plan-converted.pdf
611			Warangal Urban	https://tspcb.cgg.gov.in/DEP/Warangal%20Urban%20DEP%20Plan-converted.pdf
612	Yadadri Bhuvanagiri	https://tspcb.cgg.gov.in/DEP/Yadadri%20bhuvanagiri%20DEP%20Plan-converted.pdf		
613	Tripura	8	Dhalai	https://cdn.s3waas.gov.in/s3e4a6222cdb5b34375400904f03d8e6a5/uploads/2019/12/2019120477.pdf
614			Gomati	Yet to be upload on website.
615			Khowai	
616			North Tripura	
617			Sepahijala	
618			South Tripura	
619			Unakoti	
620			West Tripura	https://cdn.s3waas.gov.in/s3185c29dc24325934ee377cfda20e414c/uploads/2019/12/2019122189.pdf
621	Uttar Pradesh	75	Agra	Yet to be upload on website.
622			Aligarh	
623			Ambedkar Nagar	
624			Amethi	
625			Amroha	
626			Auraiya	
627			Ayodhya	

State wise details of DEPs uploaded on website

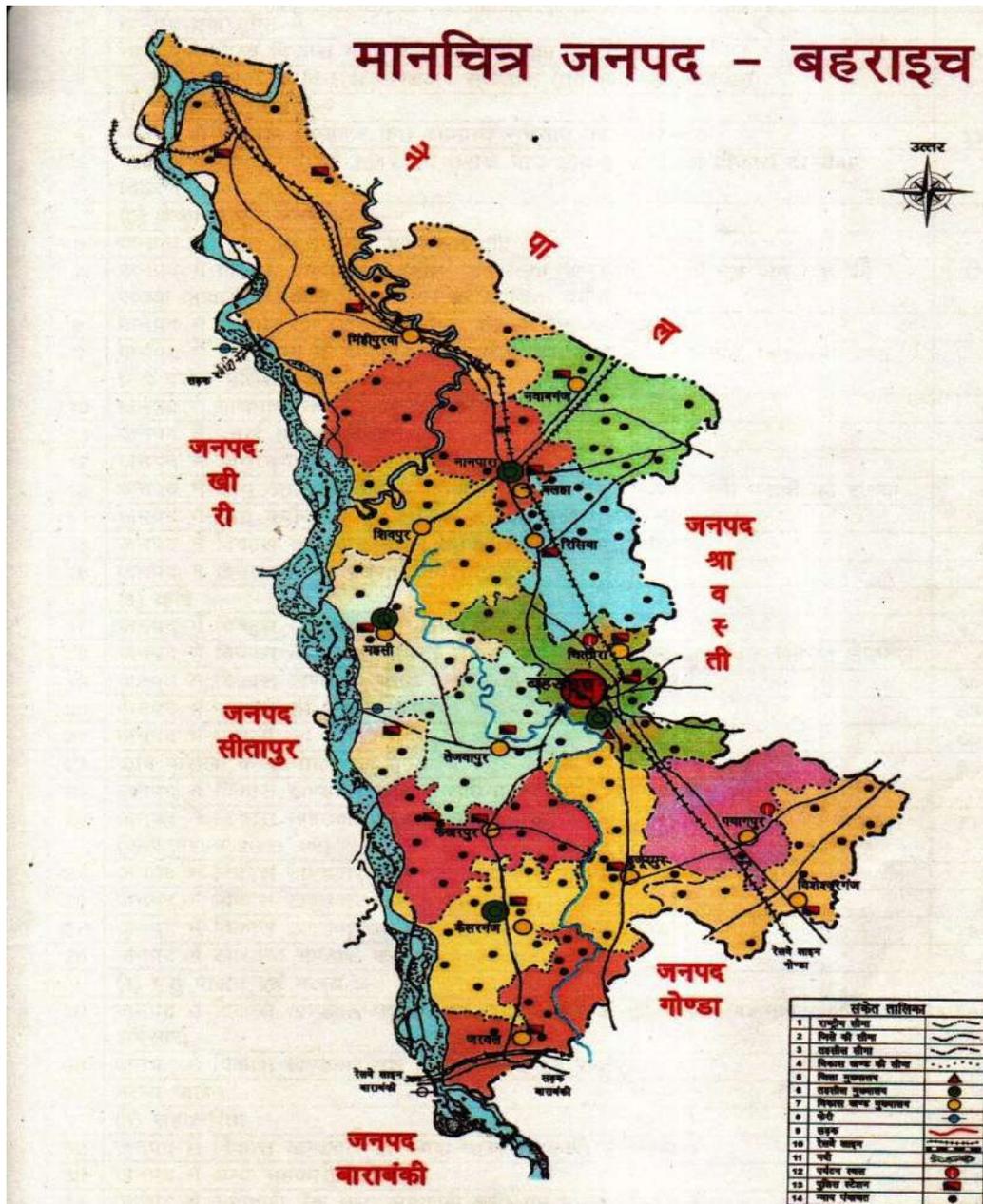
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
628			Azamgarh	
629			Baghpat	
630			Bahraich	
631			Ballia	
632			Balrampur	
633			Banda	
634			Barabanki	
635			Bareilly	
636			Basti	
637			Bhadohi	
638			Bijnor	
639			Budaun	
640			Bulandshahr	
641			Chandauli	
642			Chitrakoot	
643			Deoria	
644			Etah	
645			Etawah	
646			Farrukhabad	
647			Fatehpur	
648			Firozabad	
649			Gautam Buddha Nagar	
650			Ghaziabad	
651			Ghazipur	
652			Gonda	
653			Gorakhpur	
654			Hamirpur	
655			Hapur	
656			Hardoi	
657			Hathras	
658			Jalaun	
659			Jaunpur	
660			Jhansi	
661			Kannauj	
662			Kanpur Dehat	
663			Kanpur Nagar	
664			Kasganj	
665			Kaushambi	
666			Kheri	
667			Kushinagar	
668			Lalitpur	

State wise details of DEPs uploaded on website							
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan			
669			Lucknow				
670			Maharajganj				
671			Mahoba				
672			Mainpuri				
673			Mathura				
674			Mau				
675			Meerut				
676			Mirzapur				
677			Moradabad				
678			Muzaffarnagar				
679			Pilibhit				
680			Pratapgarh				
681			Prayagraj				
682			Raebareli				
683			Rampur				
684			Saharanpur				
685			Sambhal				
686			Sant Kabir Nagar				
687			Shahjahanpur				
688			Shamli				
689			Shravasti				
690			Siddharthnagar				
691			Sitapur				
692			Sonbhadra				
693					Sultanpur	District Environmental Plan of District Sultanpur, UP in OA No. 360 of 2018 (Shree Nath Sharma Vs. UOI & Ors.).pdf (greentribunal.gov.in)	
694					Unnao		
695					Varanasi	Yet to be upload on website.	
696			Uttarakhand		13	Almora	Yet to be upload on website.
697						Bageshwar	
698						Chamoli	
699						Champawat	
700						Dehradun	
701	Haridwar						
702	Nainital						
703	Pauri						
704	Pithoragarh						
705	Rudraprayag						
706	Tehri						
707	Udham Singh Nagar						

State wise details of DEPs uploaded on website				
S. No	Name of State	No. of District	Name of District	Website link of District Environment Plan
708			Uttarkashi	
709	West Bengal	23	Alipurduar	https://alipurduar.gov.in/notice/2020/environment_plan_29102021.docx
710			Bankura	https://cdn.s3waas.gov.in/s38e82ab7243b7c66d768f1b8ce1c967eb/uploads/2021/11/2021110332.pdf
711			Birbhum	https://cdn.s3waas.gov.in/s3fc3cf452d3da8402bebb765225ce8c0e/uploads/2021/10/2021102983.pdf
712			Cooch Behar	http://www.coochbehar.nic.in/HTMFiles/Occasional/DistrictEnvironmentPlan2021.pdf
713			Dakshin Dinajpur	Yet to be upload on website.
714			Darjeeling	https://cdn.s3waas.gov.in/s322fb0cee7e1f3bde58293de743871417/uploads/2021/11/2021110192.pdf
715			Hooghly	https://cdn.s3waas.gov.in/s3aff1621254f7c1be92f64550478c56e6/uploads/2021/10/2021102924.pdf
716			Howrah	Yet to be upload on website.
717			Jalpaiguri	http://www.jalpaiguri.gov.in/Download/80c69343-3746-4407-adb5-f58d85e7c264/Notice/08112021123836865
718			Jhargram	https://cdn.s3waas.gov.in/s3aeb3135b436aa55373822c010763dd54/uploads/2021/10/2021102950.pdf
719			Kalimpong	https://cdn.s3waas.gov.in/s368053af2923e00204c3ca7c6a3150cf7/uploads/2021/10/2021102994.pdf
720			Kolkata	https://www.kmcgov.in/KMCPortal/downloads/EnvironmentPlan_KMC_2021.pdf
721			Malda	https://www.malda.gov.in/sites/default/files/notice/2021-11/scan0896.pdf
722			Murshidabad	https://cdn.s3waas.gov.in/s3c9f0f895fb98ab9159f51fd0297e236d/uploads/2021/10/2021102925.pdf
723			Nadia	http://www.nadia.gov.in/writereaddata/TenderNotice/upload.pdf
724			North 24 Parganas	http://north24parganas.gov.in/sites/default/files/uploads0/Notice/DEP-2021.pdf
725			Paschim Bardhaman	Yet to be upload on website.
726			Paschim Medinipur	https://www.paschimmedinipur.gov.in/system/files/notification/scan00282.pdf
727			Purba Bardhaman	Yet to be upload on website.
728			Purba Medinipur	https://cdn.s3waas.gov.in/s373278a4a86960eeb576a8fd4c9ec6997/uploads/2021/11/2021110120.pdf
729			Purulia	http://purulia.gov.in/services/notice/general/DEP_PURULIA.pdf
730			South 24 Parganas	https://s24pgs.gov.in/assets/webdoc/mediaupload/83d9b67ba6a5d0b559164e8d7edb4834.pdf
731			Uttar Dinajpur	http://uttardinajpur.nic.in/advertise/DEP_UD.pdf

District Environment Management Plan

Bahraich District, Uttar Pradesh State



Office of District Collector Bahraich
 Collectrate, Bahraich
 dfobrdiv@gmail.com

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Introduction

Hon'ble National Green Tribunal in O.A. No. 710-713/2017 dated 15.07.2019 ordered regarding constitution of District Committee (as a part of District Planning Committee under Article 243 ZD) under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016.

In the above said order, it is stated that among others

Chief Secretaries may personally monitor compliance of environmental norms (including BMW Rules) with the District Magistrate once every month. The District Magistrates may conduct such monitoring twice every month. We find it necessary to add that in view of Constitutional provisions under Article 243 G, 243 W, 243 ZD read with schedules 11 and 12 and Rule 15 of Solid Waste Management Rules, 2016 it is necessary to have a District Environment Management Plan to be operated by a District Committee (as a part of District Planning Committee under Article 243 ZD)

In this regard, Uttar Pradesh vide Order No 13/2019/NGT-257/55-Envir-2-2019-44(Writ)/2016 dated 14.06.2019 formulated a system to conserve environment, to control pollution effectively and to monitor compliance of orders of Hon'ble National Green Tribunal. The system constitutes following four components.

1. **Development of Web Portal for Compliance:** For effective monitoring, Uttar Pradesh Pollution Control Board developed Uttar Pradesh Environmental Compliance Portal with URL www.upecp.in .
2. **District Environmental Committee:** In order to monitor all the matters related to Environmental Conservation and pollution, District Environment Committee is to be constituted at District Level. Composition of District Environment Committee is as below.

Sr No	Designation	Role
1	District Collector	Chairman
2	Chief Development Officer	Member
3	Senior Superintendent of Police	Member
4	Chief Executive Officer, nominated officer from Industrial Development Authority	Member
5	Additional District Magistrate	Member

District Environment Plan [Bahraich District]

6	Vice Chairman, Development Authority	Member
7	Municipal Commissioner, Municipal Corporation	Member
8	All Executive Officers, Municipality	Member
9	District Supply Officer	Member
10	Chief Medical Officer	Member
11	Executive Engineer, Irrigation	Member
12	Executive Engineer, PWD	Member
13	Executive Engineer, UPPCL	Member
14	ARTO	Member
15	SP, Transport	Member
16	General Manager, District Industry Centre	Member
17	Regional Manager, UPSIDDC	Member
18	District Panchayati Rajya Officer	Member
19	District Agriculture Officer	Member
20	District Horticulture Officer	Member
21	DSTO	Member
22	District Information Officer	Member
23	Representatives of all Oil and Gas Companies	Member
24	Representatives from all City Gas Network	Member
25	Maximum 2 registered NGOs working in the field of Environment Conservation (nominated by District Collector)	Member
26	Other officers nominated by District Collector as per requirement	Member
27	Regional Officer, UPPCB	Member
28	District Forest Officer/ Divisional Director, Social Forestry	Member Secretary

3. **Monitoring at State Level:** Various committees constituted by different orders of Hon'ble Tribunal have been dissolved and subject wise committees have been constituted under the system of monitoring by Chief Secretary. Other than this, officers of the rank of ACS/ PS/ Secretary have also been nominated as Nodal Officers for each district.
4. **Process of monitoring at the level of Chief Secretary, UP:** Monitoring of the compliance of orders of Hon'ble Tribunal by Chief Secretary, UP Government will be done on fourth week of every month.

The objectives of District Environment Management Plan are given below:

1. To ensure conservation of environment and natural resources at district level
2. Restore ecological balance
3. To achieve Sustainable Development Goals and District Level Targets within prescribed timeline
4. To ensure sustainability at district level following the principles of resource efficiency
5. To ensure decentralized micro level planning, execution and monitoring regarding environment conservation
6. To incorporate all facets of environmental conservation in micro planning
7. To harness active participation of all stakeholders in planned environment conservation actions
8. Assess, mitigate and monitor adverse impacts of various pollution sources at district level
9. Capacity building of stakeholders, department, agencies, organizations and individuals at district level to understand and implement micro level environmental conservation
10. To harness inter departmental coordination for implementation of action plans
11. To develop local knowledge centres and expertise for developing environmental conservation strategies at district level
12. To develop and implement micro monitoring system at district level

In order to develop District Environment Management Plan, various rounds of meetings of District Environment Committee were conducted. Sectorwise detailed discussion took place with respective departments and their views and suggestions have been drafted in this plan. At the same time, information of the prescribed format by CPCB was also collected from different departments which is attached as annexure with this plan. This plan is dynamic in nature and can be updated as need arises.

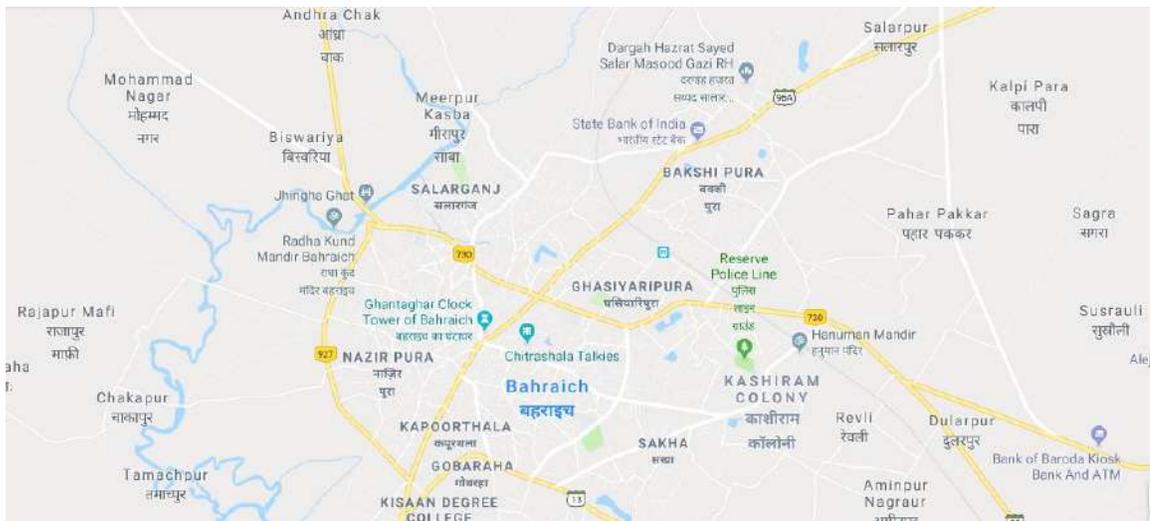
The District Environmental Management Plan for Bahraich district covers following environmental issues:

1. Solid Waste Management
2. Plastic Waste Management
3. Construction and Demolition Management
4. Bio-medical Waste Management
5. Hazardous Waste Management
6. E-Waste Management
7. Water Quality Management
8. Air Quality Management Plan
9. Mining Activity Management Plan
10. Plantation Management Plan

1.0 District Profile

Babraich is situated in North eastern part of Devipatan Division. It is situated between the 28.24 to 27.4 Latitude & 81.65 to 81.3 eastern Longitude. According to census of 1991 the area of distt. is 4696.8 sq km. Which is 31.99% of Devipatan Division. District Babraich has a international border with Nepal on the Northern part. Distt. Barabanki & Sitapur are in South, Khiri in West and Gonda & Shrawasti are in eastern side of the district Babraich. Northern part of the district is Tarai region which is covered by the dense natural forest. Chakia ,Sujauli , Nishangara , Mihinpurwa, Bichia & Baghauri are the main forest areas of the district . Sarju & Ghaghra are the major rivers of the district.

Map of District



Places of Interest

Katarnia Ghat Wild Life Sanctuary

The Katarniaghat Wildlife Sanctuary is a protected area in the Upper Gangetic plain in Uttar Pradesh, India and covers an area of 400.6 km² (154.7 sq mi) in the Terai of the Babraich district. In 1987, it was brought under the purview of the 'Project Tiger', and together with the Kishanpur Wildlife Sanctuary and the Dudhwa National Park it forms the Dudhwa Tiger Reserve. It was established in 1975.

Katarniaghat Wildlife Sanctuary is a part of the Dudhwa Tiger Reserve. It is managed along with the Dudhwa National Park and Kishanpur Wildlife Sanctuary. The Katarniaghat Forests provide strategic connectivity between tiger habitats of Dudhwa and Kishanpur in India and the Bardia National Park in Nepal. Its fragile Terai ecosystem comprises a mosaic of sal and teak forests, lush grasslands, numerous swamps and wetlands. It is home to a number of endangered species including gharial, tiger, rhino,

Gangetic dolphin, swamp deer, hispid hare, Bengal florican, the white-backed and long-billed vultures.



One of the best places in the world for seeing the gharial in its natural habitat is the Girwa River, where it is found sympatric with the mugger. The population of gharials in this stretch was one of the three that were still breeding, when the project to conserve this reptile from the verge of extinction was initiated in 1975. However, between the years of 2001 and 2005, almost all the gharial nests were raided by tribals who consider them a delicacy.



Mugger crocodiles are also seen in small number in the Girwa river, as their favorite haunts are stagnant wetlands like the many taals and baghars that dot the sanctuary. Side by side the serenely swimming gharial can be seen frolicking Ganges dolphins.

Recent discoveries in herpetofauna of Katarniaghat are highly fascinating and are represented by several species such as the banded krait, the Burmese rock python, the yellow speckled wolf-snake and the paradise flying snake. In 2012, a rare red coral kukri snake was sighted in the sanctuary.



Mari Mata Mandir

Mari mata's temple situated on the banks of Saryu river near the Bahraich-Lucknow Highway at the northern end of Bahraich city in UP is a center of faith for the devotees. In the Navaratri, devotees of rural and urban areas are engaged in worship for worship

and prayer in the temple. Besides, on Mondays and Fridays, the crowd rises for worship in the temple. It is believed that whatever the devotee is in his mother's court in court, his intention is to fulfill his wish.



Dargah Shareef

The Dargah of Syed Salar Masoud Ghazi located in the Bahraich district of Uttar Pradesh is quite impressive. A big fair is held here in Jeth. In which people come from far away. Do you know that Kadam Rasul Bhawan is situated in the Dargah complex which is an unsurpassed specimen of architectural art of the Tughlaq period. Jainir Kadam, who is

coming to the Dargah, goes ahead with the footprints of Mahfouz Hazrat Mohammad in the Rasul Bhavan. The building was constructed 750 years ago. In this building there are marks on the stone and the footprint on the stone of Prophet Hazrat Mohammad Sahib.



History

The dense forests and fast-flowing rivers are the specialities of district Bharaich. There are many Mythological facts about the great historical value of district Bharaich. It was famous as the Capital of God Brahma, the maker of the universe. It was also known as part of Gandharva Forest. Even today Northeast area of several hundred square Kms of the district is covered by the forest. It is said that Brahma ji developed this forest covered area as the place of worship for Rishis & Sadhus. Therefore this place come to known as " Bharaich"

According to some other historians in the middle age this place was the capital of "Bhar" dynasty. Therefore it was called as "Bharaich". Which later come to be known as "Bharaich".

Famous Chinese visitors Huen-tsang & Feighyaan visted this place. The famous Arab visitor Ibne-ba-tuta visted Bharaich and wrote that Bharaich is a beautiful city situated at the bank of holy river Saryu.

According to Puraans King Luv, the son of God Ram & King Prasenjit ruled Bharaich. Also during the period of exile Pandavas & along with mother Kunti visited this place. The guru of Maharaja Janak , Rishi Ashtwakra used to live here. Rishi Valmiki & Rishi Balark also used to live here .

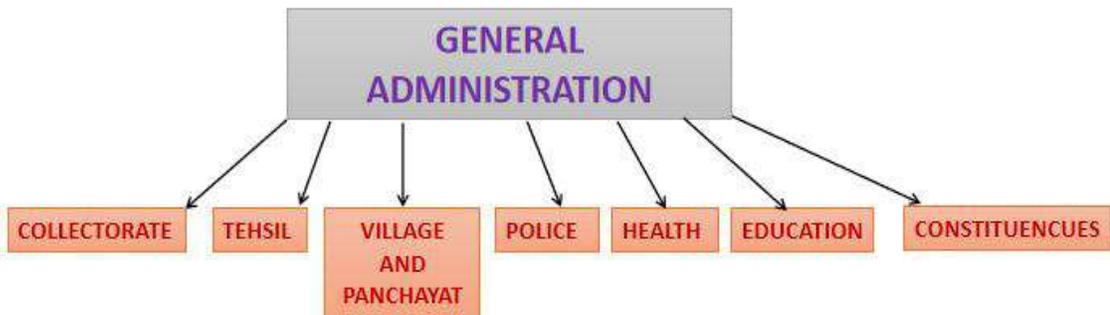
Suhaldev is mentioned in the same chronicles, as the eldest son of King Mordhwaj

of Shravasti and Miyan's chief antagonist in the Bahraich region.

Ghazi Miyan, after his initial invasions established his capital at Satrikh and then, dispatched an army to defeat the local king. Despite defeating the local Raja of Bahraich (who had even formed a confederation with other Hindu kings) under the commandeering of his father, his rule was continuously threatened by the Rajahs. Therefore, in 1033 CE, Miyan himself arrived in Bahraich to check their advance and re defeated his enemies, until the arrival of Suhaldev.

Suhaldev's army defeated Miyan's forces and a nineteen year old Miyan was killed-in action on 15 June 1033 CE. He was buried in Bahraich on the banks of a sacred reservoir, and in 1035 CE, a dargah was built.

a. District Administrative Set-up

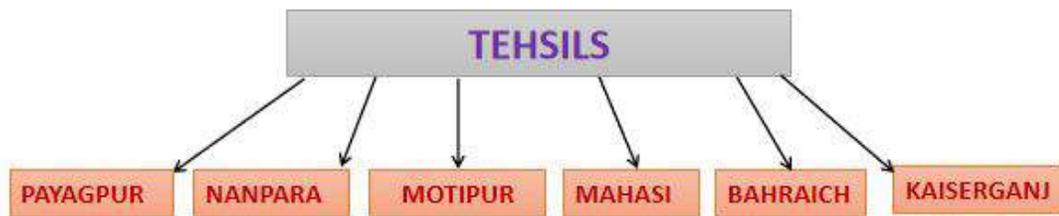


Collectorate:

In Collectorate having a lot of offices like DM Office, ADM office ,CRO office ,Panchayti Raj Office , Bhulekh Department , NIC office and many more.

b. Local institutions

District Bahraich is divided into 6 Tehsils, 14 development blocks,1387 Revenue Villages and 22 Police Stations.



Developmental Blocks:

- Hujurpur
- Mahasi
- Pakharpur
- Chittaura
- Mihinpurwa
- Shivpur
- Risra
- Visheshwarganj
- Jarwal
- Nawabganj
- Tejwapur
- Kaisarganj
- Balha
- Payagpur

Police:

The district police is headed by a Superintendent of Police (SP), and is assisted by two Additional Superintendents of Police (Addl. SP) .Also having Four Deputy Superintendent of Police (DSP).

c. Natural Resources

▪Water bodies

Sarju & Ghaghra are the major rivers of the district.

▪Availability of water resources

Apart from major rivers , there are many ponds and Nalas flowing through the district. Being a Terai region, the availability and exploitation of groundwater plays a vital role to ensure the supply of drinking water and irrigation water .

▪Forest coverage

Northern part of the district is Tarai region which is covered by the dense natural forest. Chakia, Sujauli, Nishangara, Mihinpurwa, Bichia & Baghauri are the main forest areas of the district .

Forest Administration is divided into 6 ranges - Abdullahganj, Kaiserganj, Chakia, Nanpara, Bahraich and Rupaidiha, covering an area of 12065.67 ha.

d. Geography & Demography

Bahraich borders Nepal districts Bardiya to the northwest and Banke to the northeast. The rest of Bahraich is surrounded by following districts in Uttar Pradesh: Lakhimpur and Sitapur on the west, Barabanki to the south-west, Gonda to the south-east, and Shravasti to the east.

	Bahraich	Uttar Pradesh
Area	4,696.8 km ²	2,40,928 km ²
Population	34,87,731	19,98,12,341
Rural Population	32,03,687	15,38,62,432
Urban Population	2,84,044	4,59,58,909
Decennial Growth Rate	46.08%	20.1%
Density of Population	666/km ²	830/km ²
Literacy Rate	49.32 %	69.67%
Sex Ratio	891/1000	912/1000

e. Land-use pattern

Geographical Area	4,696.8 km ²
Area Under Forest	120.65 km ²
Net Area Sown	3260 km ²
Cropped Area	5,328 km ²
area Irrigated	636.77 km ²
Percentage of Net area Irrigated to total area Sown	19.5 %

f. Climate

Bahraich has a warm humid subtropical climate with hot summers from April to July. The rainy season is from July to mid-September when Bahraich gets an average rainfall from the south-west monsoon winds, and occasionally frontal rainfall will occur in January. In winter the maximum temperature is around 25 °C (77 °F) and the minimum is in the -1 to 7 °C (30 to 45 °F) range. Fog is quite common from late December to late January. Summers are extremely hot with temperatures rising to the 40 to 47 °C (104 to 117 °F) range, the average highs being in the high of 30s (degree Celsius). Average annual rainfall is 1,900 centimetres (750 inches) (approx)

2.0 Indicative Gap Analysis and Action Plans for complying with Waste Management Rules

The Ministry of Environment, Forest and Climate Change, Government of India has notified various rules regarding management of Solid waste, Plastic waste, E-waste, etc. By doing Indicative gap analysis, we can assess the situation about waste management on a local level and gauge how far we are from the target set by different set of waste management rules. Indicative gap analysis shows the gap between existing and target conditions on various agendas or action points.

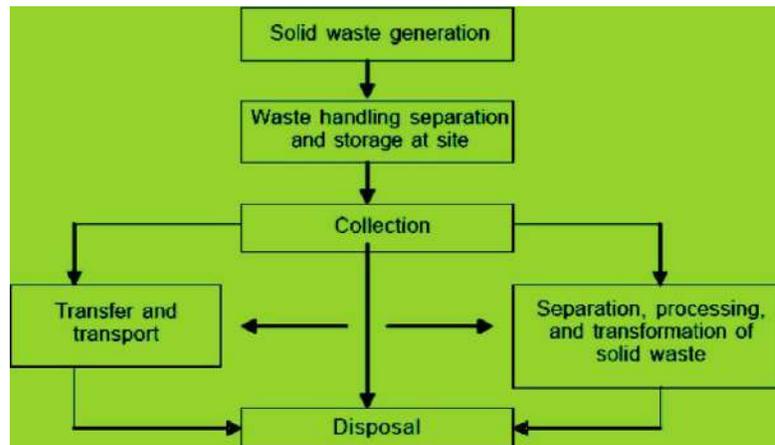
Based on this gap analysis, an action plan can be designed to meet the target, which complies with waste management rules by involving various stakeholders such as local bodies, private sector, government offices, civil society and NGOs. A target-based approach can be designed which defines the implementation agency and time-line of completion of various action plan.

(i) Solid Waste Management

Solid Waste Management may be defined as the discipline associated with the control of generation, collection, storage, transfer and transport, processing and disposal of solid wastes in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics and other environmental considerations.

The most commonly recognized methods for the final disposal of solid wastes are:

- a. Dumping on land
- b. Dumping in water
- c. Ploughing into the soil
- d. Incineration



The Ministry of Environment, Forest and Climate Change, Government of India has notified the Solid Waste Management Rules, 2016. Role of local body has been defined

as per the Rule 15 of Solid Waste Management Rules, 2016 and as per Rule 16, Uttar Pradesh Pollution Control Board has been given the responsibility to enforce these rules through local bodies. Municipal Solid Waste (Management and Handling) Rules, 2000 are applicable to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid waste.

District Bahraich has 2 Nagar Palika and 2 Nagar Panchayat which are mainly responsible for Solid Waste Management. There are 1387 revenue villages in the District which manage waste **at their level**.

Due to rapid increase in the production and consumption processes, societies generate as well as reject solid materials regularly from various sectors – agricultural, commercial, domestic, industrial and institutional.



The increasing volume and complexity of waste associated with the modern economy is posing a serious risk to ecosystems and human health. Every year, an estimated 11.2 billion tonnes of solid waste is collected worldwide and decay of the organic proportion of solid waste is contributing about 5 per cent of global greenhouse gas emissions. Every year, an estimated 11.2 billion tons of solid waste are collected worldwide. Of all the waste streams, waste from electrical and electronic equipment containing new and complex hazardous substances presents the fastest-growing challenge in both developed and developing countries.

Poor waste management - ranging from non-existing collection systems to ineffective disposal -causes air pollution, water and soil contamination. Open and unsanitary landfills contribute to contamination of drinking water and can cause infection and transmit diseases. The dispersal of debris pollutes ecosystems and dangerous substances from electronic waste or industrial garbage puts a strain on the health of urban dwellers and the environment.

The solution, in the first place, is the minimisation of waste. Where waste cannot be avoided, recovery of materials and energy from waste as well as remanufacturing and recycling waste into usable products should be the second option. Recycling leads to

substantial resource savings. For example, for every tonne of paper recycled, 17 trees and 50 per cent of water can be saved. Moreover, recycling creates jobs: the sector employs 12 million people in Brazil, China and United States alone.

a. Current status related to solid Waste management

	Urban Local bodies	No of W ar ds	No of Household s	Populatio n	Solid Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	0	0	0	0
2	Municipalities (Nagar Palikas)	56	42504	234664	51.64 MT
	Nagar Palika Parishad Bahraich	31	33959	186223	41.9 MT
	Nagar Palika Parishad Nanpara Bahraich	25	8545	48441	9.74 MT
3	Nagar panchayats (Town area Councils)	24	4921	33092	5.83 MT
	Nagar Panchayat Jarwal	13	2698	19342	3.4 MT
	Nagar Panchayat Risiya	11	2223	13750	2.43 MT

	Local Bodies	No of Villag e panch ay ats / Blocks	No of Househ ol ds	Populatio n	Solid Waste Generated per day
1	Block /Taluk / Mandal Tehsils	14	45861	2,84,044	Data not available
2	Village/Gram Panchayats	1387	557893	32,03,687	Data not available

b. Identification of gaps and Action plan:**(For Nagar Palika Parishad Bahraich)**

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completio n of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	NPP Bahraich.	6 Months
2	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of City.	NPP Bahraich	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping..	Purchasing of equipment	NPP Bahraich.	As per requirement.
3	Waste Collection				
(i)	100% collection of solid waste	100 % of waste collected.	-	NPP Bahraich.	-
(ii)	Arrangement for door to door collection	All 31 wards are covered.	Improvement in work needed. Regarding vehicles.	NPP Bahraich.	6 Months
(iii)	Waste Collection trolleys with separate compartments	9 trolleys are available.	Maintenanc e of vehicle needed.	NPP Bahraich.	On regular basis.
(iv)	Mini Collection Trucks with separate compartments	5 mini tippers are available.	Maintenance of vehicle needed.	NPP Bahraich.	On regular basis.

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(v)	Waste Deposition centres (for domestic hazardous wastes)	Center not available.	Construction of plant needed	NPP Bahraich.	1 year.
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Constructio n of plant needed for waste disposal.	NPP Bahraich.	1 year.
(ii)	Bulk Waste Trucks	3 trucks are available.	3 trucks are available.	NPP Bahraich.	-
(iii)	Waste Transfer points	Dump-site available.	Construction of plant needed for waste disposal.	NPP Bahraich.	1 year.
5	Waste Treatment and Disposal				
(i)	Wet-waste Management : On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper. (No one generate 100 kg waste per day).	NPP Bahraich.	-

District Environment Plan [Bharaich District]

(ii)	Wet-waste Management : Facility(ies) for central Biomethanation / Composting of wets waste.	Not Available.	Construction of plant needed for waste disposal.	NPP Bharaich.	1 year
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Under Construction.	80% of work completed.	NPP Bharaich.	4 months.
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant needed.	NPP Bharaich.	1 year.
(v)	Remediation of historic / legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	NPP Bharaich.	-
(vi)	Involvement of NGOs	Meeting with NGOs not done.	Two NGO's are working with NPP. Meeting with NGOs should be completed, discuss our plan and objective.	NPP Bharaich.	On regular time of interval.
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL)	NPP Bharaich	3 months

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
(viii)	Authorisation of Waste Pickers	Yes	Yes	NPP Bahraich	-
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	Yes	Own by-laws to comply with SWM Rules 2016 published.	NPP Bahraich	-

(For Nagar Palika Parishad Nanpara Bahraich)

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	NPP Nanpara.	6 Months
2	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of City.	NPP Nanpara.	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping..	Purchasing of equipment	NPP Nanpara.	As per requirement.
3	Waste Collection				
(i)	100% collection of solid waste	100 % of waste collected.	-	NPP Nanpara.	-
(ii)	Arrangement for door to door collection	All 25 wards are covered.	Improvement in work needed. Regarding vehicles.	NPP Nanpara.	6 Months
(iii)	Waste Collection trolleys with separate compartments	5 trolleys are available.	Maintenance of vehicle needed.	NPP Nanpara.	On regular basis.
(iv)	Mini Collection Trucks with separate compartments	7 mini tippers are available.	Maintenance of vehicle needed.	NPP Nanpara.	On regular basis.

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(v)	Waste Deposition centres (for domestic hazardous wastes)	Center not available.	Construction of plant/MRF needed	NPP Nanpara.	1 year.
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Constructio n of plant needed for waste disposal.	NPP Nanpara.	1 year.
(ii)	Bulk Waste Trucks	Not available.	Not available..	NPP Nanpara.	-
(iii)	Waste Transfer points	Dump-site available.	Construction of plant/MRF needed for waste disposal.	NPP Nanpara.	1 year.
5	Waste Treatment and Disposal				
(i)	Wet-waste Management : On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper. (No one generate 100 kg waste per day).	NPP Nanpara.	-

District Environment Plan [Bahraich District]

(ii)	Wet-waste Management : Facility(ies) for central Biomethanation / Composting of wets waste.	Not Available.	Construction of plant/MRF needed for waste disposal.	NPP Nanpara.	1 year
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Land Identified	Tender under process.	NPP Nanpara.	6 months.
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed.	NPP Nanpara.	1 year.
(v)	Remediation of historic / legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	NPP Nanpara.	-
(vi)	Involvement of NGOs	Meeting with NGOs not done.	Two NGO's are working with NPP. Meeting with NGOs should be completed, discuss our plan and objective.	NPP Nanpara.	On regular time of interval.
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL)	NPP Nanpara.	3 months

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(viii)	Authorisation of Waste Pickers	No Waste Pickers.	No Waste Pickers.	NPP Nanpara.	-
(ix)	Preparation of own by- laws to comply with SWM Rules 2016	No	Under Process.	NPP Nanpara.	6 Months.

(For Nagar Panchayat Jarwal)

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	NP Jarwal.	6 Months
2	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of City.	NP Jarwal.	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping..	Purchasing of equipment	NP Jarwal.	As per requirement.
3	Waste Collection				
(i)	100% collection of solid waste	100 % of waste collected.	-	NP Jarwal.	-
(ii)	Arrangement for door to door collection	All 13 wards are covered.	Improvement in work needed. Regarding vehicles.	NP Jarwal.	6 Months
(iii)	Waste Collection trolleys with separate compartments	2 trolleys are available.	Maintenance of vehicle needed.	NP Jarwal.	On regular basis.
(iv)	Mini Collection Trucks with separate compartments	3 mini tippers are available.	Maintenance of vehicle needed.	NP Jarwal.	On regular basis.

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(v)	Waste Deposition centres (for domestic hazardous wastes)	Center not available.	Construction of plant/MRF needed	NP Jarwal.	1 year.
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Constructio n of plant needed for waste disposal.	NP Jarwal.	1 year.
(ii)	Bulk Waste Trucks	Not available.	Not available..	NP Jarwal.	-
(iii)	Waste Transfer points	Dump-site available.	Construction of plant/MRF needed for waste disposal.	NP Jarwal.	1 year.
5	Waste Treatment and Disposal				
(i)	Wet-waste Management : On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper. (No one generate 100 kg waste per day).	NP Jarwal.	-

District Environment Plan [Bahraich District]

(ii)	Wet-waste Management : Facility(ies) for central Biomethanation / Composting of wets waste.	Not Available.	Construction of plant/MRF needed for waste disposal.	NP Jarwal.	1 year
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Land Identified	Tender under process.	NP Jarwal.	6 months.
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed.	NP Jarwal.	1 year.
(v)	Remediation of historic / legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	NP Jarwal.	-
(vi)	Involvement of NGOs	Meeting with NGOs not done.	Meeting with NGOs should be completed, discuss our plan and objective.	NP Jarwal.	On regular time of interval.
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL)	NP Jarwal.	3 months

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(viii)	Authorisation of Waste Pickers	No Waste Pickers.	No Waste Pickers.	NP Jarwal.	-
(ix)	Preparation of own by- laws to comply with SWM Rules 2016	No	Under Process.	NP Jarwal.	6 Months.

(For Nagar Panchayat Risiya)

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	NP Risiya.	6 Months
2	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of City.	NP Risiya.	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping..	Purchasing of equipment	NP Risiya.	As per requirement.
3	Waste Collection				
(i)	100% collection of solid waste	100 % of waste collected.	-	NP Risiya.	-
(ii)	Arrangement for door to door collection	All 25 wards are covered.	Improvement in work needed. Regarding vehicles.	NP Risiya.	6 Months
(iii)	Waste Collection trolleys with separate compartments	2 trolleys are available.	Maintenance of vehicle needed.	NP Risiya.	On regular basis.
(iv)	Mini Collection Trucks with separate compartments	1 mini tippers are available.	Maintenance of vehicle needed.	NP Risiya.	On regular basis.

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(v)	Waste Deposition centres (for domestic hazardous wastes)	Center not available.	Construction of plant/MRF needed	NP Risiya.	1 year.
4.	Waste Transport				
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Constructio n of plant needed for waste disposal.	NP Risiya.	1 year.
(ii)	Bulk Waste Trucks	Not available.	Not available..	NP Risiya.	-
(iii)	Waste Transfer points	Dump-site available.	Construction of plant/MRF needed for waste disposal.	NP Risiya.	1 year.
5	Waste Treatment and Disposal				
(i)	Wet-waste Management : On-site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper. (No one generate 100 kg waste per day).	NP Risiya.	-

District Environment Plan [Bahraich District]

(ii)	Wet-waste Management : Facility(ies) for central Biomethanation / Composting of wets waste.	Not Available.	Construction of plant/MRF needed for waste disposal.	NP Risiya.	1 year
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Land Identified	Tender under process.	NP Risiya.	6 months.
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed.	NP Risiya.	1 year.
(v)	Remediation of historic / legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	NP Risiya.	-
(vi)	Involvement of NGOs	Meeting with NGOs not done.	Meeting with NGOs should be completed, discuss our plan and objective.	NP Risiya.	On regular time of interval.
(vii)	EPR of Producers: Linkage with Producers / Brand Owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL)	NP Risiya.	3 months

S. No.	Action points For villages / blocks/ town municipalities / City corporations	Identificatio n of gap	Action Plan	Responsi ble agencies	Timeline for completi on of action plan
(viii)	Authorisation of Waste Pickers	No Waste Pickers.	No Waste Pickers.	NP Risiya.	-
(ix)	Preparation of own by- laws to comply with SWM Rules 2016	No	Under Process.	NP Risiya.	6 Months.

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- The above planned action should be implemented in time based manner.
- Actions-on model city/town/villages to be taken on priority.
- Strengthen waste collection, storage and transportation system. Set up surveillance squads/ Task Forces at Ward/Circle level. Attend vulnerable sites/locations and clean them.
- Special attention on slums and settlements near Railway tracks to maintain hygienic conditions.
- Install bio-mining activities for clearing legacy waste dump-sites.
- Prohibiting burning of garbage.

(ii) Plastic waste Management

Plastic products become an integral part of our daily life. That's why Plastic became menace worldwide as plastic polymer is produced at massive scale worldwide. On an average, production of plastic crosses 150 million tones globally per year. It has wide application in packaging, films, wrapping materials, shopping and garbage bags, fluid containers, clothing, toys, household and industrial products and building materials.

According to a report of Central Pollution Control Board (CPCB) of 2017-18, it is estimated that India generates approximately 9.4 million tones/ annum plastic waste (which amounts to 26000 tones of waste per day) and out of this approximately 5.6 million tones per annum plastic waste is recycled (i.e. 15600 tones per day) and 3.8 million tones per annum plastic waste is left uncollected or littered (9400 tones per day). The Government of India notified Plastic Waste Management (PWM) Rules, 2016 on 18th March, 2016. These rules were further amended and named as "Plastic Waste Management (Amendment) Rules, 2018". These rules shall apply to every Waste Generator, Local Body, Gram Panchayat, Manufacturer, Importer, Producer and Brand Owner. At domestic level, plastic waste constitutes a part of municipal waste and segregation is a very important issue in order to effectively handle it.

Environmental issues on disposal of Plastic Waste:

Indiscriminate littering of unskilled recycling/reprocessing and non-biodegradability of plastic waste raises the following environmental issues:

- During polymerization process fugitive emissions are released.
- During product manufacturing various types of gases are released.
- Indiscriminate dumping of plastic waste on land makes the land infertile due to its barrier properties.
- Burning of plastics generates toxic emissions such as Carbon Monoxide, Chlorine, Hydrochloric Acid, Dioxin, Furans, Amines, Nitrides, Styrene, Benzene, 1, 3- butadiene, CCl₄, and Acetaldehyde.
- Lead and Cadmium pigments, commonly used in LDPE, HDPE and PP as additives are toxic and are known to leach out.
- Non-recyclable plastic wastes such as multilayer, metalised pouches and other thermoset plastic poses disposal problems.
- Sub-standard plastic carry bags, packaging films (<40µ) etc. pose problem in collection and recycling.
- Littered plastics give unaesthetic look in the city, choke the drain and may cause flood during monsoon .

- Garbage mixed with plastics interferes in waste processing facilities and also cause problems in landfill operations.
- Recycling industries operating in non-conforming areas are posing threat to environment to unsound recycling practices.

(a)Current status related to Plastic waste management

	Urban Local bodies	Estimated quantity of Plastic Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	0
2	Municipalities (Nagar Palikas)	4.4 MT
	Nagar Palika Parishad Bahraich	4 MT
	Nagar Palika Parishad Nanpara Bahraich	0.4 MT
3	Nagar panchayats (Town area Councils)	0.32 MT
	Nagar Panchayat Jarwal	0.2 MT
	Nagar Panchayat Risiya	0.12 MT

	Local Bodies	Plastic Waste Generated per day
1	Block /Taluk / Mandal Tehsils	-
2	Village/Gram Panchayats	-

(b)Identification of gaps and Action plan:

(For Nagar Palika Parishad Bahraich)

S.No	Action points For village panchayats/ blocks/ municipalities / corporations	Identificatio n of gap	Action plan	Agencies Resposi ble	Target time for Complian ce

District Environment Plan [Bahraich District]

1.	Door to Door collection of dry waste including PW	100 % Complete	More IEC activities for waste collection including Plastic Waste.	NPP Bahraich	4 Months
2.	Facilitate organised collection of PW at Waste transfer point or Material	Under Construction	80% of work completed.	NPP Bahraich	4 Months
3.	PW collection Centres	Under Construction.	80% of work completed	NPP Bahraich	4 Months
4.	Awareness and education programs implementation	Lack of Awareness.	IEC Activities.	NPP Bahraich	Per Month
5.	Access to Plastic Waste Disposal Facilities	No Recycling plant available.	Previous Seized Plastic waste sent to Nagar Nigam Ayodhya.	NPP Bahraich	1 Year.

(For Nagar Palika Parishad Nanpara Bahraich)

S.No	Action points For village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
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1.	Door to Door collection of dry waste including PW	100 % Complete	More IEC activities for waste collection including Plastic Waste.	NPP Nanpara	4 Months
2.	Facilitate organised collection of PW at Waste transfer point or Material	Not Available	Construction of plant/MRF needed for waste disposal	NPP Nanpara	4 Months
3.	PW collection Centres	Not Available	Construction of plant/MRF needed for waste disposal	NPP Nanpara	4 Months
4.	Awareness and education programs implementation	Lack of Awareness.	IEC Activities.	NPP Nanpara	Per Month
5.	Access to Plastic Waste Disposal Facilities	No Recycling plant available.	Previous Seized Plastic waste sent to Nagar Nigam Ayodhya.	NPP Nanpara	1 Year.

(For Nagar Panchayat Jarwal, Bahraich)

S.No	Action points For village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
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District Environment Plan [Bharaich District]

1.	Door to Door collection of dry waste including PW	100 % Complete	More IEC activities for waste collection including Plastic Waste.	NP Jarwal.	4 Months
2.	Facilitate organised collection of PW at Waste transfer point or Material	Not Available	Construction of plant/MRF needed for waste disposal	NP Jarwal.	4 Months
3.	PW collection Centres	Not Available	Construction of plant/MRF needed for waste disposal	NP Jarwal.	4 Months
4.	Awareness and education programs implementation	Lack of Awareness.	IEC Activities.	NP Jarwal.	Per Month
5.	Access to Plastic Waste Disposal Facilities	No Recycling plant available.	Previous Seized Plastic waste sent to Nagar Nigam Ayodhya.	NP Jarwal.	1 Year.

(For Nagar Panchayat Risiya, Bahraich)

S.No	Action points For village panchayats/ blocks/ municipalities / corporations	Identification of gap	Action plan	Agencies Responsible	Target time for Compliance
1.	Door to Door collection of dry waste including PW	100 % Complete	More IEC activities for waste collection including Plastic Waste.	NP Risiya.	4 Months
2.	Facilitate organised collection of PW at Waste transfer point or Material	Not Available	Construction of plant/MRF needed for waste disposal	NP Risiya.	4 Months
3.	PW collection Centres	Not Available	Construction of plant/MRF needed for waste disposal	NP Risiya.	4 Months
4.	Awareness and education programs implementation	Lack of Awareness.	IEC Activities.	NP Risiya.	Per Month
5.	Access to Plastic Waste Disposal Facilities	No Recycling plant available.	Previous Seized Plastic waste sent to Nagar Nigam Ayodhya.	NP Risiya.	1 Year.

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- Plastic Waste Management Rules, 2016 should be implemented on priority basis.
- Actions-on city/town/villages to be taken on priority.
- Recycling facilities must be developed at district levels.
- Strengthen waste collection, storage and transportation system. Set up surveillance squads/ Task Forces at Ward/Circle level. Attend vulnerable sites/locations and clean them.

[Action plan should cover all village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary requirement and provisions may also be mentioned]

(iii) C & D Waste Management

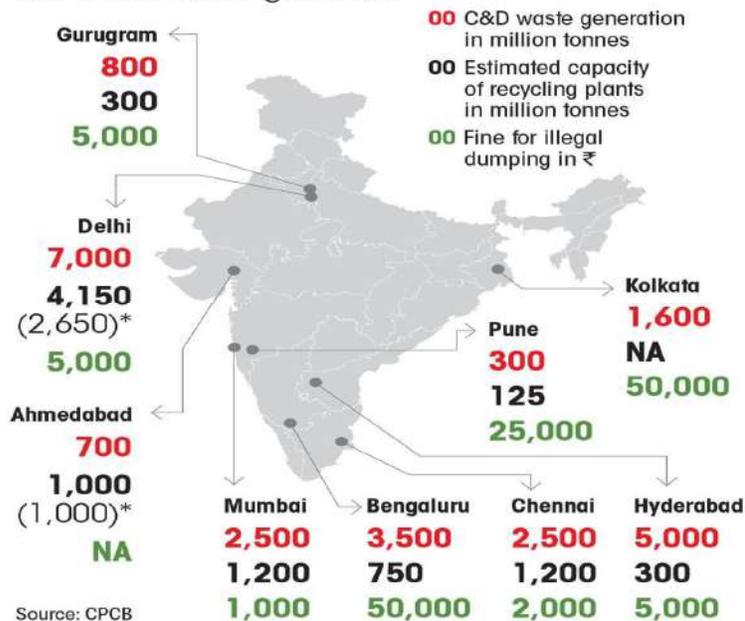
Safe and cost-effective management of construction & demolition wastes is a significant environmental challenge for modern society. Due to rapid urbanization is changing the nature of construction & demolition wastes management from a low priority, localized issue to a pervasive social and environmental problem with risks to public health and environment. Inadequately managed waste disposal has the potential to affect the health and environment. Construction and demolition waste" means waste comprising of building Materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure". The construction and demolition waste generated is about 530 million tonnes annually. The Ministry of Environment, Forest and Climate Change notified the Construction & Demolition Waste Management Rules, 2016 on 29 March 2016. The rules are an initiative to effectively tackle the issues of pollution and waste management.

India recycles just one per cent of its construction and demolition (C&D) waste, a new report released by Delhi-based non-profit, Centre for Science and Environment (CSE) on August 25, 2020, has shown.

The country generates an estimated 150 million tonnes of C&D waste every year, according to the Building Material Promotion Council. But the official recycling capacity is a meagre 6,500 tonnes per day — just about one per cent.

Ill-equipped to recycle

Plants do not have the capacity to manage the waste cities generate



*Additional capacity of plants in the pipeline. All figures are based on the capacity of the proposed recycling plants except for Delhi and Ahmedabad, which have already set up their plants.

The Bureau of Indian Standards has allowed the use of concrete made from recycled material and processed C&D waste. The Construction and Demolition Waste Rules and Regulations, 2016 have mandated reuse of recycled material.

Even the Swachh Bharat Mission has recognised the need for C&D waste management. Ranking points for C&D waste management for Swachh Survekshan 2021 have been doubled to 100 points, divided equally between management infrastructure and waste processing efficiency.

Cities will need to have a C&D waste collection system in place; notified charges for C&D services and segregation of waste in five streams. Under waste processing efficiency criteria, ranking points will be awarded based on the percentage of collected waste that is processed and reused.

A . Current status related to C & D Waste

Details of Data Requirement	Present Status
Total C & D waste generation in MT per day (As per data from Municipal Corporations / Municipalities)	3.62 MT
Nagar Palika Parishad Bahraich.	2.9 MT
Nagar Palika Parishad Nanpara Bahraich	0.4 MT
Nagar Panchayat Jarwal	0.2 MT
Nagar Panchayat Risiya	0.12 MT
Does the District has access to C&D waste recycling facility?	
Nagar Palika Parishad Bahraich.	All C & D waste sent to the local registered construction contractor of ULB
Nagar Palika Parishad Nanpara Bahraich	All C & D waste sent to the local registered construction contractor of ULB
Nagar Panchayat Jarwal	All C & D waste sent to the local registered construction contractor of ULB
Nagar Panchayat Risiya	All C & D waste sent to the local registered construction contractor of ULB.

B. Identification of gaps and Action plan:

(For Nagar Palika Parishad Bahraich)

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C & D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling plant needed.	NPP Bahraich.	1 year.
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by- laws published for user fee.	Local by- laws published for user fee.	NPP Bahraich.	-

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
3.	C&D recycling Facility	No Plant Available	All C & D waste sent to the local registered construction contractor of ULB.	NPP Bahraich.	-
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	All C & D waste sent to the local registered construction contractor of ULB.	Plant Needed.	NPP Bahraich.	1 Year.
5.	IEC on C & D waste management	IEC activities for C & D is done.	More activities needed.	NPP Bahraich.	Per Month.

(For Nagar Palika Parishad Nanpara Bahraich)

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C & D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling plant needed.	NPP Nanpara.	1 year.
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by- laws published for user fee.	Local by- laws published for user fee.	NPP Nanpara.	-
3.	C&D recycling Facility	No Plant Available	All C & D waste sent to the local registered construction contractor of ULB.	NPP Nanpara.	-

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	All C & D waste sent to the local registered construction contractor of ULB.	Plant Needed.	NPP Nanpara.	1 Year.
5.	IEC on C & D waste management	IEC activities for C & D is done.	More activities needed.	NPP Nanpara.	Per Month.

(For Nagar Panchayat Jarwal Bahraich)

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C & D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling plant needed.	NP Jarwal.	1 year.
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by- laws published for user fee.	Local by- laws published for user fee.	NP Jarwal.	-
3.	C&D recycling Facility	No Plant Available	All C & D waste sent to the local registered construction contractor of ULB.	NP Jarwal.	-

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	All C & D waste sent to the local registered construction contractor of ULB.	Plant Needed.	NP Jarwal.	1 Year.
5.	IEC on C & D waste management	IEC activities for C & D is done.	More activities needed.	NP Jarwal.	Per Month.

(For Nagar Panchayat Risiya Bahraich)

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C & D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling plant needed.	NP Risiya.	1 year.
2.	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by- laws published for user fee.	Local by- laws published for user fee.	NP Risiya.	-
3.	C&D recycling Facility	No Plant Available	All C & D waste sent to the local registered construction contractor of ULB.	NP Risiya.	-

S. No.	Action points for blocks / town municipalities / City corporations	Identification of Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	All C & D waste sent to the local registered construction contractor of ULB.	Plant Needed.	NP Risiya.	1 Year.
5.	IEC on C & D waste management	IEC activities for C & D is done.	More activities needed.	NP Risiya.	Per Month.

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- Public notices may be issued that construction and demolition waste should only be disposed at pre-identified/notified sites.
- Set up more construction and demolition waste processing facilities.

[Action plan for C&D waste management should cover all village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form as above, however all the components mentioned should be addressed for overall

C&D waste management. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary requirement and provisions may also be mentioned

(iv) Biomedical Waste Management

Biomedical waste is defined as “any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biological”. The biomedical waste management and handling has been assuming increasing significance for the past few years. The responsibility of medical administrators as regards proper handling and disposal of this category of waste has now become a statutory requirement with the promulgation of Government of India.

Categories of Biomedical Waste

There are ten defined categories (category code Nos. 1 to 10) as follows:

1. Human anatomical waste : (tissues, organs, body parts)
2. Animal waste: (including animals used in research and waste originating from veterinary hospitals and animal houses).
3. Microbiological and biotechnology waste : (including waste from lab cultures, stocks or specimens of microorganisms, live or attenuated vaccines, wastes from production of biological etc.)
4. Waste sharps:(used/unused needles, syringes, lancets, scalpels, blades, glass etc.)
5. Discarded medicines and cytotoxic drugs.
6. Soiled wastes: (items contaminated with blood and body fluids, including cotton dressings, Linen, plaster casts, bedding etc.)
7. Solid wastes: (wastes generated from disposable items other than waste sharps such as tubing, catheters, i. v. sets, etc.)
8. Liquid waste: (waste generated from washing, cleaning, housekeeping and disinfection activities including these activities in labs).
9. Incineration ash :(from incineration of any biomedical waste)
10. Chemical waste: (chemicals used in production of biological and disinfection).

Disposal of this waste is an environmental concern, as many medical wastes are classified as infectious or biohazardous and could potentially lead to the spread of infectious disease. The most common danger for humans is the infection which also affects other living organisms in the region. Daily exposure to the wastes (landfills) leads to accumulation of harmful substances or microbes in the person's body.

Biomedical waste must be properly managed and disposed of to protect the environment, general public and workers, especially healthcare and sanitation workers

who are at risk of exposure to biomedical waste as an occupational hazard. Steps in the management of biomedical waste include generation, accumulation, handling, storage, treatment, transport and disposal.

The Bio-medical Waste (Management and Handling) Rules, 1998 and further amendments were passed for the regulation of bio-medical waste management. On 28th Mar 2016 Biomedical Waste Management Rules 2016 were also notified by Central Govt. Each state's Pollution Control Board or Pollution control Committee will be responsible for implementing the new legislation. New regulations affect the distribution of medical waste by medical professionals into their proper receptacles.

In India, though there are a number of different disposal methods, the situation is desultory and most are harmful rather than helpful. If body fluids are present, the material needs to be incinerated or put into an autoclave. Although this is the proper method, most medical facilities fail to follow the regulations. It is often found that biomedical waste is dumped into the ocean, where it eventually washes up on shore, or in landfills due to improper sorting or negligence when in the medical facility. Improper disposal can lead to many diseases in animals as well as humans. For example, animals, such as cows in Pondicherry, India, are consuming the infected waste and eventually, these infections can be transported to humans who consume their meat or milk. Large number of unregistered clinics and institutions also generate bio-medical waste which is not controlled.

Due to the competition to improve quality and so as to get accreditation from agencies like ISO, NABH, JCI, many private organizations have initiated proper bio-medical waste disposal but still the gap is huge.

The latest guidelines for segregation of bio-medical waste recommend the following color coding:

- **Red Bag** – Syringes (without needles), soiled gloves, catheters, IV tubes etc. should be all disposed of in a red colored bag, which will later be incinerated.
- **Yellow Bag** – All dressings, bandages and cotton swabs with body fluids, blood bags, human anatomical waste, body parts are to be discarded in yellow bags.
- **Cardboard box with blue marking** – Glass vials, ampules, other glass ware is to be discarded in a cardboard box with a blue marking/sticker.
- **White Puncture Proof Container (PPC)** – Needles, sharps, blades are disposed of in a white translucent puncture proof container.
- **Black Bags** – These are to be used for non-bio-medical waste. In a hospital setup, this includes stationary, vegetable and fruit peels, leftovers, packaging including that from medicines, disposable caps, disposable masks, disposable shoe-covers, disposable tea cups, cartons, sweeping dust, kitchen waste etc.



Improper management of health care waste can have both direct and indirect health consequences for health personnel, community members and on the environment. Indirect consequences in the form of toxic emissions from inadequate burning of medical waste, or the production of millions of used syringes in a period of three to four weeks from an insufficiently well planned mass immunization campaign. Biomedical waste is not limited to medical instruments; it includes medicine, waste stored in red bio-hazard bags, and materials used for patient care, such as cotton and band-aids. The most serious effect that biomedical waste has on our seas is the discharge of poisons into the waters that could then be consumed by ocean life creatures. Toxins would interject into the food chain and eventually reach humans who consume sea creatures. Human exposure to such toxins can stunt human growth development and cause birth defects.

a. Current Status related to biomedical waste

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	71
Total no. of non-bedded HCF	0
No. of HCFs authorised by SPCBs/PCCs	18
No of Common Biomedical Waste Treatment and Disposal Facilities (CBWTFs)	1
Capacity of CBWTFs	3000 Kg/day
No. of Deep burials for BMW if any	55
Quantity of biomedical waste generated per day	312 Kg/day
Quantity of biomedical waste treated per day	312 Kg/day

b. Identification of gaps and Action plan:

S. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1.	Inventory and Identification of Healthcare Facilities	Check whether all HCFs including, clinics, hospitals, Veterinary hospitals, Aayush hospitals, animal houses, etc generating biomedical waste area identified and authorised by SPCBs/PCCs.	Action plan for completing / Updating of Inventory and authorisation of HCFs by SPCBs/PCCs	Spectrum Waste Solution Pvt. Ltd. Mastemau. Sultanpur Road, Lucknow.	-
2.	Adequacy of facilities to treat biomedical waste	Check if there is any gap between Quantity of Biomedical Waste generated	Action plan for setting-up CBWTF or providing access to CBWTF with 75Km from	Yes	Adequacy done by CBWTF

		per day and quantity of Biomedical Waste treated and disposed in the district? In case of no access to CBWTFs, adequacy of existing disposal of BMW	places waste generation. Including identification of site for setting up such facility. Action plan for management of BMW through captive facilities in case of no access to CBWTF		
3.	Tracking of BMW	Check whether bar code system is implemented by all HCFs and CBWTFs?	Plan for implementation of bar code system by all HCFs and CBWTFs in the district.	No	BMW Agencies are not provided Bar Code system
4.	Awareness and education of healthcare staff	Whether training has been organised for all stakeholders?	Action plan for awareness programs and training to healthcare staff and ULB officials	Yes	Training provided by DQAC
5.	Adequacy of funds	Whether adequate funds is allocated to Government health care facilities for bio-medical waste management by State Govt.?	Action plan for ensuring adequate funds to Government health care facilities for bio-medical waste management by State Govt.,.	Yes	-
6.	Compliance to Rules by HCFs and CBWTFs	Is there any district level mechanism to monitor compliance by Hospitals / HCFs?	Draw action plan to monitor compliance of HCFs and CBWTFs through SPCBs/PCCs.	Yes	Action Plan made by DQAC

7.	District Level Monitoring Committee	Check whether District Level Monitoring Committee has been constitute and meetings are being organised?	Actin plan w.r.t Periodicity of reviews and follow- up by DLMC. Identify teams in health department to monitor compliance	Yes	Monitoring done by DQAC
8.	Wastewater Treatment	Check if HCFS are required to install ETPs for wastewater generated.	Action plan for installation of ETPs by HCFS where applicable.	Yes	Action plan under process.

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- Hospitals, Clinics and individual practitioners may be served with notices to prohibit disposal of bio-medical waste in the community dustbins. In case of non- compliance, EC may be imposed on them.
- Cities, towns and villages may tie-up individually or collectively to transport bio-medical waste to the common treatment plants

[SPCBs/PCCs is the prescribed authority to ensure implementation of BMW Management Rules, 2016. However, Rules also provides mandates to health department to monitor compliance. Hence Action plan for BMW waste management should cover access to biomedical waste management in entire geographical area of the district village panchayats/ blocks/ town municipalities / City corporations. Action plan need not be prepared in Tabular form. SPCBs/PCC should be part of action plan. Action plan may dwell upon other relevant action points not mentioned in above template. If required budgetary

requirement for government HCFs may also be mentioned]

(v) Hazardous Waste Management

Hazardous waste is those that may contain toxic substance generated from industrial, hospital, some type of household waste. The improper handling, collection, treatment and disposal of hazardous waste material may cause substantial harm to human health or environment. Hazardous wastes can take the form of solids, liquids, sludges or contained gases and they are generated primarily by chemical production, manufacturing, and other industrial activities.

They may cause damage during inadequate storage, transportation, treatment or disposal operations. Improper hazardous-waste storage or disposal frequently contaminates surface and groundwater supplies. People living in homes built near old and abandoned waste disposal sites may be in a particularly vulnerable position. Hazardous wastes are classified on the basis of their biological, chemical, and physical properties. These properties generate materials that are toxic, reactive, ignitable, corrosive, infectious, or radioactive.

a. Current Status related to Hazardous Waste Management

At present, there is no institution established at district level which uses Hazardous Waste. So no plan is being proposed at present. If any industry or any activity which uses any hazardous substance is established in future then this chapter will be introduced.

[Major source of hazardous waste (HW) is industries and facilities located in the districts, who are required to be regulated under Water (P&CP) Act 174, Air (P&CP) Act 1981 and E(P) Act, 1986 and the Rules notified thereof. Many commercial establishments like automobile repair shops, paint workshops, stores, etc. may also generate small quantities of hazardous waste. The district administration should be aware of the type of hazardous waste generation in their district and adequacy of facilities for safe handling and disposal within or outside District. Linkage of district administration with common TSDFs in the State is necessary to establish system for safe disposal of domestic hazardous waste]

(vi) E-Waste Management

Waste electrical and electronic equipment (WEEE) is becoming major threat to the whole world. Rapid growth of technology, up-gradation of technical innovations and a high rate up-gradation by exchanging old electronic items have led to one of the fastest growing waste in the world.

Its toxic emissions mixed with virgin soil and air and causing harmful effects to the entire biota either directly or indirectly. Direct impacts include release of acids, toxic compounds including heavy metals, carcinogenic chemicals and indirect effects such as bio magnification of heavy metals. Many private firms are involved in collecting, dismantling, separation and exporting e-wastes for recyclers. However, strict regulations are currently being followed as on approval of such firms such as e-steward certification by Basel action network in US, they also involved in public awareness programs. E-Waste consists of end of electrical and electronic equipments and products such as: Refrigerator, Washing machines, Computers and Printers, Televisions, Mobiles, I-pods etc.

The Ministry of Environment, Forest and Climate Change notified the E-Waste Management Rules, 2016 on 23 March 2016 in supersession of the e-waste (Management & Handling) Rules, 2011. The amendment in rules has been done with the objective of channelizing the E-waste generated in the country towards authorized dismantlers and recyclers in order to formalize the e-waste recycling sector. The collection targets under the provision of Extended Producer Responsibility (EPR) in the Rules have been revised and targets have been introduced for new producers who have started their sales operations recently.

a. Current Status related to E-Waste Management

Details of Data Requirement	Present Status
Inventory of E-Waste in MT/year	0 MT/Year
Collection centers established by ULBs in the District	0
Collection centers established by Producers or their PROs	0
No authorized E-Waste recyclers / Dismantler	0

b. Identification of gaps and action plan:

S. No.	Action points	Gaps in implementation	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / Bulk-waste generators	No Inventory	No Inventory	SPCB / PCC/ UPP CB/D department of Industries	Regular Activity.
2	E-Waste collection points	No E-waste collection points.	No E-waste collection points.	E-waste Recyclers/Producers/Local Bodies.	Immediate
3	Linkage among Stakeholders to channelize E-Waste	No linkage among stakeholders.	No linkage among stakeholders.	Local Bodies/UPPCB/District Administration.	Regular Activity.
4	Regulation of Illegal E- Waste recycling / dismantling	Prevalence of informal trading, dismantling, and recycling of E-waste is in District	Action plan in coordination with SPCBs/PCCs and District Administration to check this activity.	UPPCB	Regular Activity.

5	Integration of informal sector	Whether mechanism exists for bringing informal sector into main stream in collection and recycling of E-Waste	Evolve mechanism by involving producers / PROs.	UPPCB/ Department of Industries.	Regular Activity.
6	Awareness and Education	Are there any programs at district level for awareness about E- waste management?	Plan special workshops and awareness campaigns through Producers / PROs	E-waste Producers/UPPCB	Regular Activity

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- E waste (Management) Rules 2016 should be stringently complied.
- All E waste generator, processor, user etc. should take proper permission/ authorization from UPPCB.
- All the E waste should be stored as per CPCB guidelines and Form 2 & 3 must be maintained by generator.
- All the E-Waste should be channelized to dispose to board authorized agencies only.

[CPCB is the prescribed authority to grant Extended Producer Authorisation to various Producers of Electrical and Electronic Equipment being placed on market. Targets for collection of their E-Waste is given to each Producers. Every Producers should have installed a network of collection centres pan India, accordingly, every district should be covered.

SPCBs/PCCS are given mandate to ensure implementation of EPR authorisation. Therefore district administration should have all information about collection centres / call centres established by various producers in the District. Such information should be disseminated to public and local administration. Action plan for E-Waste management should cover the aspects of inventory, collection centres for e-waste channelization, linkage with Producers of their PROS, linkage with recyclers, information of bulk waste generators and effective EPR verification by SPCBs. Action plan need not be prepared in Tabular form. SPCBs/PCC should be part of action plan. Action plan may dwell upon other relevant action points not mentioned in above template.]

3.0 Air Quality Management

Air quality affects our health our livability of our cities and towns, and our environment. Air pollution, particularly from human activity, can cause health problems that's affect the heart and lungs, and can cause cancer. Even short-term exposure to air pollution can cause health problems. Children, the elderly and people with existing heart and lung condition are especially affected by air pollution.

Air quality management refers to all the activities a regulatory undertakes to protect human health and the environment from the harmful effects of air pollution. There is a continuous review and assessment of goals and strategies based on their effectiveness. All parts of this process are informed by scientific research that provides air quality managers with essential understanding of how pollutants are emitted, transported in air and their effects on human health and the environment.

a. Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district. - Operated by SPCB / State Govt / Central govt./ PSU agency : - Operated by Industry:	Continuous air quality monitoring station not installed by UPPCB
Number of manual monitoring States operated by SPCBs	Continuous air quality monitoring station not installed by UPPCB
Name of towns / cities which are failing to comply with national ambient air quality stations	None
No of air pollution industries	8 (List attached in Annex)

Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln] / [Industrial Estate] / [Others] (Multiple selection)	Large Industry (Sugar Mill Distillery) & Power Plant
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b. Identification of gaps and action plan:

S. No.	Action points	Indicative Action Plan	Respon si ble agency	Timeline for completi on of action plan
1.	Identification of prominent air polluting sources?	Presently No Hot Spot Area in District.	PCB	Regular Activities
2.	Ambient Air quality data?	Continuous Air Quality monitoring station not yet installed.	PCB	Completely
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	Continuous Air Quality monitoring station not yet installed.	PCB	Regular Activities
4.	District Level Action Plan for Air Pollution	District Bahraich is not covered in the category of Non-attainment city.	PCB	Regular Activities
5.	Hotspots of air pollution in District	Action Taken by Agriculture department for Stubble Burning.	PCB	Regular Activities

6.	Awareness on Air Quality	Presently "Swachh Vayu" App is working in the state.	PCB	Regular Activities
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Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- State Pollution Control Board should post the information (district wise on its website) indicating industries projects granted with consents ameliorative steps and their compliance status.
- Industries discharging Air Emission and not having proper APCM are closed down as per Air Act till compliance is achieved

1. Public access for informing that if any industry is discharging unauthorized gaseous emissions, may be provided on the website of SPCB and such complaints be acted expeditiously.

[The district administration is expected know the air quality in the district, identify air polluting sources both industrial and urban area sources and shall monitor mitigation measures and compliance of air polluting sources. District level air quality management plan is necessary to monitor and implement programs for improving air quality in the district. Action plans prepared for 100+ non-attainment cities under NCAP project initiated by MoEF&CC may be referred for drawing district action plan. Action plan need not be prepared in Tabular form. SPCBs/PCC may be part of action plan for control of industrial air pollution. Action plan may dwell upon other relevant action points which are not mentioned in above template.]

4.0 Water Quality Management

Systematic management of water resources is necessary to ensure the required balance between development pressures and the safeguarding of the natural and built environment for future generations. The purpose of Water Quality management Plan (WQMP) is to reduce discharge of pollutants into urban runoff from development projects by reducing or eliminating sources of pollutants, and managing site runoff volumes and flow rates through best Management Practices.

Domestic Sewage Management Plan

Domestic sewage is generated by domestic activities including toilet, bathroom, clothes washing and kitchen cleaning activities. This sewage water contains high levels of micro-organisms, chemicals (nutrients) and other contaminants capable of causing human illness and adversely impacting on the local environment.

4.1 Water Quality Monitoring

a. Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	[Names and Length of each river in Km]
Length of Coastline (if any)	None
Nalas/ Drains/Creeks meeting Rivers	[Nos]
Lakes / Ponds	[Nos] and [Area in Hectares]
Total Quantity of sewage from towns and cities in District	[MLD]
Quantity of industrial wastewater	3.045 MLD
Percentage of untreated sewage	[%]
Details of bore wells and number of permissions given for extraction of groundwater	[Nos]
Groundwater polluted areas if any	None
Polluted river stretches if any	None

b. Identification of gaps and action plan for water quality monitoring:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan

1.	Inventory of water bodies	An environmental monitoring cell shall maintain data of all water bodies (rivers / canals / natural drains / creeks / estuaries / groundwater / ponds / lakes / etc.) in district including its water quality	Irrigation Department	-
2.	Quality of water bodies in the district	<p>Check availability of data on water bodies. Create a district level monitoring cell for periodic monitoring of water bodies for specific parameters in association with SPCBs.</p> <p>It is also necessary to disseminate information pertaining to water quality in the form of hoardings on river banks, official websites, etc.</p>	PCB	-

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
3.	Hotspots of water contamination	Check trends of water quality and identify hotspot of surface water and ground water. Establish a system or separate cell to monitor water quality. Implement action points for restoration of water quality in association with SPCBs and department of environment.	PCB	-
4.	Protection of river / lake water front	Action plan should be prepared for control river side open defecation, dumping of Solid waste on river banks, for idol immersion etc.		
5.	Inventory of sources of water pollution	Check whether inventory of all sewage and wastewater discharge points into water bodies in the district. Action plan to complete inventory.		
6.	Oil spill disaster management (for coastal districts)	Whether district oil spill crisis management group and District Oil Spill Disaster Contingency Plan has been created? If not, create District Oil Spill Crisis Management Group and District Oil Spill Disaster Contingency	Not Applicable	Not Applicable

		Plan for the district.		
7.	Protection of flood plains	Check whether there is regulation for protection of flood plain encroachment? Action plan should be prepared for protection flood plain and prevention of encroachment.	Yes.	
8.	Rejuvenation of groundwater	Check availability of groundwater and if required prepare action plan to rejuvenate ground water in selected areas. Action plan should be prepared for Rain water harvesting		
9.	Complaints redressal system	Check whether there is any complaint redressing system based on Mobile App / Online, is available? If not, a complaint redressing system based on Mobile App / Online should be available at district level		

4.2 Domestic Sewage

a. Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns and above	3
No of Class-I towns and above	1
No of Towns STPs installed	0
No of Towns needing STPs	1
No of ULBs having partial underground sewerage network	0
Total Quantity of Sewage generated in District from Class II cities and above	0
Quantity of treated sewage flowing into Rivers (directly or indirectly)	0
Quantity of untreated or partially treated sewage (directly or indirectly)	0
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	0

b. Identification of gaps and action plan for treatment of domestic sewage:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Sewage Treatment Plants (STPs)	No Plant Available	Jal Nigam	-
2.	Underground sewerage network	No Underground sewage network in the city.	-	-

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- SPCB/PCCs may undertake snapshot monitoring of ambient air quality in a phased manner covering all cities and towns for wider coverage. GRAP action should be initiated in case of deviations.
- Surveillance squads/ task forces may be set up at Ward and Circle level to prohibit burning of garbage and other waste.
- Open parks, dilapidated roads and other sources of dust pollution should be identified and actions be taken to prevent the suspension of dust from such sources.
- Every city, town and village should have time-bound plan to set up sewage/Septage management facility.
- Intermediate remedial methods may be employed till sewage drains are intercepted and diverted to STP.
- Treated sewage may be utilized for sprinkling on dust emitting sources for gardening and other non-potable purposes.

[Action plan for installing new /up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration may draw action points in consultation with ULBs and Urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action points which are not mentioned in above template.]

5.0 Industrial waste-water management

Industrial waste water is one of the important and major pollution sources of Water. A huge amount of industrial waste water was discharged into rivers, lake & sand coastal areas. This resulted in serious pollution problems in the water environment and causes negative effects to the eco-system and human's life. There are many types of industrial waste water based on different industries and contaminants. Each sector produces its own particular combination of pollutants.

Most industries produce some wastewater. Recent trends have been to minimize such production or to recycle treated wastewater within the production process. Some industries have been successful at redesigning their manufacturing processes to reduce or eliminate pollutants, through a process called pollution prevention. Sources of industrial wastewater include battery manufacturing, electric power plants, food industry, iron and steel industry, mines and quarries, nuclear industry, oil and gas extraction, organic chemicals manufacturing, petroleum refining and petrochemicals, pulp and paper industry, smelters, textile mills, industrial oil contamination, water treatment, wood preserving. Treatment processes include brine treatment, solids removal (e.g. chemical precipitation, filtration), oils and grease removal, removal of biodegradable organics, removal of other organics, removal of acids and alkalis, removal of toxic materials.

a. Current Status related to Industrial Waste-water Management

Number of Red, Orange, Green and White industries in the District	Nos of Red industries - 09 Nos of Orange industries - 24+ 300 (Brick Kiln) Nos of Green industries - 21
No of Industries discharging wastewater	05
Total Quantity of industrial wastewater generated	3.045 MLD
Quantity of treated industrial wastewater discharged into Nalas / Rivers	3.045 MLD
Common Effluent Treatment Facilities	No
No of Industries meeting Standards	05
No of Industries not meeting discharge	01

Standards

b. Identification of gaps and action plan for industrial wastewater:

S. No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Compliance to discharge norms by Industries	Identify gaps w.r.t industries not Meeting the standards. Necessary action be initiated through SPCBs against the industries not meeting the standards.	UPPCB	Regular Activity
2.	Complaint redressal system	Check if there is any complaint redressing system based on Mobile App / Online, is available? If not, a complaint redressing system based on Mobile App / Online portal may be prepared at district level.	UPPCB	Completed

6.0 Mining Activity Management plan

Mining sector has observed considerable rise in past few years. Extraction of minerals consists of several steps few of which needs considerable attention otherwise these result in irreparable loss. Sand mining of sand is the major mining activity. It is important that mining is done from identified areas, river bed mining must be strictly prohibited and strict action should be against those involved in illegal mining activities. Role of district administration, police department and mining department is very important. Mining activities inside Forest Areas should be discouraged and Eco Sensitive Zone guidelines should be strictly implemented around Protected Areas.

The Boulder, Gravel and Sand are one of the most important construction materials. These minerals are found deposited in river bed as well as adjoining areas. These aggregates of raw materials are used in the highest volume on earth after water. Therefore, it is the need of hour that mining of these aggregates should be carried out in a scientific and environment friendly manner.

Mineral Concession in respect of minor minerals are granted as per the provisions of the State Rules, framed by the State Government in exercise of powers conferred under section 15 of the Mines and Minerals (D&R) Act, 1957.

a. Current Status related to Mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining Activity	Sand Mining.
No of licenced Mining operations in the District	03
% Area covered under mining in the District	4.46 %
Area of Sand Mining	0
Area of sand Mining	0

b. Identification of gaps and action plan:

S. No	Action points	Gaps and Action Plan	Responsible agency	Time-line for completion of action plan
1.	Monitoring of Mining activity	A task force/committee constituted by UP Government through letter no. 616/86-2018-371/2005 dated 20-03-2018, in which District Magistrate will be chairman and District Mines Officer will be Secretary/Member.		-
2.	Inventory of illegal mining if any mining	A task force/committee constituted by UP Government through letter no. 616/86-2018-371/2005 dated 20-03-2018, in which District Magistrate will be chairman and District Mines Officer will be Secretary/Member.		-
3.	Environment compliance by Mining industry	Letter issued to all Mining lease holders to compliance the term and condition which are mentioned in EC issued by SEIAA.		-

7.0 Noise Pollution Management plan

Noise pollution is generally defined as regular exposure to elevated sound levels that may lead to adverse effects in humans or other living organisms. According to the World Health Organization, sound levels less than 75 dB are not damaging to living organisms, regardless of how long or consistent the exposure is.

Main Sources of Noise Pollution are:

- i. Traffic noise.
- ii. Industrial noise.
- iii. Construction sites.

a. Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	01 Noise Meter available in the Regional Office U.P.P.C.B Ayodhya.

b. Identification of gaps and action plan.

S.No.	Action points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
1.	Availability of Sound/Noise Level Meters.	01 Noise meter available in Regional Office U.P.P.C.B Ayodhya.	PCB	Immediate
2.	Ambient Noise Level monitoring.	Ambient Fixed Noise meter monitoring not installed.	PCB	Regular Activities
3.	Signboards in Noise zones	District Administration installed sign Board for sensitive zone.	PCB	Immediate
4.	Complaint redressing system	Any person can submit a complaint by e-mail/by post in office.	PCB	-

Budget Available: Since the financial year 2021-22 is about to end and a large portion

of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

Conclusion & Recommendations

- UPPCB may undertake snapshot monitoring of Noise Level in a phased manner covering all cities and towns for wider coverage.
- Surveillance squads/ task forces may be set up at Ward and Circle level to prohibit DG & other Noise activities during functions and parties.

[District administration may ensure that concerned agencies responsible for control of noise pollution are equipped with adequate number of noise level meters. There should be a system to monitor ambient sound levels to ensure that national ambient noise standards are complied with. Action plan may be implemented through responsible agencies namely SHOs, Traffic police ULBs and SPCBs. Action plan need not be prepared in Tabular form. Action plan may also dwell upon other relevant action points which are not mentioned in above template.]

8.0 Monitoring Framework

National Forest Policy, 1988 envisages minimum of 33% of geographical area under

forest and tree cover. In continuation, section-2,4 of State Forest Policy 2017 of Uttar Pradesh provide for increase in greenery by promoting plantation as mass movement by engaging different sections of society as students, ladies, farmers, differently able persons, ex army men, BPL families and forest dependent communities.

Bahraich is among greenest districts of Uttar Pradesh. Katarniaghat Wildlife Division, Bahraich Forest Division and a range of Shravasti Forest Division fall within boundaries of the district. It is home to diverse flora and fauna and many species of national and international importance are found here. Forests of Sal, Teak carrying Tigers, Leopards, Elephants, Rhinoceros, Saras, Gharial, Crocodiles,

Ganggetic Dolphins are among major attractions.

According to India State of Forest Report-2019, the forest cover of Uttar Pradesh is 14,805.65 square kilometers which is 6.15% of state's geographical area. In terms of forest canopy density classes, the state has 2616.43 sq kms under very dense forest (VDF), 4080.04 sq kms under moderately dense forest (MDF) and 8109.18 sq kms under Open Forest (OF). Forest cover in the state has increased by 126.65 sq kms as compared to the previous assessment report (2017). During this period, Forest cover of district Bahraich increased by 1.1 sq kms

To achieve the goals envisaged in the State Forest Policy, 2019 ; Government Order No 881/81-5/2019-03/2019 dated 21st November, 2019 has allotted targets of plantation to different departments for the year 2020-21, 2021-22 and 2022-23. 57.24 lakh plants were planted during 2020-21 against the target of 51.56 lakhs. Out of this, 21.39 lakh saplings were planted by Forest Department while 35.85 lakh saplings were planted by other departments.

S No	Department	Year 2021-22	Year 2022-23
1	Forest Department	20,68,632	24,13,404
2	Other Departments	38,60,985	45,04,466

DEC continuously monitors the health of plantations done by cross department checking. Third party monitoring by Forest Survey of India was carried out for the plantations done in 2020-21.

Budget Available: Since the financial year 2021-22 is about to end and a large portion of budget has already been spent in last 9 months, available budget will be useful for committed activities. In order to undertake activities outlined in this plan, fresh budget will be required which is under preparation. Budget is being prepared by field units.

Budget Required: Fresh demand is being prepared by field units and it will be updated soon in this section.

CONCLUSION

Efforts have been made to make a District Environmental Plan in line with the model District Environment Plan template provided by NGT covering the topics given therein. The users of this Plan should- bear in mind that this plan is not a- substitute to Govt.

rules and regulations, but a skeletal framework with action points and roles and responsibilities of stakeholders. These are only suggestive but not exhaustive.

Annexure

District Environment Plan [*Bahraich District*]

Large Industry of District Bahraich

1. M/s. Shavasti Kisan Sahkari Chini Mill Ltd. (Sugar Division) Nanpara, Bahraich.
2. M/s. Shavasti Kisan Sahkari Chini Mill Ltd. (Distillery Division), Nanpara, Bahraich.
3. M/s. Simbhouli Sugars Ltd. (Sugar Division), Unit - Chilwariya, Bahraich.
4. M/s. Simbhouli Sugars Ltd. (Distillery Division), Unit - Chilwariya, Bahraich.
5. M/s. Simbhouli Power Plant , Chilwariya, Bahraich.
6. M/s. Indian Potash Ltd, Jarval Road, Bahraich.
7. M/s. Parle Biscuits Pvt. Ltd. Parsendi, Kaiserganj, Bahraich.
8. M/s. Parle Biscuits Pvt. Ltd.(Distillery Division), Parsendi, Bahraich.

Item Nos.01 to 04

Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

Original Application No.710/2017
WITH
Original Application No.711/2017
WITH
Original Application No.712/2017
WITH
Original Application No.713/2017

Shailesh Singh

Applicant(s)

Versus

Sheela Hospital & Trauma Centre,
Shahjahanpur &Ors.

Respondent(s)

WITH

Shailesh Singh

Applicant(s)

Versus

Kailash Hospital and Heart Institute&Ors.

Respondent(s)

WITH

Shailesh Singh

Applicant(s)

Versus

Shri Ganga Charan Hospital (P) Ltd.,Bareilly &Ors.

Respondent(s)

WITH

Shailesh Singh

Applicant(s)

Versus

Katiyar Nursing Home, Hardoi&Ors.

Respondent(s)

Date of hearing: 15.07.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL,
CHAIRPERSON HON'BLE MR. JUSTICE S.P. WANGDI,
JUDICIAL MEMBER HON'BLE MR. JUSTICE K.
RAMAKRISHNAN, JUDICIAL MEMBER HON'BLE DR. NAGIN
NANDA, EXPERT MEMBER**

For Applicant(s): Ms. Preeti Singh and Ms. Swati Jindal, Advocate

For Respondent (s): Mr. Balendu Shekhar, Advocate for MoEF&CC
Ms. Pinky Anand, ASG, Mr. G.G. Gorge, Mr. Hemant Arya, Advocates for State of U.P
Mr. Anant Agarwal, Ms. Sweta Rani, Advocates for Respondent No. 3&5 in O.A No. 712/2019. Mr. TVS Raghavendra Sreyas, Advocate for APPCB
Mr. Pradeep Misra, Advocate for HSPCB
Mr. Rahul Verma, Addl. A.G for State of Uttarakhand
Mr. Rajat Navet, Advocate for R-9
Ms. Sakshi Popli, Advocate for DPCC
Mukesh Verma, Advocate for State PCB
Mr. Sharmistha, Advocate for APPCB
Ms. Soumyajit Pani, Advocate for State of Odisha
Mr. Suyash Singh, Advocate for Sheela Nursing Home, Chandigarh and Katiyar
Mr. Leishangthem Roshmanikh, Advocate for State of Manipur
Mr. Rahul Khurana, Advocate for State of Haryana and HSPCB
Mr. K.V Jagdishraman G. Indira, Advocate for UT of Andaman & Nicobar
Mr. H.S.K Enatoli Sema, Advocate for State of Nagaland & NPCB
Mr. Shubham Bhalla, Advocate for UT, Chandigarh.

ORDER

1. The issue raised in these applications is non - compliance of the provisions of Bio-medical Waste Management Rules, 2016 (BMW Rules) by the States and UTs.
2. The matter was reviewed vide order dated 12.03.2019. It was noted that unscientific disposal of bio-medical waste had potential of serious diseases such as Gastrointestinal infection, Respiratory infection, Eye infection, Genital infection, Skin infection, Anthrax, Meningitis, AIDS, Haemorrhagic fevers, Septicaemia, Viral Hepatitis type A, Viral Hepatitis type B and C, etc. Such unscientific disposal

also causes environmental pollution leading to unpleasant smell, growth and multiplication of vectors like insects, rodents and worms and may lead to the transmission of diseases like typhoid, cholera, hepatitis and AIDS through injuries from syringes and needles contaminated with various communicable diseases. The Tribunal

referred to the news article published in "Dainik Jagran" dated

"That the Gautam Buddha Nagar is the only district where a survey of 66 hospitals was conducted in October 2017 where 23 were found doing the management of Biomedical waste. 18 hospitals of which have been issued notices by the Regional Officer, UPPCB, GuatamBudh Nagar."

3 Reference was also made to the report of the CAG placed website in May, 2017 as

"Inadequate facility of bio-medical waste (BMW) treatment. As per the report paragraph 2.1.9.5 there were 8,366 Health Care Establishments (HCEs) out of which 3,362 HCEs were operating without authorization. Total BMW generated in the State was 37,498 kg/day out of which only 35,816 kg/day was treated and disposed of. BMW of 1,682 kg/day was being disposed of untreated unauthorised operation and untreated disposal of BMW and did not take any action against the defaulters."

4. It was also noted that on 06.02.2019, this Tribunal had required the State of Uttar Pradesh to furnish performance guarantee in the sum of Rs. 10 Crores. We are informed that vide order dated 03.05.2019, the said direction stands stayed by the Hon'ble Supreme Court in *Civil Appeal No(s). 4287-4290/2019, State of Uttar Pradesh & Ors. Etc. v. Shailesh Singh & Ors. Etc.*
5. The Tribunal noted that the steps taken in the State of Uttar Pradesh for compliance of the BMW Rules were inadequate. The regulatory regime was required to be stern in view of impact on public health by unscientific disposal of bio-medical waste. Such unscientific disposal must result in prosecution and recovery of deterrent compensation so that non-compliance is not profitable. The Tribunal noted that not a single person was shown to have been convicted in spite of large violation, nor any compensation was shown to have been recovered. No scale of compensation had been laid down, no action plan had been prepared. The unsatisfactory state of affairs was not confined to the State of Uttar Pradesh, Punjab, Haryana and Uttarakhand who were before the Tribunal but also to the other States. The BMW Rules provide for furnishing of annual reports by the States to the CPCB and by the CPCB to the MoEF&CC and also being made available on the website of the concerned State. The Tribunal directed all the States and UTs to furnish such reports by 30.04.2019, for the period such reports were due before 30.04.2019, failing which the defaulting States will be required to pay compensation at the rate of Rs. 1 Crore per month after 01.05.2019. The States were also required to prepare

their respective action plans within one month. The Tribunal also directed the CPCB to furnish its comments on the action plans and to undertake study and prepare a scale of compensation to be recovered from the violators of BMW Rules without prejudice to the State PCBs taking steps for recovery of compensation from the polluters or laying down their own scales which should not be less than the scale of the CPCB.

6. Accordingly, a report has been filed by the CPCB certain extracts from the report are as follows:

“
Inventory of HCFs and Biomedical Waste Generation:
Incomplete inventory on biomedical waste generation is an evident from the fact that biomedical waste generation reported by SPCBs is not proportional to the population in States/UTs. Generation of biomedical waste across States is reported as Bihar (6

%), Delhi (4.4 %), Gujarat (5.21 %), Karnataka (12 %), Kerala (7.35 %), Maharashtra (11.10 %), Rajasthan (4.03 %), Tamil Nadu (8.39 %), Uttar Pradesh (7.81 %) & West Bengal (5.34 %) which is not proportional to population States. Therefore, SPCBs/PCCs should complete inventory of all HCFs (both bedded and non-bedded) to assess quantity of biomedical waste generation as well as to ensure effective treatment and disposal of biomedical waste generated by them.

As per annual information, out of 559 tonnes, about 518 tonnes of biomedical waste generated per day is treated and disposed through 198 no. of common facilities and 9,841 captive treatment facility installed by Healthcare facilities. However, quantity of biomedical waste

reported is not reliable or accurate since inventory of healthcare facilities and biomedical waste generation is not yet completed by all States.

States initiated Inventory studies: Lakshadweep, Andaman Nicobar, Tripura, Daman & Diu, Delhi, Chandigarh, Telangana, Kerala, Gujarat, Haryana, Punjab, Mizoram, Maharashtra, Puducherry, Rajasthan, Tamil Nadu, Jharkhand, Uttar Pradesh, Himachal Pradesh, Andhra Pradesh, MP and Meghalaya.

States not reported status of inventory study: Jammu & Kashmir, Sikkim, Arunachal Pradesh, West Bengal, Assam and Odisha.

Operation of Healthcare Facilities without Authorization: *As per BMWM Rules, 2016, Healthcare Facilities are required to obtain authorization under said Rules, irrespective of quantity of biomedical waste generation. Annual information indicates that out of 2,38,259 of HCFs, only 97,099 (40%) no. of HCFs have applied for authorization and 84,805 (35%) HCFs are granted authorization under BMWM Rules, 2016. This indicates that about 25 % of the identified HCFs are not yet authorized by SPCBs and biomedical waste management by such facilities could not be monitored.*

States namely Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttarakhand, Uttar Pradesh & West Bengal permitted use of deep burial pits for the disposal of biomedical waste despite having Common Disposal Facilities.

2.3.5 States without Common Treatment & Disposal Facilities: States like Arunachal Pradesh, Andaman & Nicobar, Goa, Lakshadweep, Mizoram, and Nagaland & Sikkim are not having CBWTF for the treatment & disposal of biomedical waste.

States namely Andaman Nicobar, Arunachal Pradesh, Assam, J & K, Lakshadweep, Mizoram, Orissa, Puducherry, Sikkim, Uttar Pradesh and West Bengal have not submitted any information on implementation of Barcode system.

2.3.11 Constitution of State Level Advisory Committees: States namely Jammu & Kashmir, Lakshadweep and Sikkim have not yet constituted the said Committees as required under BMWM Rules, 2016.

Submission of Action Plans by State Governments: States namely Assam, Bihar, Chhattisgarh, Daman & Diu and Dadra & Nagar Haveli, Goa, Jharkhand, Karnataka, Lakshadweep, Manipur, Meghalaya, Punjab, Tamilnadu, Telangana, Uttarakhand and West Bengal have not submitted Action plans within due date for submission, that is one month from order of Hon'ble Tribunal dated 12/03/2019.

Performance Guarantee by Government of Uttar Pradesh State: In this regard, Uttar Pradesh State has not submitted Performance Guarantee to CPCB on compliance to Action Plan submitted by them.

Key Performance Indicators: CPCB has identified the following Key Performance Indicators for assessing treatment and disposal of biomedical waste, and effectiveness in implementation of BMWM Rules, 2016;

- (1) *Inventory of all Healthcare Facilities and biomedical waste generation.*
- (2) *Authorization to all Healthcare Facilities including non-bedded HCFs.*
- (3) *Facilitate setting-up adequate number of Common Biomedical Waste Treatment Facilities (CBWTFs) to cover entire State or all HCFs.*
- (4) *Constitution of State Advisory Monitoring Committee and District Level Monitoring Committee.*
- (5) *Implementation status of Barcode system.*
- (6) *Monitoring of Healthcare Facilities other than hospitals/clinics such as Veterinary Hospitals, Animal Houses, AYUSH Hospitals etc.*

Review of Action Plans:

Table 3: Scoring of States/ UTs for effectiveness of Action Plans

S.No	Name of State	Action plan received S.No Name of State from SPCB/PCCs & Score Health Department	Score
1	Sikkim	Health Department	1
2	Arunachal Pradesh	SPCB	1
3	Lakshadweep	Health Department	2.5
4	J&K	Health Department	3
5	Mizoram	Health Department	3
6	Manipur	Health Department	3
7	Uttar Pradesh	Health Department	3.5
8	Nagaland	Health Department	3.5

A score of 7 and above is indicated as an adequate action plan, score between 4-6.5 considered as satisfactory action plan whereas a score of less than 4 is considered not satisfactory.

Environmental Compensation for Healthcare Facilities(HCFs):

$$\text{Environmental Compensation for HCFs} = HR \times T \times S \times R \times N$$

Where;

HR – Health Risk factor

T- Type of Healthcare

Facility S – Size of Health Care Facility

R – Environmental Compensation

factor N – Number of days of Violation

HR Health Risk (HR) is a number from 0 to 100 and increasing HR value denotes the increasing degree of health risk due to improper handling of BMW in healthcare facility.

Further, in any case minimum Environmental Compensation in respect to Healthcare Facility shall not be less than Rs.1200/- per day.

Deterrent Factor for Healthcare Facilities:

Incremental effect on Environmental compensation charges are given below:

Scenario	Applicable ECC
Up to 15 days from target date	Original ECC
Between 15 to 30 days beyond target date	Two times
Fails to comply in 2 nd	Two times

<i>inspections including new violations if any</i>	
<i>Between 30 to 45 days beyond target date</i>	<i>Four times</i>
<i>Fails to comply in 3rd inspections including new violations if any</i>	<i>Four times</i>
<i>Beyond 60 days from target date</i>	<i>Closure of HCF</i>
<i>Fails to comply in 4th consecutive inspection</i>	<i>Closure of HCF</i>

Environmental Compensation for Common Biomedical Waste Treatment Facility (CBWTF):

$$Environmental\ Compensation\ for\ CBWTFs = PI \times S \times R \times N$$

Environmental Compensation

Where;

PI– Pollution Index

S – Size of Operation

R – Environmental Compensation

factor N – Number of days of Violation

Further, in any case minimum Environmental Compensation in respect to Common Biomedical Waste Treatment Facility shall not be less than Rs. 3,000/- per day.

Deterrent Factor for Common Biomedical Waste Treatment Facilities:

Incremental effect on Environmental compensation charges are given below:

Scenario	Applicable ECC
<i>Up to 30 days from target date</i>	<i>Original ECC</i>
<i>Between 30 to 60 days beyond target date</i>	<i>Two times</i>

<i>Fails to comply in 2nd inspection including new violations if any</i>	<i>Two times</i>
<i>Between 60 to 90 days beyond target date</i>	<i>Four times</i>
<i>Beyond 90 days</i>	<i>Closure of CBWTF</i>
<i>Fails to comply in 3rd consecutive inspection</i>	<i>Closure of CBWTF</i>

”

7. We have heard learned counsel for the parties available before this Tribunal. We do not see any objection to the recommendations of the CPCB. No meaningful objection has been raised by any of the parties. Accordingly, the report of the CPCB is accepted. The same may be placed on the website of the CPCB for three months. All the States/UTs may take action according to the said report.

8. The States/UTs may furnish complete inventory of HCFs and BMW generation within two months and where the inventories are incomplete, the same may be completed. We place on record our disapproval of the inaction of States in furnishing the inventory studies as well as for incomplete inventories. It is regretful to note that 25% of identified HCFs have not even taken authorization from the concerned State PCBs in absence of which, monitoring of waste management is not taking place. The States which have not set up common treatment and disposal facility must do so within two months as per Rules. The States who have not furnished the information on the barcode system may also furnish such information at the earliest but not beyond two months. The States

which have not yet constituted State Level Advisory Committee may also do so within two months. The action plans and their execution must be carried out having regard to the key performance indicators. The States which have inadequate action plans, not satisfactory action plans, needing further actions must also do the needful within two months realizing their responsibility to the environment and public health which ought to be monitored directly by the Chief Secretaries in terms of order of this Tribunal dated 16.01.2019 in *O.A. No. 606/2018* and further orders in the said matter. By the further order in the said matter in the case of all the States, directions were issued that Chief Secretaries may personally monitor compliance of environmental norms (including BMW Rules) with the District Magistrate once every month. The District Magistrates may conduct such monitoring twice every month. We find it necessary to add that in view of Constitutional provisions under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016, it is necessary to have a District Environment Plan to be operated by a District Committee (as a part of District Planning Committee under Article 243 ZD) with representatives from Panchayats, Local Bodies, Regional Officers, State PCB and a suitable officer representing the administration, which may in turn be chaired and monitored by the District Magistrate. Such District Environment Plans and Constitution of District Committee may be placed on the website of Districts concerned. The monthly report of monitoring by the District Magistrate may be furnished to the Chief Secretary and may be

placed on the website of the District and kept on such websites for a period of one year. This may be made operative from 1.08.2019. Compliance of this direction may also be seen by the Chief Secretaries of the States/UTs. This may not only comply with mandate of law but provide an institutional mechanism for effective monitoring of environment norms. Needless to say that right to clean environment being part of right to life, such effective monitoring is a must. Such monitoring must include issues specified in the order of this Tribunal dated 16.01.2019, O.A No. 606/2018, Para 40 which is as follows:-

- "a. Status of compliance of SWM Rule, 2016, Plastic Waste Management Rules, 2016 and Bio-Medical Waste Management Rules, 2016 in their respective areas.*
- i. Status of functioning of Committees constituted by this order.*
 - ii. Status of the Action Plan in compliance vide order dated 20.09.2018 in the News Item published in "The Hindu" authored 25 by Shri Jacob Koshy Titled "More river stretches are now critically polluted: CPCB (Original Application No. 673/2018).*
 - iii. 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*
 - iv. Status of Action Plan with regard to identification of polluted industrial clusters in O.A. No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels" dated 13.12.2018.*
 - v. 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.*
 - vi. Total amount collected from erring industries on the basis of 'Polluter Pays' principle, 'Precautionary principle' and details of utilization of funds collected.*
 - vii. 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."*

9. Further important issues flagged for monitoring include training programs for the officers concerned with enforcement of environment norms at the ground level, reuse of treated water, recharge of groundwater, conservation of water bodies.¹ It has been brought to our notice that State PCBs are facing certain handicaps in performing their functions for want of adequate staff and infrastructure. While this is a matter to be reviewed by concerned Chief Secretaries, the State PCBs/PCCs are free to prepare and execute appropriate plans for utilizing the environment restoration fund with the approval of CPCB. The expenditure may include hiring of experts and consultants, expanding air and water quality monitoring network, procurement of scientific equipment, undertaking restitution remediation and specialized studies on contaminated sites so that there is effective oversight for enforcement of law. Under no circumstances these funds be spent on salaries, logistics etc.
10. The compensation regime suggested by the CPCB may be adopted. It will be open to the State PCBs/PCCs to adopt a higher scale of compensation, having regard to the problems faced in such States/UTs.
11. It is made clear that if even after two months the States/UTs are found to be non-compliant, the compensation will be liable to be recovered from the said States/UTs at the rate of Rs. 1 Crore per month till the non-compliance continues.

¹See order dated 17.05.2019, O.A. No 606/2018, Para No. 27 (vi, vii, viii)

12. The CPCB may file further progress report in the matter after coordination through the concerned authorities of the States, including the State Boards/other Health Departments.
13. The Chief Secretaries may furnish their respective compliance reports as per orders passed in *O.A No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016.*

Copies of this order be sent to all the Chief Secretaries, CPCB and MoEF& CC by e-mail for compliance.

List for further consideration on 18.11.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

July 15, 2019
Original Application No.710/2017 and other connected matters AK

Item No. 04 & 05

Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

(Through Video Conferencing)

Original Application No. 804/2017
(Earlier O.A. No. 36/2012)

WITH

M.A. No. 1302/2018

IN

Interlocutory Application No. 63IN
W. P. (C) No. 657/1995

Rajiv Narayan & Anr

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

With

The Research Foundation for Science, Technology
And Natural Resource Policy

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 12.04.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s): Mr. Raj Panjwani, Senior Advocate
Ms. Meera Gopal, Advocate
Mr. Rahul Choudhary, Advocate

For Respondent (s): K. Enatoli Sema and Mr. Amit Kumar Singh
Advocates for State of Nagaland
Mr. Manish Kumar, Advocate
Mr. Sriansh Prakash and Mr. Raj Kumar Maurya,
Advocates for EDMC
Mr. Daleep Dhyani, Advocate for
HSPCB
Mr. Amit Tiwari, Advocate for
SOUP
Mr. Raj Kumar, Advocate for CPCB

ORDER

1. The issue for consideration is non-compliance of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. The status reports filed by the States were considered with reference to the following:

- “1. As to what is the total generation of hazardous waste in their respective States.*
- 2. Which agencies have been authorized in terms of rules to collect, transport, disposed of and the process of the hazardous wastes.*
- 3. What is the capacity of the plants which have been given due authorization for that purpose.*
- 4. What happens and how the remnant hazardous waste is being dealt with.*
- 5. The members who have been allotted any of the authorized plants and are not sending hazardous waste to those plants. What action the concerned authorities i.e. the State Government and the respective States and State Pollution Control Boards have taken so far, against such members. These details should be filed within one week from today.”*

2. Vide order dated 30.07.2018, the Tribunal found that Central Pollution Control Board (CPCB) was required to prepare a consolidated review report every year under Rule 20, based on reports of the State Pollution Control Boards (SPCBs). The Tribunal directed as follows:

- “(i) All the States, where the hazardous waste is being generated must set up Treatment, Storage and Disposal Facility (TSDF) facility of adequate capacity at appropriate locations within three months from today and forthwith imitate action against erring units.*
- (ii) Central Government and Central Pollution Control Board must forthwith monitor the compliance of the rules by reviewing the needfor action in all the states.*
- (iii) The Central Pollution Control Board may forthwith constitute a monitoring Committee for the purpose it may appoint a Nodal Officer exclusively to oversee the compliance of the rules. The Member Secretary CPCB may act as a Nodal Officer till a substitute is found. The action taken must be placed on the website of the Central Pollution Control Board within 3 months from today. Compliance report be filed before this Tribunal on or before 30th November, 2018, which will be treated as a separate application.”*

3. Setting up of Treatment, Disposal and Storage Facility (TSDF) being an urgent and important requirement which was required to be monitored as above. In compliance of the directions of the Tribunal, an affidavit has been filed on 08.02.2019 by the CPCB stating that on 09.08.2018 a Monitoring Committee was constituted headed by Dr. Ajay A. Deshpande, former Expert Member, NGT. CPCB also issued directions under Section 5 of the Environment (Protection) Act, 1986 on 30.01.2019 for all the SPCBs/Pollution Control Committees (PCCs) as follows:

- “a) Ensure that all the solvent recovery industries in the state have mandatory Authorisation for the same in compliance with the SOP and Checklist issued by CPCB for solvent recovery units, within one month. The said SOP and checklist have been circulated to all SPCBs/PCCs vide letter no. B29016/(SC)/1(55-IV)/17-18/WM-II/18152-86 dated 08/3/2018 and is also available at CPCB website http://cpcb.nic.in/uploads/hwmd/utilizaionspent_solvent.pdf.*
- b) Ensure that these solvent recovery industries shall immediately follow the SOP, for safe and scientific spent solvent handling, processing and storage.*
- c) Ensure that such solvent recovery units shall comply with the provisions of HOWM Rules, 2016, in terms of interstate transport of Hazardous waste and manifest document prescribed under Rule 18 and 19 of the HOWM Rules, 2016, with immediate effect. Stringent action be taken against the erring industries who are giving the spent solvent to such recycling industries without following the manifest systems.*
- d) Conduct industry interaction programs within a month to create awareness and sensitization on HOWM Rules, 2016 with all the stakeholder industries of Spent Solvent generation/utilization.*
- e) Prepare an inventory of such solvent recovery units and publish the same on their website for information of all, stakeholders within one month with copy to CPCB within one month.”*

4. The Monitoring Committee furnished its interim report in compliance of orders of this Tribunal after reviewing the various aspects of enforcement of the Rules proposing actions as follows:

Sl.	Observations	Proposed Actions (Responsible
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No.		Agency and timeline of action)
1	<p>Hazardous waste identification: - Uniformity in assessment, Byproducts and solvents (Details in Chapter 4 – Section 4.1.1)</p> <p>a. The Rules define by-products very categorically linking it to its intended use. Presently, there is no verification or appraisal of such continuous intended use before classifying certain waste as a byproduct. There is a need for SOP/guidelines for identification of by-products based on the manufacturing process as well as intended use.</p> <p>b. Applicability of various clauses of the HW Rules to the 'other waste' also needs to be defined clearly in the Rules itself.</p> <p>c. Presently, there is hardly any scientific examination or scrutiny for identification and quantification of HW prior to grant of authorisation.</p> <p>d. The HW Rules basically focuses on a close loop approach for the HW Management which is reflected in the adoption of manifest system in order to ensure that the HW movement is continuously tracked till its final disposal (Cradle to Grave approach).</p> <p>e. However, in case of spent solvent sent for solvent recovery, such manifest system seems to be ending at the door step of the spent solvent recycler. It would be advisable to continue this manifest system right upto the actual user of such recovered solvent from solvent recovery plant to ensure appropriate regulation of spent solvent plant performance and appropriate accounting and use of recovered solvent.</p> <p>The similar approach is also required to be adopted in all cases of recycling/recovery/ utilisation such as used oil, waste oil, lead scrap, spent acid, spent catalyst, etc.</p>	<p>1. There is a need to urgently prepare a guidelines or protocol on how to decide the by-product on specific criteria. This can be done based on chemical process involved in order to bring consistency in approach. (MoEF&CC and CPCB: 06 months)</p> <p>2. Other waste is presently missing from all the regulatory actions, including inventory. It is necessary to bring such waste in regulatory domain, as envisaged in the rules. (SPCBs/PCCs: inventory of 2018-19 onwards).</p> <p>3. SPCBs/PCCs need to take steps to ensure closing of the manifests received and reconcile the HW handling data. This work is humungous and need support in terms of software and online submissions. (SPCBs/PCCs).</p> <p>4. Pan India IT based solution is suggested for tracking HW. Such integrated data handling and management solution is under implementation by CPCB which the committee would like to review in next phase.</p> <p>5. The pre-processing and recycling/utilisation facilities need to be treated as critical environmental infrastructure facilities for sound environmental management of hazardous waste so as to ensure enhanced level and frequency of enforcement and environmental monitoring. Elaborate protocols are needed to be developed. (SPCBs/PCCs: continuous activity).</p> <p>6. According to Rules, the identification and quantification of the hazardous waste generation is to be done at the authorisation stage itself and therefore, it is necessary that SPCBs shall adopt the scientific principles as enumerated for such identification and quantification of HW. (SPCB/PCCs: Immediate)</p>

<p>2.</p>	<p>Grant of Authorisation by SPCBs/PCCs (Details in Chapter 4 – Section 4.1.2)</p> <p>a. The Rules stipulates requirement of enclosing field inspection report while granting authorisation</p> <p>b. The committee observed that only in few cases the SPCBs are enclosing the said field inspection report alongwith authorisation granted.</p> <p>c. Further, such filed inspection report lacks details w.r.t to adequacy of the facilities on storage, transportation, treatment, recycling/utilisation, disposal, etc.</p>	<p>1. Uniform format for visits and inspections of HW handling facilities is necessary to ensure comprehensive inspections as per the provisions of the Rules. A format is proposed by the Committee which is given at Annexure XVI.</p> <p>2. The authorisation document should clearly stipulate respective mode of management (such as common or captive incineration/secured landfilling or pre-processing or recycling or utilization or export or captive storage, as applicable) for each category of HW being generated. <u>(SPCB/PCCs: immediate)</u></p>
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<p>3.</p>	<p>Inventory (Details in Chapter 4 – Section 4.2)</p> <p>a. Inventories are based on reporting by the generators/occupiers through annual report as well as authorisation.</p> <p>b. The inventory data do not cover all the industries who have been granted authorisation. It also does not cover the hazardous waste from domestic sources, interstate movement, import/export of hazardous waste, and other waste.</p> <p>c. The inventories are not verified and validated based on the scientific principles by the State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs).</p> <p>d. There is a substantial variation in the quantity declared in the authorisation and actual quantity of hazardous waste generation declared in the annual report.</p> <p>e. Quantities reported in the captive utilisation of hazardous waste appear to be on higher side and are not verified.</p> <p>f. There are no standard protocol/guidelines for preparation of HW inventory based on sound scientific principles and approach which is a basic necessity to ensure uniform and consistent preparation of HW inventory by different</p>	<p>1. Standard guidelines and protocol based on scientific fundamentals for preparation of inventory should be prepared by CPCB and strictly followed by the SPCBs/PCCs to ensure reliable and credible inventory. (SPCBs/PCCs and CPCB/: <u>inventory of 2018-19 onwards</u>)</p> <p>2. SPCBs/PCCs shall verify and scientifically validate the HW data and facilities before grant or renewal of authorisation. (SPCBs/PCCs: <u>inventory of 2018-19 onwards</u>)</p> <p>3. There is an emergent need to develop sectoral process based reasonable HW generation range to have uniformity in assessing the HW generation from industries and benchmarking the same with its peers, rather than solely depending on industry data. (SPCBs/PCCs: <u>continuous activity</u>)</p> <p>4. All occupiers who have authorisations shall submit the Annual report and in case of non-compliance, action needs to be taken by SPCB/PCC. (SPCBs/PCCs: <u>inventory of 2018-19 onwards</u>)</p> <p>5. The timelines for inventory preparation as envisaged in Rules be strictly complied with by SPCBs/PCCs. Preparation of country's inventory by CPCB is dependent on such timely submission by SPCBs/PCCS. (SPCBs/PCCs and CPCB)</p>
	<p>SPCBs/PCCs.</p>	

<p>4.</p>	<p>Enforcement actions (Details in Chapter 5)</p> <p>a. Though there have been several incidents on record of noncompliance of HW Regulations resulting in discharge of HW in environment, the powers vested with the CPCB/SPCBs/PCCs for recovering environmental damages under Rules 23(1) has not been invoked.</p> <p>b. Only three States namely Maharashtra, Telangana and Madhya Pradesh have reported prosecution actions under Section 15 of EP Act, 1986.</p> <p>c. There are hardly few cases where the SPCBs/PCCs have invoked provisions related to revocation and/or refusal of authorisation in view of the observed noncompliances.</p> <p>d. Inspection report, mostly is not attached along with the authorisation granted. Wherever inspection reports have been attached such reports lack in required information for appraisal.</p>	<p>1. SPCBs/PCCs shall invoke the powers conferred under clause 23 (1) and (2) of the Rules, related to all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes, and non-compliance respectively. CPCB has already issued guidelines for Liability assessment, for invoking clause 23(1) and (2) of HW Rules. CPCB shall also take consequential actions under clause 23 (1) as per the said guidelines wherever directions under section 5 of the E(P) Act have been issued by CPCB, noticing environmental damages. <u>(SPCBs/PCCs and CPCB: Immediate).</u></p> <p>2. The habitual and serious defaulters shall be prosecuted under provisions of the Environment (Protection) Act, 1986. Other alternative regulatory actions including refusal and revocation of Authorisation can also be explored following the due process. <u>(SPCBs/PCCs: Immediate)</u></p> <p>3. Non-compliance to be documented while processing authorisation for renewal or inspections in order to invoke powers of refusal or revocation of Authorisation as per Rules. <u>(SPCBs/PCCs: Immediate)</u></p> <p>4. Urgent updation of concerned websites of SPCBs/PCCs/CPCB with respect to all enforcement actions along with details of industries and action taken. <u>(SPCBs/PCCs/ CPCB: Immediate)</u></p> <p>5. There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in regulatory actions and bring transparency, predictability and consistency in enforcement for actions. <u>(SPCBs/PCCs/CPCB: within 06 months)</u></p>
<p>5.</p>	<p>Hazardous waste utilisation and recycle. Issues and need of improvements (Details in Chapter 4 – Section 4.3)</p> <p>a. The inventory data shows skewed variation in utilisation of HW pattern among different</p>	<p>1. The inventory data needs to be verified and validated before accepting the same. The states shall adopt the proposed guidelines immediately while preparation of HW inventory. <u>(SPCBs/PCCs: Immediate)</u></p>

<p>States. For example in Gujarat about 36 % of the HW generated is either recycled or utilised, whereas in Maharashtra 0.98 % HW generated is recycled and utilised.</p> <p>b. Maharashtra is not authorising and promoting the co-processing which is one of the major option of utilisation of HW, although the HW Rules provided hierarchy of wastemanagement promoting recycle and utilisation of the HW. There is a need to have a consistent and scientific approach to promote the HW recycle and reuse in consonance of the objective of the HW Rules expressed in terms of hierarchy, throughout the country.</p> <p>c. There are certain environmental risks associated with the recycle and utilisation of the HW in case of non-compliance. It is therefore necessary that such recycle and utilisation of HW is strictly regulated in terms of the performance of such recycle and utilisation.</p> <p>d. There is need to immediately prepare guidelines for high volume low impact waste like slags from pyrometallurgical operations, fly ash, red mud, Jarosite, mine tailings and ore beneficiation rejects.</p> <p>e. More clarity is required on the application of Rule 9 particularly in case of captive utilisation. Presently, it is very difficult for SPCB/PCC field staff to investigate and analyse such claims of industry. Therefore, presently, the data given by industry is relied upon in totality.</p> <p>f. The pre-processing facilities collect the HW from different industries and carry out the homogenization/blending activities to achieve the required calorific value and other desired specification for co-processing. As this industry sector indulge in handling the wide range of</p>	<p>2. There is emergent need of consistent approach in recycle and utilisation of HW in terms waste management hierarchy mandated in the rules across all the States in order to ensure the level playing field for the industry. This can be achieved by advocacy programme such as concept of waste exchange banks, know your waste programme, circular economy, documentation of the success stories along with regulatory interventions wherever required. (SPCBs/PCCs)</p> <p>3. It is also necessary to develop certain benchmarks/guidelines for the possibilities of HW recycle/utilization on case to case basis. For example, for co-processing at Cement plants the Thermal Substitution Ratio (TSR) can be an objective criterion to decide the potential to use HW for utilisation purpose. The range of TSR at different cement plants can be collated to develop a database for sound coprocessing practices. (SPCBs/PCCs)</p> <p>4. The concept of environmental benchmarking among the similar industries generating HW can be useful to ensure consistency and uniformity. The emerging trend of circular economy would be a key intervention for rationalising the HW generation and reuse/utilisation (SPCBs/PCCs: continuous activity)</p>
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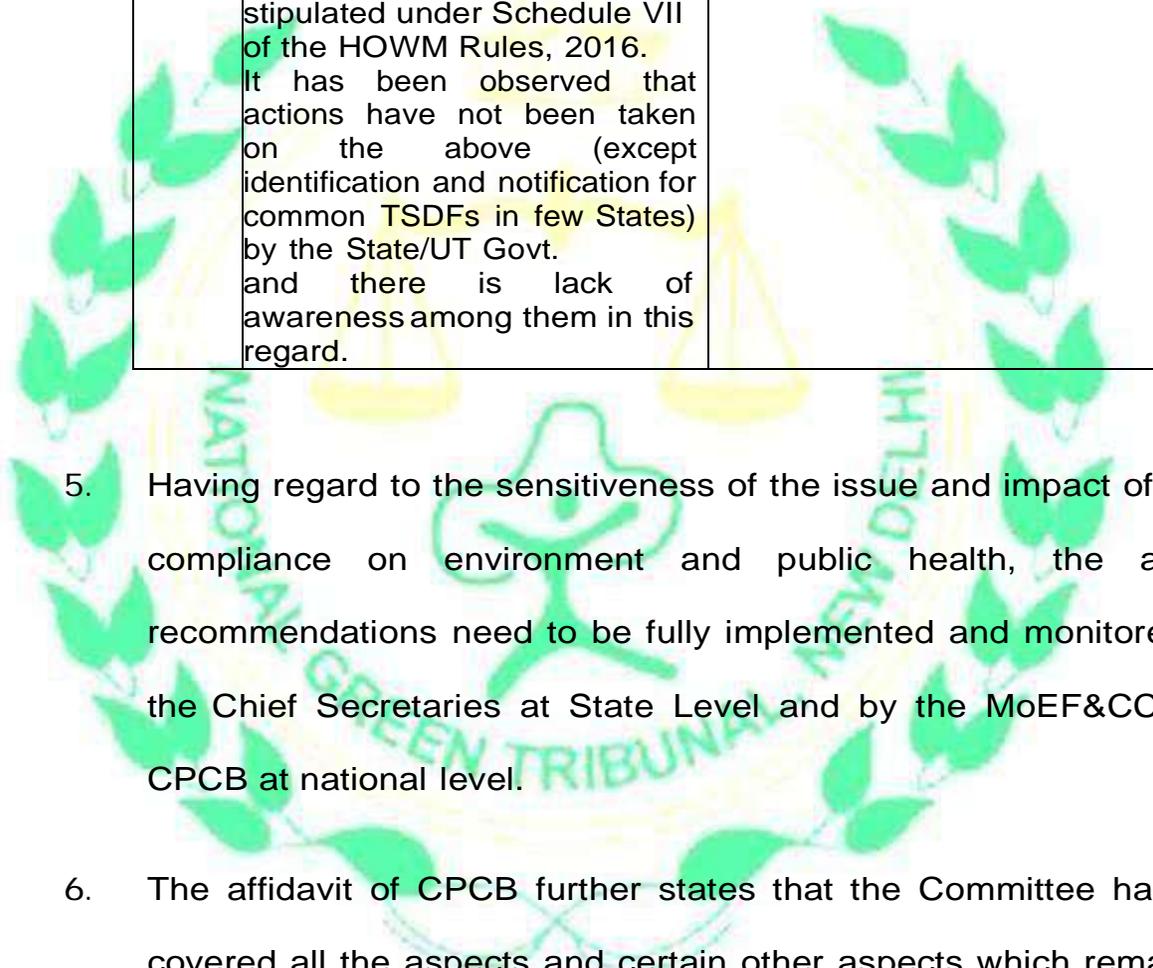
	<p>wastes from different industries, it would be prudent to have improved enforcement regime in terms of number of inspections, detailing of inspection, environmental monitoring and reporting of waste receive/disposed etc. on the lines of common facilities.</p>	
<p>6.</p>	<p>Common Treatment, Storage and Disposal facilities: reporting. (Details in Chapter 4 – Section 4.5) a. The Committee has observed that in some cases the TSDF rejects the consignment received from the waste generator for non-compliance of acceptance criteria. This consignment is returned back to the waste generator. b. The site selection criteria, design and layout are the critical parameters for establishment of the TSDF. In addition, waste storage, stabilization, landfilling, incineration and leachate management are critical operations. The committee has observed non-compliance of these guidelines For example TSDF at Balotra, Roorkee, Kanpur, etc. c. Of 18 SPCBs/PCCs having common secured landfills, 06 SPCBs have still not opened Escrow Account provision for postclosure monitoring of common SLF. d. Compliance of the Hon'ble NGT orders dated 30/07/2018 with regard to setting of TSDFs and taking imitating actions against erring units- Only Goa and Odisha have submitted action plan with timeframe for setting of Common SLF + Incinerator and Common Incinerator respectively. Only Odisha has taken action against erring units</p>	<p>1. The practice of returning the HW consignment needs to be immediately stopped and the consignment needs to be stored within the TSDF with information to the waste generator and also the concerned SPCB. The TSDF shall take appropriate measures to dispose this waste at the risk and cost of the waste generator under due information to the SPCB immediately on priority. Though the present guidelines prescribed that the waste shall be sent back to the waste generators, this practice needs to be immediately discontinued in view of non-accounting of the waste once it is out of manifest protocol and the associated environmental risks. <u>(SPCBs/PCCs/TSDFs: immediate)</u> 2. SPCBs/PCCs shall conduct environmental audit including the site selection criteria, design and layout for the TSDFs in next one year. They can engage expert institutes for the purpose and seek CPCB's technical advice on the ToR of the study, if required. <u>(SPCBs/PCCs: 01 year)</u> 3. All the Common SLF shall disclose the mandatory amount deposited in Escrow Account annually to SPCB/PCC, CPCB and display on their website. SPCB/PCC to take action in case of non-compliance. <u>(SPCBs/PCCs: immediate)</u> 4. It is necessary that the Hon'ble NGT orders dated 30/07/2018 with regard to setting up of TSDF and taking imitate actions against erring units be strictly complied with by the concerned State/UT Government and SPCBs/PCCs. <u>(State/UT Governments and SPCBs/PCCs: immediate)</u></p>
<p>7.</p>	<p>Contaminated sites: Status, identification, need of urgent action, investment, capacity building,</p>	<p>1. It is necessary that such contaminated site database is developed after due verification by SPCBs/PCCs and validation by</p>

<p>guidelines. (Details in Chapter 4 – Section 4.7)</p> <p>The Committee has initiated work on monitoring of direction of the Hon'ble Supreme Court with regard to contaminated site WP 657/1995 and has discussed the matter with SPCBs/PCCs/CPCB and the petitioner Shri Sanjay Parikh, Adv. The Committee recognised the monitoring of this aspect has a large scope and the committee intends to focus on this specific issue in coming days. In the meantime committee has made following preliminary observations and record the need of immediate interventions.</p> <p>a. MoEF&CC/CPCB have identified total 329 potentially hazardous waste contaminated sites and subjected them for screening based on verification by the SPCBs. After the verification by SPCBs, the total 144 sites have been identified as contaminated sites and 57 sites are still under evaluation. The Committee is of the opinion that the identification of the contaminated sites is an elaborate process involving objective criteria and standard protocols. It is expected that SPCBs and CPCB shall follow such objective criteria and standard protocol to identify the contaminated sites and also to assess their scope and extent of contamination.</p> <p>b. Out of 144 identified contaminated sites, CPCB has prioritised 8 sites for which DPR for assessment and remediation has been prepared. However, there is an urgent need to execute this remediation plan on top priority. The Committee has been informed that the required financial resources for such remediation have not been mobilised so far.</p> <p>c. There is a change in number of such identified sites over the period which</p>	<p>CPCB or some expert third party, so as to ensure the reliability of such data base. The entire process of screening, verification and validation needs to be as per standard protocol and the data needs to be owned by both SPCB/PCC and CPCB, not leaving the things at state level alone. (SPCBs/PCCs/CPCB: continuous activity)</p> <p>2. CPCB should update national priority list of such confirmed contaminated sites. (CPCB:continuous activity)</p> <p>3. Concerned SPCBs/PCCs shall identify the responsible person/industry, for each of these contaminated sites for suitable application for polluter pays principle for the remediation programme in line with the CPCB guidelines 'Implementing Liabilities for Environmental Damages & Disposal of Hazardous Waste and Penalty'. (SPCBs/PCCs: Immediate and continuous activity)</p> <p>4. Both SPCBs and CPCB shall continue the process of identification of probable contaminated sites and subject them to identification criteria and decide their status as well as scope and extent of such contamination. This process is a dynamic and need to be a regular feature of enforcement. (SPCBs/PCCs and CPCB: continuous activity)</p> <p>5. In case of the contaminated sites where the polluter is not identified, the State/UT Government would be required to finance remediation of such sites to safeguard the people living in contaminated areas from adverse health effects, in terms of their constitutional responsibility to protect and improve the environment. (States/UTs Government and SPCBs/PCCs)</p> <p>6. SPCBs/PCCs need to initiate immediate intervention measures for containing immediate threats from existing contaminated sites (in both active and inactive sites) and also further ingress of HW. (SPCBs/PCCs: immediate)</p>
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	<p>could be due to listing/delisting of probable contaminated sites as a result of increased enforcement and monitoring activities, and variations in criteria.</p>	
<p>8.</p>	<p>Impact of other regulations (Details in Chapter 4 – Section 4.2) The committee notes that HW resulting from enforcement of other regulations like E-waste, SW rules etc are presently not accounted in the HW management plans under HW rules. Committee finds a need to consider impact of other regulations while planning HW management including preparation of inventory and assessing the impacts.</p> <p>a. As per E-waste regulation, in case of fluorescent and other mercury containing lamp where recyclers are not available, such waste is channelized to common TSD for disposal after pretreatment/immobilization of mercury. Such waste should also be accounted into HW inventurisation.</p> <p>b. In case of solid waste rules, there is a separate category of domestic HW which is expected to be disposed in the Common Hazardous facility, however, there is no data or information available on the quantity and quality of such domestic HW available so far.</p>	<p>SPCBs/PCCs and CPCB need to take cognizance of these aspects while enforcing the relevant rules and also, preparation of HW inventory and other interventions. (SPCBs/PCCs and CPCB)</p>
<p>9.</p>	<p>Import and export. (Details in Chapter 4 – Section 4.6)</p> <p>a. Harmonization of Basel codes with ITC (HS codes): The Ministry (MOEF) provides permission on the basis of Basel codes while DGFT uses HS codes. There is a need to synchronize the two codes to avoid confusion.</p> <p>b. Risk management assessment: The customs authorities use the risk management system (RMS) to enable low risk consignments to be cleared based on the acceptance of the importer's self-assessment and without examination. Roughly 30 percent of containers covered under risk management out of</p>	<p>Committee would deliberate on this issue further for making detailed recommendations. Still however, following recommendations on co-ordination and data management are made;</p> <p>1. There is need to synchronise Basel code and HS codes to cover all scheduled items as per HW rules in customs verification and control more effectively. (MoEF&CC, Custom and Port Authorities)</p> <p>2. CAG has come out with details of illegal HW import and its storage in ports and ICDs. This needs to be verified on priority and action be taken for disposal of the same in terms of earlier orders of Hon'ble Supreme Court. (Custom and Port Authorities)</p> <p>3. Improve traceability of importers:</p>

	<p>which 10 percent are physically verified. There are different types of waste streams which have not been integrated in the RMS. There is a need to review the import/export data of various waste streams and include them in RMS. Further, waste streams in Schedule III – Parts A, B and D and Schedule VI that are often mis-declared by importers need to be identified and added to the RMS.</p> <p>c. Collaboration between regulating authorities: Regular interaction between the Ministry of Environment, Forest and Climate Change, CPCB, SPCBs/PCCs, customs and ports authorities should take place with frequent consultative meetings and trainings in order to avoid working in silos.</p>	<p>The Customs authorities could make the registration process of importers more stringent as there have been cases where importers have never been able to be traced when their illegal imports were intercepted (MoEF&CC, DGFT, Custom and Port authorities)</p>
10	<p>Capacity building in CPCB and SPCBs/PCCs and other agencies (trained adequate manpower, laboratory, budget) (Details in Chapter 4 – Section 4.7 and 4.8)</p>	<p>1. Each of the SPCBs/PCCs/Custom/TSDf, as listed in report, need to have at least one laboratory where all HW parameters as required under the Rules can be analysed. (SPCBs/PCCs/Custom/TSDf: 06 months)</p> <p>2. Capacity building in SPCBs/PCCs for rapid preliminary assessment of contaminated sites, which may include practical training on use of tools for soil and groundwater screening such as hand-held XRF instruments, Colorimeter, PID for VOCs/SVOCs, hand operated augers, groundwater pumps, level meters, etc. (CPCB: 06 months)</p> <p>3. SPCBs/PCCs and CPCB needs capacity building in terms of qualified and experienced manpower and also, tools and techniques for effective governance. Committee is informed about steps being taken by SPCBs and would review the same in detail. (MoEF&CC, State/UT Government, CPCB and SPCBs / PCCs: Immediate)</p>
11.	<p>Duties performed by State/UT Govt. as stipulated under the HOWM</p>	<p>1. There is need to sensitize State/UT Govts. about duties required to be performed by the concerned department/agency as</p>

<p>entrusted with duties of authorising Dept. of Industry/other Govt. agency and Dept. of Labour/other Govt. agency with regard to allocation/earmarking of industrial space, recognition/ registration/ health & safety/etc. of workers involved in recycling/ preprocessing/ other utilization activities of HW and submission of integrated plan under Rule 5(1), (2) and (3) respectively: The State Govt. has also been entrusted with duties of identification and notification of sites for common TSDF and publishing periodically inventory of disposal sites as stipulated under Schedule VII of the HOWM Rules, 2016. It has been observed that actions have not been taken on the above (except identification and notification for common TSDFs in few States) by the State/UT Govt. and there is lack of awareness among them in this regard.</p>	<p>5(3) and Schedule VII of the HOWM Rules, 2016. Hon'ble NGT may issue appropriatedirections in this regard. <u>(All State/UT Govts.: Immediate)</u></p>
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5. Having regard to the sensitiveness of the issue and impact of non-compliance on environment and public health, the above recommendations need to be fully implemented and monitored by the Chief Secretaries at State Level and by the MoEF&CC and CPCB at national level.
6. The affidavit of CPCB further states that the Committee has not covered all the aspects and certain other aspects which remain to be considered include contaminated site, capacity building of regulators, issues related to import and export of hazardous waste etc. for which further time of six months is required.
7. We are of the view that the Committee must complete its task expeditiously within three months from today. In view of the fact that

two months have already gone by after the affidavit was filed, its final report may now be submitted on or before 31.07.019.

8. It is made clear that if the progress in implementation of the Rules is not found to be adequate, the States may be required to furnish performance guarantees to comply with the Rules in a time bound manner.
9. CPCB may determine the scale of compensation to be recovered for violation of the Rules within one month from today and furnish a report to this Tribunal by-email at ngt.filing@gmail.com. CPCB may furnish final action taken report in the matter on or before 15.08.019 by e-mail at ngt.filing@gmail.com.
10. The Chief Secretaries may look into the issue of capacity building of the SPCBs/PCCs to deal with the issue of compliance of the Rules.

List for further consideration on 26.08.2019.

Adarsh Kumar Goel, CP

Dr. Nagin Nanda, EM

April 12, 2019
Original Application No. 804/2017
(Earlier O.A. No. 36/2012)
DV

Item No. 01

Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

Original Application No. 360/2018
M.A. No. 823/2018) (SLP (Civil) No. 2959/2014)

(With report dated 22.02.2019)

Shree Nath Sharma

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 26.09.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL,
CHAIRPERSON HON'BLE MR. JUSTICE S.P WANGDI,
JUDICIAL MEMBER HON'BLE MR. JUSTICE K.
RAMAKRISHNAN, JUDICIAL MEMBER HON'BLE DR. NAGIN
NANDA, EXPERT MEMBER**

For Applicant(s): Mr. S.K. Bhattacharya, Advocate with Shree Nath Sharma, in person

For Respondent(s): Mr. Gautam Singh, Advocate for State of Rajasthan

ORDER

1. The issue for consideration is the steps for remedial action for enforcement of environmental norms at Bharatpur, Rajasthan.
2. The matter was initiated by way of writ petition before the Rajasthan High Court with reference to pollution of Sujanganga river which is surrounded by a historical Fort. The High Court transferred the writ petition to this Tribunal which order was affirmed by the Hon'ble Supreme Court.

3. Vide order dated 31.07.2018, the Tribunal referred to the order of the High Court dated 14.11.2011 in *C.W.P. No. 065/96* directing removal of encroachments. The High Court noted that out of 860 encroachments, 760 had been removed. It was directed that hospital waste be segregated, traffic plan prepared and air and water quality tests conducted. The direction also required the steps for restoration for the Bharatpur canal.
4. The Tribunal directed the Collector and the District Magistrate, Bharatpur to take further remedial action.
5. Accordingly, an affidavit of compliance has been filed by the Commissioner, Municipal Corporation, Bharatpur annexing a status report from the Collector/District Magistrate dated 22.02.2019. The report deals with the compliance of direction for segregation of hospital waste, traffic action plan to check vehicular pollution, noise control plan, pollution control system for control of pollution of Sujanganga river, conservation and restoration of Fort and repair of Moatwall, installation of incinerator, sewerage system and monitoring mechanism, including holding of monthly meetings.
6. In view of above, steps having been taken, the immediate problem may appear to have been addressed. However, enforcement of environmental norms is a continuous requirement. The District Magistrate, CPCB and the SPCB may consider further necessary action which may be coordinated by the SPCB. First meeting for the purpose may be held within one month from today and the matter be finalized within two months. This Tribunal in *O.A. No. 606/2018*, while dealing with the compliance of Municipal Solid Waste Management Rules, 2016 also flagged other issues and required

monitoring at the level of the Chief Secretaries and the District Magistrates. The Chief Secretaries of all the States/UTs have appeared before this Tribunal, including the Chief Secretary of State of Rajasthan and directions have been issued for continuous monitoring and filing of further reports.

7. Vide order dated 12.09.2019, while fixing a schedule for further appearance of the Chief Secretaries of all the States/UTs, direction has been issued to compile information with reference to the following specific thematic areas viz.:

- 
- Compliance to Solid Waste Rules including Legacy Waste.
 - Compliance to Bio-medical Waste Rules.
 - Compliance to Construction & Demolition Waste.
 - Compliance to Hazardous Waste Rules.
 - Compliance to E-waste Rules.
 - 351 Polluter Stretches in the country.
 - 122 Non-attainment cities.
 - 100 industrial clusters.
 - Status of STPs and re-use of treated water.
 - Status of CETPs/ETPs including performance.
 - Ground water extraction/contamination and re-charge.
 - Air pollution including noise pollution.
 - Illegal sand mining.
 - Rejuvenation of water bodies.

8. Such information is to be furnished to the CPCB by the Chief Secretaries of all the States/UTs indicating:

- Current status

- Desirable level of compliance in terms of statutes.
- Gap between current status and desired levels.
- Proposal of attending the gap with time lines.
- Name and designation of designated officer for ensuring compliance to provisions under statute.

9. Since CPCB is to file updated report by 15.11.2019, the Chief Secretaries of all the States/UTs may furnish such information by 31.10.2019.

10. We may also refer to order dated 15.07.2019 in O.A. No. 710/2017, *Shailesh Singh vs. Sheela Hospital & Trauma Centre, Shahjahanpur & Ors.* directing as follows:

“We find it necessary to add that in view of Constitutional provisions under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016, it is necessary to have a District Environment Plan to be operated by a District Committee (as a part of District Planning Committee under Article 243 ZD) with representatives from Panchayats, Local Bodies, Regional Officers, State PCB and a suitable officer representing the administration, which may in turn be chaired and monitored by the District Magistrate. Such District Environment Plans and Constitution of District Committee may be placed on the website of Districts concerned. The monthly report of monitoring by the District Magistrate may be furnished to the Chief Secretary and may be placed on the website of the District and kept on such websites for a period of one year. This may be made operative from 1.08.2019. Compliance of this direction may also be seen by the Chief Secretaries of the States/UTs. This may not only comply with mandate of law but provide an institutional mechanism for effective monitoring of environment norms.”

11. To facilitate preparation of such District Environment Plan, it will be appropriate that CPCB prepares a Model/Models and places the same on its website which may be adopted with suitable changes as per local requirements for all Districts in the country and monitored by the Chief Secretaries with reports to the Tribunal in O.A. No. 606/2018.

12. The Department of Environment of all States and Union Territories may collect such District Environment Plans of their respective States and finalize the 'State Environment Plan' covering the specific thematic areas referred in Para-7 including information as contained in Para-8 and template of Model/Models District Environment Plan provided by the CPCB. The action for preparation of State's Environment Plan shall be monitored by the respective Chief Secretaries of States and Administration of UTs. Let this action be completed by 15.12.2019 and compliance be reported to the Tribunal by 31.12.2019.

13. Based on States and UTs Environment Plans, MoEF&CC and CPCB shall prepare country's Environment Plan accordingly. Let the Secretary, MoEF&CC and Chairman, CPCB steer the preparation of country's Environment Plan. Let their action be completed by 31.01.2020 and compliance be reported to the Tribunal by 15.02.2020.

Let the copy of this order be sent to the Secretary, MoEF&CC, Chairman, CPCB, All Chief Secretaries of States and Administrators of all the Union Territories by e-mail for compliance.

The application is disposed of except for further monitoring of the matter in O.A. No. 606/2018.

Adarsh Kumar Goel, CP

S.P Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

September 26, 2019
Original Application No. 360/2018DV



Advisory on Single-Use Plastic

(iv) Any other plastic material for which an alternative exists.

(3) All the institutions shall promote and practice source segregation in the office premises

III Waste management system improvements

- (i) States/UTs may support local bodies / Gram Panchayats in improving source segregation of waste. Waste collection and transportation systems may be standardized, and best practices may be inculcated. States/UTs and ULBs may focus on improving last mile delivery of collection and transportation services. The focus should also be placed on improving collection and transportation infrastructure and ensuring segregated waste is collected.
- (ii) All plastic waste generated / packaging industry may be called upon to implement the Extended Producer Responsibility by effectively collecting back plastic waste.

IV Supporting activities

Promotion of eco-friendly alternatives

State/UT Governments can play a key role in promoting eco-friendly alternatives in order to phase out single-use plastics progressively. Projects which support up scaling or recycling of single-use plastic items and promote small scale or micro enterprises, should be encouraged. Encouragement needs to be given for development of alternate packaging materials and SUPs.

Social Awareness and public education

- (i) Awareness / Sensitization campaigns should be organized throughout the State/UT through TV/Radio etc. to discourage the use of single-use plastic.
- (ii) All events organized by or sponsored by the Government shall be single-use plastic free.
- (iii) Government should try to invite eminent public personalities to serve as brand ambassadors or in any other capacity in the campaign to discourage the use of single-use plastic.
- (iv) Attention should be focussed on creating awareness / sensitization in hotspots of plastic usage including tourist spots, religious spots, beaches, pilgrimage sites, schools, colleges, etc.
- (v) Particular attending should also be focussed on students and young adults to inculcate a behavioural change in plastic usage. Changes in school curriculum should be introduced to discourage use of single-use plastics, promote the use of plastic alternate materials and promote source segregation.

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V State Governments may emphasize the need to implement provisions of Solid Waste Management Rules, 2016 and Plastic Waste Management 2016 for an effective synergy between waste collection of all types and their efficient disposal.

2.0 Indicative Gap Analysis and Action Plan for complying with waste Management Rules

(i) Solid Waste Management

a. Current status related to solid waste management

	Urban Local Bodies	No of Wards	No of Households	population	Solid Waste Generated par day
1	Municipalities(Nagar palika parishad nanparabahraich)	25	8545	48441	9.74

B. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	N.P.P Nanpara	6 months
2.	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of city.	N.P.P Nanpara	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping.	Purchasing of equipment.	N.P.P Nanpara	As per requirement
3	Waste collection			N.P.P Nanpara	
(i)	100% Collection of solid waste	100 % of waste collected.	-	N.P.P Nanpara	-
(ii)	Arrangement for door to door collection	All 25 wards are covered.	Improvement in work needed. Regarding vehicles.	N.P.P Nanpara	6 months
(iii)	waste collection trolleys with separate compartments	5 trolleys are available.	Maintenance of vehicle needed.	N.P.P Nanpara	On regular basis.
(iv)	Mini collection Trucks with Separate compartments	7 Mini tippers are available.	Maintenance of vehicle needed.	N.P.P Nanpara	On regular basis.
(v)	waste Deposition centers (for domestic hazardous waste)	Center not available.	Construction of plant/MRF needed	N.P.P Nanpara	1 year.
4.	waste Transport			N.P.P Nanpara	
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Construction of plant/MRF needed for waste disposal.	N.P.P Nanpara	1 year
(ii)	Bulk waste trucks	not available.	not available.	N.P.P Nanpara	-

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(iii)	waste transfer points	Dumpsite available.	Construction of plant/MRF needed for waste disposal.	N.P.P Nanpara	1 year
5	Waste Treatment and Disposal			N.P.P Nanpara	
(i)	wet-waste management on site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper.(No one generate 100 kg waste per day.)	N.P.P Nanpara	-
(ii)	Wet-waste management facility(ies) for central bio mathination /composting of wets waste.	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.P Nanpara	1 year
(iii)	Dry-waste management: material Recovery for dry-waste fraction	Land Identified.	Tender under process.	N.P.P Nanpara	6 months
(iv)	Disposal of Inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed	N.P.P Nanpara	1 year
(v)	Remediation of historic/legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	N.P.P Nanpara	-
(vi)	involvement of NGOs	Meeting with NGOs not done.	Meeting with NGOs should be complet, discuss our plan and objective.	N.P.P Nanpara	On regular time of interval.
(vii)	ERP of produces: linkage with producer/ brand owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL).	N.P.P Nanpara	3 months
(viii)	Authorization of waste pickers	No waste pickers	No waste pickers	N.P.P Nanpara	-
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	No	Under Process.	N.P.P Nanpara	6 months

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above table. if required budgetary requirement and provisions may also be mentioned]


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(ii) Plastic waste Management

(a) Current status related to plastic waste management

	urban Local bodies	Estimated quantity of Plastic waste Generated
1	Municipalities(Nagar palika parishad nanparabahraich))	0.4 MT

(b) Identification of gaps & action plan:

S.No	action points for municipalities	Identification of gaps	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	100 % complete.	More IEC activities for waste collection including Plastic Waste	N.P.P Nanpara	4 Months
2	Facilitate organized collection of PW at waste transfer point or Material Recovery facility	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.P Nanpara	4 Months
3	PW collection	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.P Nanpara	4 Months
4	Awareness and programs Implementation	Lack of awareness.	IEC activities.	N.P.P Nanpara	Per Month
5	Access to plastic waste Disposal facilities.	No recycling plant available.	Previous seized Plastic Waste sent to nagarnigamayodhya.	N.P.P Nanpara	1 year

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. if required budgetary requirement and provisions may also be mentioned]

(iii) C&D waste management

a. Current status related to C&D waste

Details of Data Requirement	Present Stats
Total C & D waste generation in MT parday(As per from municipal corporations/ municipalities	0.4 MT
Dose the District has access to C&D waste recycling facility?	All C& D waste sent to the local registered construction contractor of

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b. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C&D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling Plant Needed.	N.P.P Nanpara	1 Year
2	Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by-laws published for user fee.	Local by-laws published for user fee.	N.P.P Nanpara	-
3	C&D recycling facility	No plant available.	All C&D waste sent to the local registered construction contractor of ULB.	N.P.P Nanpara	-
4	Usage of recycled C&D waste in non-structural concrete ,paving blocks, lower layers of road pavements, colony and rural roads	All C&D waste sent to the local registered construction contractor of ULB.	Plant needed.	N.P.P Nanpara	1 year
5	IEC on C&D waste management.	IEC activities for C&D is done	More activities needed.	N.P.P Nanpara	Per Month

[Action plan for C&D waste management should cover all village panchayat/blocks town municipalities/city corporations, action need not be prepared in Tabular form ad above, however all the components mentioned should for addressed for overall C&D waste management. Action plan need not be prepared in tabular form. SPCBs/PCC be part of action plan. action plan may dwell upon relevant action points not mentioned in above template.]

(vi)E-waste Management

a. Current Status related to E-waste Management

Details of Date Requirement	Present Status
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Inventory of E-Waste in MT/year	MT/year
Collection centers established by ULBs in the District	[Nos]
Collection centers established by Producers or their PROs	[Nos]
No authorized E-waste recyclers/ Dismantler	[Nos]

b. Identification of gap and action plan:

S.No.	Action points	Gaps in Identification	Action plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / BWG				
2	E-Waste Collection Points				
3	Linkage among Stakeholders to Channelize E-Waste				
4	Regulation of Illegal E-waste recycling/ dismantling				
5	Integration of Informal Sector				
6	Awareness and Education				

[CPCB in the prescribed authority to grant extended producer authorization to various producers of Electrical and Electronic Equipment being placed on market. Targets For Collection of their E-waste is given to each producers. Every Producers Should have installed a network of collection enters pan India , accordingly, every district should be covered. SPCBs/PCCS are given mandate to ensure implementation of EPR authorization. Therefore district administration should have all information abbot collation centers /call centers established by various producers in the District. Such management should be disseminated to public and local administration. Action plan for E-waste management should cover the aspects of inventory, collation centers for e-waste channelization effective EPR verification by SPCBs. Action plan may dwell upon other Relevant action poets not mentioned in above template.]

District level

4.2 Domestic Sewage

a. Identification of gaps and Action plan for treatment of domestic sewage

Details of Date Requirement	Present Status
No of Class-II towns and above	3
No of class-I towns above	1
No of towns STPs installed	0
No of towns needing STPs	1
No of ULBs having partial underground sewerage network	0

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Total Quantity of Sewage generated in District from Class II Cities and above	0
Quantity of treated sewage flowing into Rivers (directly or indirectly)	0
Quantity of untreated or partially treated sewage (directly or indirectly)	0
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	0

b. Identification of gaps and Action plan for treatment for domestic sewage:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1.	sewage treatment plants (STPs)	No plant Available	Jal Nigam	-
2.	Underground sewage network	No Underground sewage network in the city	-	-

[Action plan for installing new/up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration may draw action points in consultation with ULBs and urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action points which are not mentioned in above template.]

5.0 Industrial waste water management

a. current status related to industrial wastewater Management

Number of Red, orange, green and white industries the District	[Nos of Red industries], [Nos of orange industries], [Nos of green industries], and white industries]
No of industries discharging wastewater generated	[Nos]
Total Quantity of Industrial wastewater generated	[MLD]
Quantity of treated industrial wastewater discharged into Nalas/Rivers	[MLD]
Common Effluent treatment Facilities	[Nos]
No of Industries meeting Standards	[Nos]
No of Industries not meeting discharge standards	[Nos]

a. Identification of gaps and Action plan for Industrial wastewater:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1	Compliance to discharge norms by Industries	-	-	-
2	Complaint redressal system	-	-	-

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2.0 Indicative Gap Analysis and Action Plan for complying with waste Management Rules

(i) Solid Waste Management

a. Current status related to solid waste management

	Urban Local Bodies	No of Wards	No of Households	population	Solid Waste Generated par day
1	Municipalities (Nagar Palika Parishad Bahraich)	31	33959	186223	41.9 MT

B. Identification of gaps and Action plan:

S.N o.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	NPP Bahraich	6 months
2.	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of city.	NPP Bahraich	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping.	Purchasing of equipment.	NPP Bahraich	As per requirement
3	Waste collection				
(i)	100% Collection of solid waste	100 % of waste collected.	-	NPP Bahraich	-
(ii)	Arrangement for door to door collection	All 31 wards are covered.	Improvement in work needed. Regarding vehicles.	NPP Bahraich	6 months
(iii)	waste collection trolleys with separate compartments	9 trolleys are available.	Maintenance of vehicle needed.	NPP Bahraich	On regular basis.
(iv)	Mini collection Trucks with Separate compartments	5 Mini tippers are available.	Maintenance of vehicle needed.	NPP Bahraich	On regular basis.
(v)	waste Deposition centers (for domestic hazardous waste)	Center not available.	Construction of plant needed	NPP Bahraich	1 year.
4.	waste Transport				
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Construction of plant needed for waste disposal.	NPP Bahraich	1 year
(ii)	Bulk waste trucks	3 trucks are available.	3 trucks are available.	NPP Bahraich	-

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(iii)	waste transfer points	Dumpsite available.	Construction of plant needed for waste disposal.	NPP Bahraich	1 year
5	Waste Treatment and Disposal				
(i)	wet-waste management on site composting by bulk waste generators (Authority may decide on requirement as per Rules	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper.(No one generate 100 kg waste per day.)	NPP Bahraich	-
(ii)	Wet-waste management facility(ies) for central bio mathination /composting of wets waste.	Not available.	Construction of plant needed for waste disposal.	NPP Bahraich	1 year
(iii)	Dry-waste management: material Recovery for dry-waste fraction	Under Construction.	80 % of work completed.	NPP Bahraich	4 months
(iv)	Disposal of Inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant needed	NPP Bahraich	1 year
(v)	Remediation of historic/legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	NPP Bahraich	-
(vi)	involvement of NGOs	Meeting with NGOs not done.	Two NGO's are working with NPP. Meeting with NGOs should be completed, discuss our plan and objective.	NPP Bahraich	On regular time of interval.
(vii)	ERP of produces: linkage with producer/ brand owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL).	NPP Bahraich	3 months
(viii)	Authorization of waste pickers	Yes.	Yes.	NPP Bahraich	-
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	Yes .	own by-laws to comply with SWM Rules 2016 published.	NPP Bahraich	-


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[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above table. If required budgetary requirement and provisions may also be mentioned]

(ii) Plastic waste Management

(a) Current status related to plastic waste management

urban Local bodies		Estimated quantity of Plastic waste Generated
1	municipalities (nagarpalika parishad Bahraich)	4 MT

(b) Identification of gaps & action plan:

S.No	action points for municipalities	Identification of gaps	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	100 % complete.	More IEC activities for waste collection including Plastic Waste	NPP Bahraich	4 Months
2	Facilitate organized collection of PW at waste transfer point or Material Recovery facility	Under Construction.	80 % of work completed.	NPP Bahraich	4 Months
3	PW collection	Under Construction.	80 % of work completed.	NPP Bahraich	4 Months
4	Awareness and programs Implementation	Lack of awareness.	IEC activities.	NPP Bahraich	Per Month
5	Access to plastic waste Disposal facilities.	No recycling plant available.	Previous seized Plastic Waste sent to nagarnigamayodhya.	NPP Bahraich	1 year

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. if required budgetary requirement and provisions may also be mentioned]

(iii) C&D waste management

a. Current status related to C&D waste

Details of Data Requirement	Present Stats
Total C & D waste generation in MT par day(As per from municipal corporations/ municipalities)	2.9
Dose the District has access to C&D waste recycling facility?	All C& D waste sent to the local registered construction contractor of ULB.


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b. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C& D waste sent to the local registered construction contractor of ULB.No point is available.	Recycling Plant Needed.	NPP Bahraich	1 Year
2	Weather local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by-laws published for user fee.	Local by-laws published for user fee.	NPP Bahraich	-
3	C&D recycling facility	No plant available.	All C& D waste sent to the local registered construction contractor of ULB.	NPP Bahraich	-
4	Usage of recycled C&D waste in non-structural concrete ,paving blocks, lower layers of road pavements, colony and rural roads	All C& D waste sent to the local registered construction contractor of ULB.	Plant needed.	NPP Bahraich	1 year
5	IEC on C&D waste management.	IEC activities for C&D is done	More activities needed.	NPP Bahraich	Per Month

[Action plan for C&D waste management should cover all village panchayat/blocks town municipalities/city corporations, action need not be prepared in Tabular form ad above, however all the components mentioned should for addressed for overall C&D waste management.

Action plan need not be prepared in tabular form. SPCBs/PCC be part of action plan. action plan may dwell upon relevant action points not mentioned in above template.]

(vi)E-waste Management

a. Current Status related to E-waste Management

Details of Date Requirement	Present Status
Inventory of E-Waste in MT/year	MT/year
Collection centers established by ULBs in the District	[Nos]
Collection centers established by Producers or their PROs	[Nos]
No authorized E-waste recyclers/ Dismantler	[Nos]

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b. Identification of gap and action plan:

S.No.	Action points	Gaps in Identification	Action plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / BWG				
2	E-Waste Collection Points				
3	Linkage among Stakeholders to Channelize E-Waste				
4	Regulation of Illegal E-waste recycling/ dismantling				
5	Integration of Informal Sector				
6	Awareness and Education				

[CPCB in the prescribed authority to grant extended producer authorization to various producers of Electrical and Electronic Equipment being placed on market. Targets For Collection of their E-waste is given to each producers. Every Producers Should have installed a network of collection enters pan India , accordingly, every district should be covered. SPCBs/PCCS are given mandate to ensure implementation of EPR authorization. Therefore district administration should have all information abbot collation centers /call centers established by various producers in the District. Such management should be disseminated to public and local administration. Action plan for E-waste management should cover the aspects of inventory, collation centers for e-waste channelization effective EPR verification by SPCBs. Action plan may dwell upon other Relevant action poets not mentioned in above template.]

District level

4.2 Domestic Sewage

a. Identification of gaps and Action plan for treatment of domestic sewage

Details of Date Requirement	Present Status
No of Class-II towns and above	3
No of class-I towns above	1
No of towns STPs installed	0
No of towns needing STPs	1
No of ULBs having partial underground sewerage network	0
Total Quantity of Sewage generated in District from Class II Cities and above	0
Quantity of treated sewage flowing into Rivers (directly or indirectly)	0
Quantity of untreated or partially treated sewage (directly or indirectly)	0
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	0

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b. Identification of gaps and Action plan for treatment for domestic sewage:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1.	sewage treatment plants(STPs)	No plant Available	Jal Nigam	-
2.	Underground sewage network	No Underground sewage network in the city	-	-

[Action plan for installing new/up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration. may draw action points in consultation with ULBs and urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action poets which are not mentioned in above template.]

5.0 Industrial waste water management

a. current status rerated to industrial wastewater Management

Number of Red, orange, green and white industries the District	[Nos of Red industries], Nos of orange industries], Nos of green industries], and white industries]
No of industries discharging wastewater generated	[Nos]
Total Quantity of Industrial wastewater generated	[MLD]
Quantity of treated industrial wastewater discharged into Nalas/Rivers	[MLD]
Common Effluent treatment Facilities	[Nos]
No of Industries meeting Standards	[Nos]
No of Industries not meeting discharge standards	[Nos]

a. Identification of gaps and Action plan for Industrial wastewater:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1	Compliance to discharge norms by Industries	-	-	-
2	Complaint redressal system	-	-	-


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2.0 Indicative Gap Analysis and Action Plan for complying with waste Management Rules

(i) Solid Waste Management

a. Current status related to solid waste management

	Urban Local Bodies	No of Wards	No of Households	population	Solid Waste Generated par day
1	Nagar panchayat(Town area N P Jarwal)	13	2698	19342	3.4

B. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	N.P.Jarwal	6 months
2.	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of city.	N.P.Jarwal	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping.	Purchasing of equipment.	N.P.Jarwal	As per requirement
3	Waste collection			N.P.Jarwal	
(i)	100% Collection of solid waste	100 % of waste collected.	-	N.P.Jarwal	-
(ii)	Arrangement for door to door collection	All 13 wards are covered.	Improvement in work needed. Regarding vehicles.	N.P.Jarwal	6 months
(iii)	waste collection trolleys with separate compartments	2 trolleys are available.	Maintenance of vehicle needed.	N.P.Jarwal	On regular basis.
(iv)	Mini collection Trucks with Separate compartments	3 Mini tippers are available.	Maintenance of vehicle needed.	N.P.Jarwal	On regular basis.
(v)	waste Deposition centers (for domestic hazardous waste)	Center not available.	Construction of plant/MRF needed	N.P.Jarwal	1 year.
4.	waste Transport			N.P.Jarwal	
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Construction of plant/MRF needed for waste disposal.	N.P.Jarwal	1 year
(ii)	Bulk waste trucks	not available.	not available.	N.P.Jarwal	-
(iii)	waste transfer points	Dumpsite	Construction	N.P.Jarwal	1 year

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		available.	of plant/MRF needed for waste disposal.		
5	Waste Treatment and Disposal			N.P.Jarwal	
(i)	wet-waste management on site composting by bulk waste generators (Authority may decide on requirement as par Rules	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper.(No one generate 100 kg waste per day.)	N.P.Jarwal	-
(ii)	Wet-waste management facility(ies) for central bio mathination /composting of wets waste.	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.Jarwal	1 year
(iii)	Dry-waste management: material Recovery for dry-waste fraction	Land Identified.	Tender under process.	N.P.Jarwal	6 months
(iv)	Disposal of Inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed	N.P.Jarwal	1 year
(v)	Remediation of historic/legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	N.P.Jarwal	-
(vi)	involvement of NGOs	Meeting with NGOs not done.	Meeting with NGOs should be complet, discuss our plan and objective.	N.P.Jarwal	On regular time of interval.
(vii)	ERP of produces: linkage with producer/ brand owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL).	N.P.Jarwal	3 months
(viii)	Authorization of waste pickers	No waste pickers	No waste pickers	N.P.Jarwal	-
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	No	Under Process.	N.P.Jarwal	6 months

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above table. if required budgetary requirement and provisions may also be mentioned]

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(ii) Plastic waste Management

(a) Current status related to plastic waste management

	urban Local bodies	Estimated quantity of Plastic waste Generated
1	Nagar panchayt(nagar panchayat jarwalBahraich)	0.2 MT

(b) Identification of gaps & action plan:

S.No	action points for municipalities	Identification of gaps	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	100 % complete.	More IEC activities for waste collection including Plastic Waste	N.P.Jarwal	4 Months
2	Facilitate organized collection of PW at waste transfer point or Material Recovery facility	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.Jarwal	4 Months
3	PW collection	Not available.	Construction of plant/MRF needed for waste disposal.	N.P.Jarwal	4 Months
4	Awareness and programs Implementation	Lack of awareness.	IEC activities.	N.P.Jarwal	Per Month
5	Access to plastic waste Disposal facilities.	No recycling plant available.	Previous seized Plastic Waste sent to nagarnigamayodhya.	N.P.Jarwal	1 year

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. if required budgetary requirement and provisions may also be mentioned]

(iii) C&D waste management

a. Current status related to C&D waste

Details of Data Requirement	Present Stats
Total C & D waste generation in MT par day(As per from municipal corporations/ municipalities)	0.2 MT
Dose the District has access to C&D waste recycling facility?	All C& D waste sent to the local registered construction contractor of ULB.

b. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1	Arrangement for separate collection	All C&D waste sent to the local	Recycling Plant	N.P.Jarwal	1 Year

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	of C&D waste to C&D waste deposition point.	registered construction contractor of ULB. No point is available.	Needed.		
2	Weather local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by-laws published for user fee.	Local by-laws published for user fee.	N.P.Jarwal	-
3	C&D recycling facility	No plant available.	All C&D waste sent to the local registered construction contractor of ULB.	N.P.Jarwal	-
4	Usage of recycled C&D waste in non-structural concrete ,paving blocks, lower layers of road pavements, colony and rural roads	All C&D waste sent to the local registered construction contractor of ULB.	Plant needed.	N.P.Jarwal	1 year
5	IEC on C&D waste management.	IEC activities for C&D is done	More activities needed.	N.P.Jarwal	Per Month

[Action plan for C&D waste management should cover all village panchayat/blocks town municipalities/city corporations, action need not be prepared in Tabular form ad above, however all the components mentioned should for addressed for overall C&D waste management. Action plan need not be prepared in tabular form. SPCBs/PCC be part of action plan. action plan may dwell upon relevant action points not mentioned in above template.]

(vi)E-waste Management

a. Current Status related to E-waste Management

Details of Date Requirement	Present Status
Inventory of E-Waste in MT/year	MT/year
Collection centers established by ULBs in the District	[Nos]
Collection centers established by Producers or their PROs	[Nos]
No authorized E-waste recyclers/ Dismantler	[Nos]

b. Identification of gap and action plan:

S.No.	Action points	Gaps in Identification	Action plan	Responsible agency	Timeline for completion of action plan
1	Inventory /				

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	Generation of E-Waste / BWG				
2	E-Waste Collection Points				
3	Linkage among Stakeholders to Channelize E-Waste				
4	Regulation of Illegal E-waste recycling/ dismantling				
5	Integration of Informal Sector				
6	Awareness and Education				

[CPCB in the prescribed authority to grant extended producer authorization to various producers of Electrical and Electronic Equipment being placed on market. Targets For Collection of their E-waste is given to each producers. Every Producers Should have installed a network of collection enters pan India , accordingly, every district should be covered. SPCBs/PCCS are given mandate to ensure implementation of EPR authorization. Therefore district administration should have all information abbot collation centers /call centers established by various producers in the District. Such management should be disseminated to public and local administration. Action plan for E-waste management should cover the aspects of inventory, collation centers for e-waste channelization effective EPR verification by SPCBs. Action plan may dwell upon other Relevant action poets not mentioned in above template.]


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District level

4.2 Domestic Sewage

a. Identification of gaps and Action plan for treatment of domestic sewage

Details of Date Requirement	Present Status
No of Class-II towns and above	3
No of class-I towns above	1
No of towns STPs installed	0
No of towns needing STPs	1
No of ULBs having partial underground sewerage network	0
Total Quantity of Sewage generated in District from Class II Cities and above	0
Quantity of treated sewage flowing into Rivers (directly or indirectly)	0
Quantity of untreated or partially treated sewage (directly or Indirectly)	0
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	0

b. Identification of gaps and Action plan for treatment for domestic sewage:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1.	sewage treatment plants(STPs)	No plant Available	Jal Nigam	-
2.	Underground sewage network	No Underground sewage network in the city	-	-

[Action plan for installing new/up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration. may draw action points in consultation with ULBs and urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action points which are not mentioned in above template.]

5.0 Industrial waste water management

a. current status related to industrial wastewater Management

Number of Red, orange, green and white Industries the District	[Nos of Red Industries], Nos of orange industries], Nos of green industries], and white industries]
No of industries discharging wastewater generated	[Nos]
Total Quantity of Industrial wastewater generated	[MLD]
Quantity of treated industrial wastewater discharged into Nalas/Rivers	[MLD]
Common Effluent treatment Facilities	[Nos]
No of Industries meeting Standards	[Nos]
No of Industries not meeting discharge standards	[Nos]

a. Identification of gaps and Action plan for Industrial wastewater:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1	Compliance to discharge norms by Industries	-	-	-
2	Complaint redressal system	-	-	-


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2.0 Indicative Gap Analysis and Action Plan for complying with waste Management Rules

(i) Solid Waste Management

a. Current status related to solid waste management

	Urban Local Bodies	No of Wards	No of Households	population	Solid Waste Generated par day
1	Nagar panchayat (Town area N P Risiya)	11	2223	13750	2.43

B. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1.	Segregation				
(i)	Segregation of waste at source	Lack of Information regarding Segregation.	IEC activities.	N.P Risiya	6 months
2.	Sweeping				
(i)	Manual Sweeping	Complete Sweeping is done.	Regular Inspection of city.	N.P Risiya	-
(ii)	Mechanical Road Sweeping & Collection	No equipment available for mechanical sweeping.	Purchasing of equipment.	N.P Risiya	As per requirement
3	Waste collection			N.P Risiya	
(i)	100% Collection of solid waste	100 % of waste collected.	-	N.P Risiya	-
(ii)	Arrangement for door to door collection	All 25 wards are covered.	Improvement in work needed. Regarding vehicles.	N.P Risiya	6 months
(iii)	waste collection trolleys with separate compartments	2 trolleys are available.	Maintenance of vehicle needed.	N.P Risiya	On regular basis.
(iv)	Mini collection Trucks with Separate compartments	1 Mini tippers are available.	Maintenance of vehicle needed.	N.P Risiya	On regular basis.
(v)	waste Deposition centers (for domestic hazardous waste)	Center not available.	Construction of plant/MRF needed	N.P Risiya	1 year.
4.	waste Transport			N.P Risiya	
(i)	Review existing infrastructure for waste Transport.	100 % waste transported at the selected place.	Construction of plant/MRF needed for waste disposal.	N.P Risiya	1 year
(ii)	Bulk waste trucks	not available.	not available.	N.P Risiya	-

Ajay Sr
D.FO

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(iii)	waste transfer points	Dumpsite available.	Construction of plant/MRF needed for waste disposal.	N.P Risiya	1 year
5	Waste Treatment and Disposal			N.P Risiya	
(i)	wet-waste management on site composting by bulk waste generators (Authority may decide on requirement as per Rules)	No Bulk Waste Generator in city area.	Notification for BWG was published in Newspaper. (No one generate 100 kg waste per day.)	N.P Risiya	-
(ii)	Wet-waste management facility(ies) for central bio mathination /composting of wets waste.	Not available.	Construction of plant/MRF needed for waste disposal.	N.P Risiya	1 year
(iii)	Dry-waste management: material Recovery for dry-waste fraction	Land Identified.	Tender under process.	N.P Risiya	6 months
(iv)	Disposal of Inert and non-recyclable wastes: Sanitary Landfill	Sanitary Landfill not available.	Construction of plant/MRF needed	N.P Risiya	1 year
(v)	Remediation of historic/legacy dumpsite	No legacy waste available.	Previous legacy waste remediation completed.	N.P Risiya	-
(vi)	involvement of NGOs	Meeting with NGOs not done.	Meeting with NGOs should be complet, discuss our plan and objective.	N.P Risiya	On regular time of interval.
(vii)	ERP of produces: linkage with producer/ brand owners	Lack of information about rules.	IEC activities and meeting with PRO's and (VYAPAR MANDAL).	N.P Risiya	3 months
(viii)	Authorization of waste pickers	No waste pickers	No waste pickers	N.P Risiya	-
(ix)	Preparation of own by-laws to comply with SWM Rules 2016	No	Under Process.	N.P Risiya	6 months

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above table. if required budgetary requirement and provisions may also be mentioned]

अधिरापी अधिकारी
नगर पंचायत रिसिया
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(ii) Plastic waste Management

(a) Current status related to plastic waste management

	urban Local bodies	Estimated quantity of Plastic waste Generated
1	Nagar panchayt(nagar panchayat RisiyaBahraich)	0.12

(b) Identification of gaps & action plan:

S.No	action points for municipalities	Identification of gaps	Action plan	Agencies Responsible	Target time for Compliance
1	Door to Door collection of dry waste including PW	100 % complete.	More IEC activities for waste collection including Plastic Waste	N.P Risiya	4 Months
2	Facilitate organized collection of PW at waste transfer point or Material Recovery facility	Not available.	Construction of plant/MRF needed for waste disposal.	N.P Risiya	4 Months
3	PW collection	Not available.	Construction of plant/MRF needed for waste disposal.	N.P Risiya	4 Months
4	Awareness and programs Implementation	Lack of awareness.	IEC activities.	N.P Risiya	Per Month
5	Access to plastic waste Disposal facilities.	No recycling plant available.	Previous seized Plastic Waste sent to nagarnigamayodhya.	N.P Risiya	1 year

[Action plan should cover all village panchayats /blocks/town municipalities/city corporations. Action plan need not be prepared in tabular form as above. Action plan may dwell upon other relevant action points not mentioned in above template. if required budgetary requirement and provisions may also be mentioned]

(iii) C&D waste management

a. Current status related to C&D waste

Details of Data Requirement	Present Stats
Total C & D waste generation in MT par day(As per from municipal corporations/ municipalities)	0.12 MT
Dose the District has access to C&D waste recycling facility?	All C& D waste sent to the local registered construction contractor of ULB.

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बहराइच

b. Identification of gaps and Action plan:

S.No.	Action points for Municipalities (City)	Identification of gap	Action plan	Responsible agencies	Timeline for completion of action plan
1	Arrangement for separate collection of C&D waste to C&D waste deposition point.	All C&D waste sent to the local registered construction contractor of ULB. No point is available.	Recycling Plant Needed.	N.P Risia	1 Year
2	Weather local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	Local by-laws published for user fee.	Local by-laws published for user fee.	N.P Risia	-
3	C&D recycling facility	No plant available.	All C&D waste sent to the local registered construction contractor of ULB.	N.P Risia	-
4	Usage of recycled C&D waste in non-structural concrete ,paving blocks, lower layers of road pavements, colony and rural roads	All C&D waste sent to the local registered construction contractor of ULB.	Plant needed.	N.P Risia	1 year
5	IEC on C&D waste management.	IEC activities for C&D is done	More activities needed.	N.P Risia	Per Month

[Action plan for C&D waste management should cover all village panchayat/blocks town municipalities/city corporations, action need not be prepared in Tabular form ad above, however all the components mentioned should for addressed for overall C&D waste management.

Action plan need not be prepared in tabular form. SPCBs/PCC be part of action plan. action plan may dwell upon relevant action points not mentioned in above template.]

(vi)E-waste Management

a. Current Status related to E-waste Management

Details of Date Requirement	Present Status
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बहराइच

Inventory of E-Waste in MT/year	MT/year
Collection centers established by ULBs in the District	[Nos]
Collection centers established by Producers or their PROs	[Nos]
No authorized E-waste recyclers/ Dismantler	[Nos]

b. Identification of gap and action plan:

S.No.	Action points	Gaps in Identification	Action plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / BWG				
2	E-Waste Collection Points				
3	Linkage among Stakeholders to Channelize E-Waste				
4	Regulation of illegal E-waste recycling/ dismantling				
5	Integration of Informal Sector				
6	Awareness and Education				

[CPCB is the prescribed authority to grant extended producer authorization to various producers of Electrical and Electronic Equipment being placed on market. Targets For Collection of their E-waste is given to each producers. Every Producers Should have installed a network of collection enters pan India , accordingly, every district should be covered. SPCBs/PCCS are given mandate to ensure implementation of EPR authorization. Therefore district administration should have all information abbot collation centers /call centers established by various producers in the District. Such management should be disseminated to public and local administration. Action plan for E-waste management should cover the aspects of inventory, collation centers for e-waste channelization effective EPR verification by SPCBs. Action plan may dwell upon other Relevant action poets not mentioned in above template.]

District level

4.2 Domestic Sewage

a. Identification of gaps and Action plan for treatment of domestic sewage

Details of Date Requirement	Present Status
No of Class-II towns and above	3
No of class-I towns above	1
No of towns STPs installed	0
No of towns needing STPs	1
No of ULBs having partial underground sewerage network	0

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नाम पञ्चायत रिसिया
बदराइच

Total Quantity of Sewage generated in District from Class II Cities and above	0
Quantity of treated sewage flowing into Rivers (directly or indirectly)	0
Quantity of untreated or partially treated sewage (directly or indirectly)	0
Quantity of sewage flowing into lakes	0
Total available Treatment Capacity	0

b. Identification of gaps and Action plan for treatment for domestic sewage:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1.	sewage treatment plants(STPs)	No plant Available	Jal Nigam	-
2.	Underground sewage network	No Underground sewage network in the city	-	-

[Action plan for installing new/up-grading sewage treatment and laying of sewerage network is the mandate of local bodies, being cost intensive action points, the district administration. may draw action points in consultation with ULBs and urban development department. Action plan need not be prepared in Tabular form. ULBs, SPCBs/PCC and UDD may be part of action plan for collection and treatment of sewage. Action plan may also dwell upon other relevant action points which are not mentioned in above template.]

5.0 Industrial waste water management

a. current status related to industrial wastewater Management

Number of Red, orange, green and white industries the District	[Nos of Red industries], Nos of orange industries], Nos of green industries], and white industries]
No of industries discharging wastewater generated	[Nos]
Total Quantity of Industrial wastewater generated	[MLD]
Quantity of treated industrial wastewater discharged into Nalas/Rivers	[MLD]
Common Effluent treatment Facilities	[Nos]
No of Industries meeting Standards	[Nos]
No of Industries not meeting discharge standards	[Nos]

a. Identification of gaps and Action plan for Industrial wastewater:

S.No.	Action points	Gaps and Action plan	Responsible agency	Timeline for completion
1	Compliance to discharge norms by Industries	-	-	-
2	Complaint redressal system	-	-	-

अधिकारी
नगर पंचायत सिन्धु
बडोदा

प्रेषक,

सेवा में,

खान अधिकारी,
बहराइच।

प्रभागीय वनाधिकारी,
बहराइच वन प्रभाग,
बहराइच।

संख्या 696 / तीस-खनन / 2021

दिनांक :- 27 / 05 / 2021

महोदय,

कृपया कार्यालय जिलाधिकारी, बहराइच के पत्र संख्या 4787/29-4 (DEP), बहराइच दिनांक 25.05.2021 का सन्दर्भ ग्रहण करने का कष्ट करे। जिसके क्रम में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, पर्यावरण, वन जलवायु परिवर्तन मंत्रालय, भारत सरकार के उपरोक्त संदर्भित पत्र संख्या द्वारा ओ0ए0 संख्या 360/2019 में मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली द्वारा पारित आदेश दिनांक 29.01.2021 के क्रम में डिस्ट्रिक्ट इन्चार्जमेन्ट मैनेजमेन्ट प्लान संशोधित प्रारूप में भरकर उपरोक्त सूचना संलग्न प्रारूप पर उपलब्ध कराये जाने के निर्देश दिये है।

अतः उपरोक्त सूचना आपकी सेवा में सूचनार्थ एवं आवश्यक कार्यवाही हेतु

प्रेषित है।

संलग्न:- यथोक्त।

श्री भागीवती
D.F.P.


खान अधिकारी,
बहराइच।

6.0 Mining activity Management plan

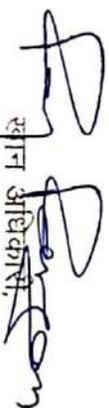
a. Current Status related to mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining activity	Name of mines- Ordinary Sand [Sand Mining]/[Iron Ore]/[Bauxite]/[coal]/other[specify]
No of licenced Mining operations in the District	02
% Area covered under mining in District	4.46
Area of Sand Mining	0
Area of Sand Mining	0

B. Identification of gaps and action plans

S.No.	Action points	Gaps and action Plan	Responsible agency	Timeline for completion
-------	---------------	----------------------	--------------------	-------------------------

1	Monitoring of Mining activity	A district level task team may be identified to identify mining activity and to monitor status wither respect to environmental compliance		Of action plan A task force/committee constituted by Up govt throught leather no 616/86-2018 371/2005 dated 20-03-2018 which District magistrate will be chairman and District Mines officer will be Secretary member.
2	Inventory of illegal mining if any mining	Action plan to identify illegal sand and other mining activity in the District through surveillance, patrolling and enforcement. District Level task force may be constituted for control of illegal mining activity		A task force/committee constituted by Up govt throught leather no 616/86-2018 371/2005 dated 20-03-2018 which District magistrate will be chairman and District Mines officer will be Secretary member.
3	Environment compliance by Mining Industry	Action plan for preidic verification of compliance to environmental conditions stipulated by SPCBs/PCC, MoEF&CC department of mines etc. SPCBs/PCC may be involved in this activity		Leather issued to all Mining lease holders to compliance terms and condition which a mention in EC issued by SEIAA.

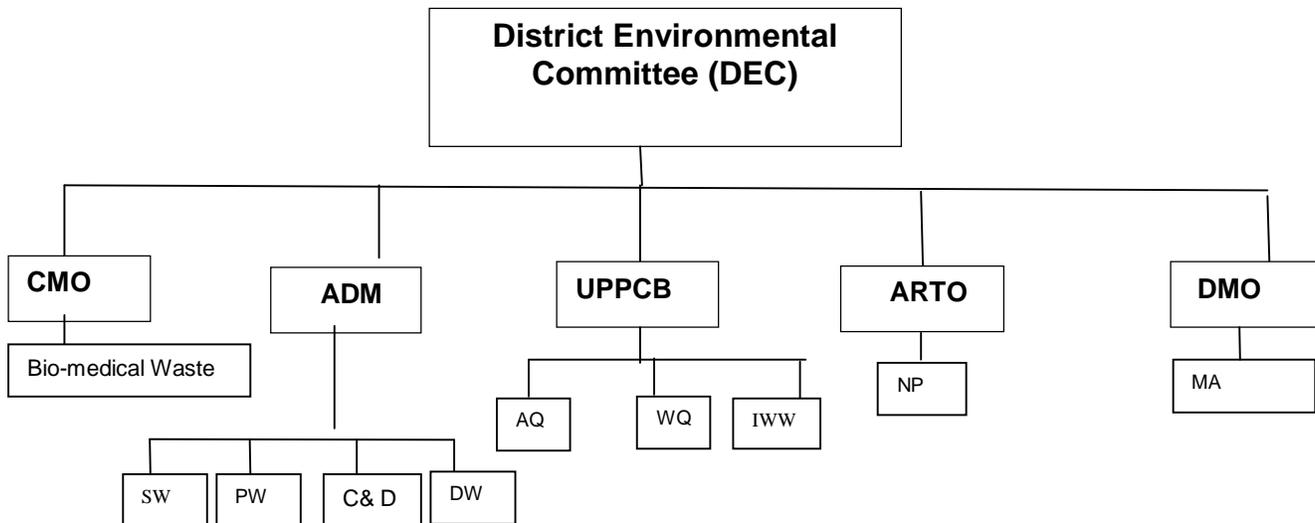

 रमान अधिकारी,
 बहराइच।

District environmental plan of Bahraich district has been prepared on the basis of recommendation received from respected departments .They point out line in the District environmental management plan (DEMP) will be implemented on field by respective departments.

Activities outlined are highly technical in nature and thus required technical knowledge the subject to properly monitor outcomes and provide fruitful suggestion if any. At district level head of department of each department are in administrative position where. They have additional administrative powers along with technical knowledge thus department wise monitoring of progress out comes of this plans are indicated table below

Departments	Concerned Administration/ Authorities
Biomedical waste	Chief medical officer (CMO)
Air quality / water quality /Noise pollution /industrial waste water/ E waste	Uttar Pradesh pollution control board (UPPCB)
Solid waste / C & D waste / Hazardous waste / Domestic waste/ Plastic waste	Assistant district magistrate (ADM)
Noise level/fine/ penalties	Assistant Regional Transport Officer (ARTO)
Mining activities	District Mining Officers (DMO)

Since there is District environmental committee is operational in each district and meeting of district environmental committee takes place in every month the progress and outcomes of plan will be monitor by district environmental committee chaired by district magistrate Bahraich.





District Environment Plan

बोकारो इस्पात नगर में आपका हार्दिक स्वागत है।

Bokaro, Jharkhand



Drafted By:

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District Environment Committee, Bokaro, Jharkhand

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Email:- bokarodfo@gmail.com

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Abbreviations

BDO: Block Development Officer

CPCB: Central Pollution Control Board

SPCB: State Pollution Control Board

CO: Circle Officer

DC: Deputy Commissioner

ACF: Assistant Conservator of Forests

DFO: Divisional Forest Officer

SDM: Sub Divisional Magistrate

GM: General Manager

DEO: District Education Officer

DDC: Deputy Development Commissioner

AMC: Additional Municipal Commissioner

RO: Regional Officer, JSPCB

SP: Superintendent of Police

DEP: District Environment Plan

DSMS: Decentralized Sewage Management System DSP: Deputy Superintendent of Police

JSPCB: Jharkhand State Pollution Control Board

MoEF&CC: Ministry of Environment, Forest and Climate Change

MS: Member Secretary, DEC

NGT: National Green Tribunal

CTO: Consent to Operate

BSL: Bokaro Steel Plant

SAIL: Steel Authority of India Limited

TA: Town Administration

NP: Nagar Parishad

SHG: Self Help Group

STP: Sewage Treatment Plant

CMC: Chas Municipal Corporation

GP: Gram Panchyat

ASAP: As soon as possible

PWD: Public Works Department

DEC: District Environment Committee

Preface

Hon'ble National Green Tribunal (NGT) since its assent by the supreme legislative body of India (Indian Parliament) in June 2010 has been playing an augmented role in the conservation of national green environment. It pledges to maintain a healthy, sustainable and congenial atmosphere nationwide for all the creatures and specially the human society so that they can pursue a life full of health.

To make this mission successful it is important for the whole nation to participate in it at each unit of national administration. Thus, NGT took a constitutional reference to compliance with the provisions made in the constitution of India;

“under Articles 243 G, 243 W, 243 ZD read with Schedules 11 and 12 and Rule 15 of the Solid Waste Management Rules, 2016, it is necessary to have a District Environment Plan to be operated by a District Committee (as a part of District Planning Committee under Article 243 ZD) with representatives from Panchayats, Local Bodies, Regional Officers, State PCB and a suitable officer representing the administration, which may in turn be chaired and monitored by the District Magistrate. Such District Environment Plans and Constitution of District Committee may be placed on the website of Districts concerned.”

This order was re-stressed by Hon'ble NGT in O.A. No. 360/2018, order dated 26.09.2019, where Hon'ble Tribunal said,

“Compliance of this direction may also be seen by the Chief Secretaries of the States/UTs. This may not only comply with mandate of law but provide an institutional mechanism for effective monitoring of environment norms”

Accordingly, Forest, Environment and Climate Change Department, Government of Jharkhand, through notification no. 4869 dated 26.12.2019, reconstituted District Environment Committee and also gave it responsibility of drafting District Environment Plan (DEP).

Government of India has enacted acts such as The Water (Prevention and Control of Pollution) Act, 1974 (No.6 of 1974), The Air (Prevention and Control of Pollution) Act, 1981 (No.14 of 1981) and The Environment Protection Act, 1986 (No.29 of 1986) besides other acts which have implications on environment related governance.

Ministry of Environment, Forest and Climate Change (MoEF&CC) have notified various waste management rules under The Environment Protection Act, 1986 from time to time to manage the burgeoning issue of waste and thus prevent and control environmental damage.

To gain 360-degree view of situation of environment management related practices in Bokaro district, the newly constituted District Environment Committee organized several meetings. The committee also segregated data according to model data collection format prescribed by Central Pollution Control Board (CPCB) and tried to explore opportunities of better implementation of various acts and rules inside the district.

The appreciated efforts of the committee has resulted the **work** into this **dynamic draft**. This is to take proper assessment of the present scenario of environment related governance in the district at all administrative levels from urban to Panchayat. This also elicits present and future responsibilities of different functionaries and task forces related to implementation of acts and rules in the district. This draft paves future road map for governing district environment.

1. Introduction

This document has been drafted in compliance with the honorable NGT'S order in O.A. No. 710-713/2017, issued on 15-07-2019.

When it comes to the existence of the 'Environment' it is interactive consequences between the biotic components like animals, plants, and other living organisms, and abiotic the components – water, air, soil, sunlight etc. Many day to day activities as well as economic activities have a fall out of disturbing the environment around us. As, these activities are unavoidable, the need of the time is to manage the waste and pollutants in such a way that it affects our environment minimally.

The right justification is not to limit management of environment to only management of waste and pollutants. Rather, it also includes extracting our natural resources like drinking water in a sustainable manner and conserving our natural heritage like forest which provides innumerable number of eco-system services.

Hence, getting a holistic picture of scenario of environment is much more essential. The current status of implementation of applicable acts and rules made under them, future planning for their compliance and need of resources for the same. It is also essential that all the departments have a clear objective in their mind and are also clear about their role towards betterment of environment.

It is therefore mandatory to be practiced at district level, and thus District Environment Plan is condition sine qua non to sustainable development of district and it's citizen's health.

The scope of District Environment Plan is clearly laid out in Hon'ble NGT order in O.A. No. 360/2018, dated 12.09.2019, which said:

“while fixing a schedule for further appearance of the Chief Secretaries of all the States/UTs, direction has been issued to compile information with reference to the following specific thematic areas viz.:

- *In compliance with Solid Waste Rules including Legacy Waste.*
- *In compliance with Bio-medical Waste Rules.*
- *In compliance with Construction & Demolition Waste.*
- *In compliance with Hazardous Waste Rules.*
- *In compliance with E-waste Rules.*
- *351 Polluter Stretches in the country.*
- *122 Non-attainment cities.*
- *100 industrial clusters.*
- *Status of STPs and re-use of treated water.*
- *Status of CETPs/ETPs including performance.*
- *Ground water extraction/contamination and re-charge.*
- *Air pollution including noise pollution.*
- *Illegal sand and coal mining.*
- *Rejuvenation of water bodies”*

Forest, Environment and Climate Change Department, Government of Jharkhand, through notification No. 4869 dated 26.12.2019 also included implementation of

- Air Act
- Water Act

In the purview of the District Environment Plan.

Hon'ble NGT in O.A. No. 360/2018, order dated 26.09.2019, in Para 8, also said:

“Such information is to be furnished to the CPCB by the Chief Secretaries of all the States/UTs indicating:

- *Current status*
- *Desirable level of compliance in terms of statutes*
- *Gap between current status and desired levels.*
- *Proposal of attending the gap with timelines.*
- *Name and designation of designated officer for ensuring compliance to provisions under statute.”*

The above order provides the broad contours for developing a District Environment Plan. Thus, this District Environment Plan would follow above broad guidelines in context of Bokaro district.

1.1 Basic features of the draft (Bokaro District Environment Plan) :-

1. This draft is dynamic in nature with all the provisions of possible updates demanded by the changing scenario of the district environment. The present recommendation of update on the basis of revision is once every two years.
2. The document elicits the guidelines for both urban and rural areas' environment management plan.
3. The prescriptions will mostly need attention by responsible parties to ensure cleaner In order to get the environment of Bokaro better, all the responsible authorities will have to take part actively. In course of time both the State and the Centre government have to come forward for financial support. **The district administration has to work and look forward to all the possible platforms of revenue generation.**
4. The draft has the provisions of convergence during the implementation of all the applicable rules.
5. Target accomplishment is possible on the condition that:-
 - a). **Responsible government functionaries are supposed to take initiatives.**
 - b). **Heads of the local bodies are expected to participate actively.**
6. Report preparation, submission on demand at an interval and progress record to be updated with the **District Environment Committee mandatorily.**

1.2. Environmental Status of India:-

A huge and continuously rising population of the country and in order to impart different economic platforms for the survival and sustainable growth of the population, deliberately or by default we generate wastes in quite relevant proportion. Though sometimes the ignorance and unawareness of people causes a sheer increase in the quantity of the wastes. By product of industries and many similar activities which are unavoidable augment the waste production in India.

Urban India witnesses the waste generation of 65 million tones / year. Only 47 million tones (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites. In terms of waste generation Urban India ranks 3rd position in the world and by 2050 waste production is expected to rise to 440 million tones. This is estimated figure for only municipal waste generated in urban area and does not include many other kind of waste such as Construction and Demolition waste, e-waste etc.

Year	Source	Generation (million Tons per annum)
2017	Based on 450 gm. per capita daily generation and urban population of 440million*	72
2017	Based on 450 gm. per capita daily generation and urban population of 440million*	62
2014-15	Central Pollution Control Board	52
2013-14	Task Force on Waste to Energy, Planning Commission	62

Though the per capita daily generation of waste is lower in non-urban setup, yet it can be as high as 30-35 million tons per annum. This figure doesn't really come in discussion because of they are not usually concentrated like in urban areas but are mostly dumped and burnt in backyard.

Various subordinate legislations for regulating the manner of disposal and dealing with generated waste are made under the umbrella law of Environment Protection Act, 1986 (EPA). Specific forms of waste are the subject matter of separate rules and require separate compliances, mostly in the nature of authorizations, maintenance of records and adequate disposal mechanisms.

Need of the hour is proper implementation of all the rules made under various act at district level. Due to multiplicity of the rules and technicalities involved, it is necessary that the implementation is steered by ensuring convergence between various stakeholders, be it regulator or the polluter.

District Environment Plan goes beyond only Pollution Management Plan. Management and regulation of polluting activities in India has been mainly devolved to local bodies and State Pollution Control Boards (SPCB). But, it is much more than that. There has to be co-ordination between district authorities and local bodies so that the district as a unit is able to comply with all the rules. Officials representing State Pollution Control Boards should not only check whether rules are being complied or not but go beyond that to facilitate one and all to manage polluting activities and reduce impact on environment.

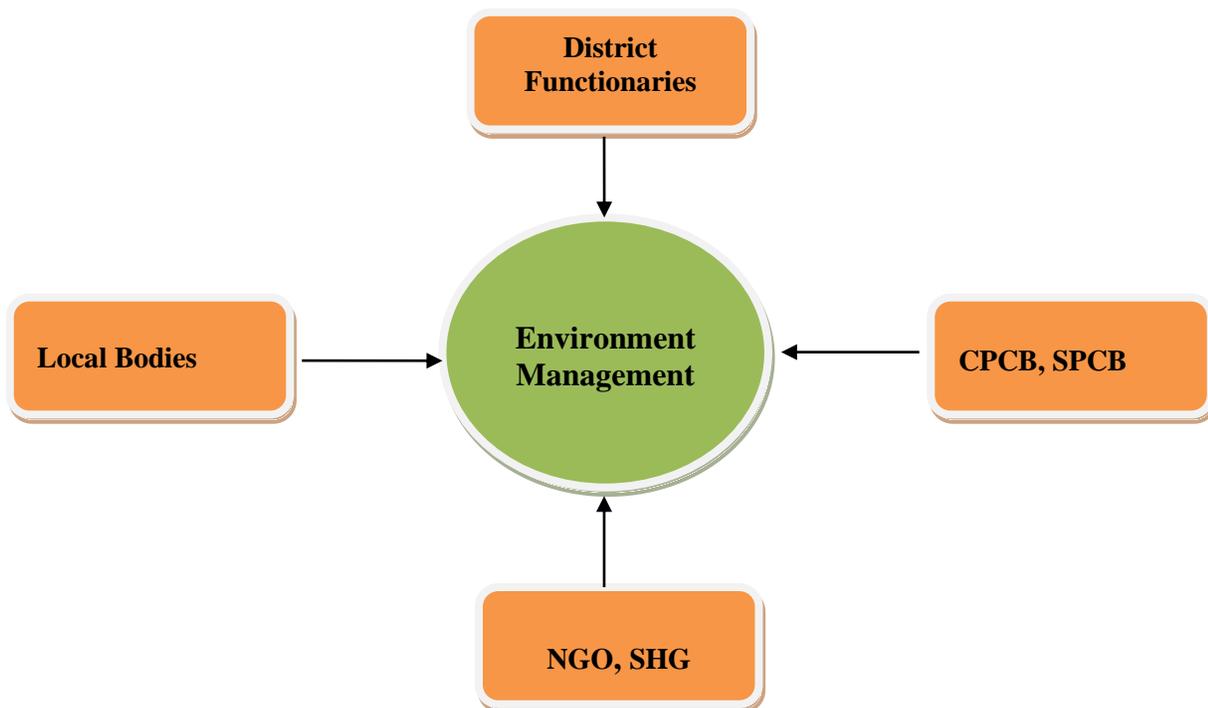


Figure 1. Environment Management Co-ordinates

At this juncture, it would also be wise to have a relook at the administrative setup at district level (More or less consistent across India). The Diagram represents it qualitatively given below:

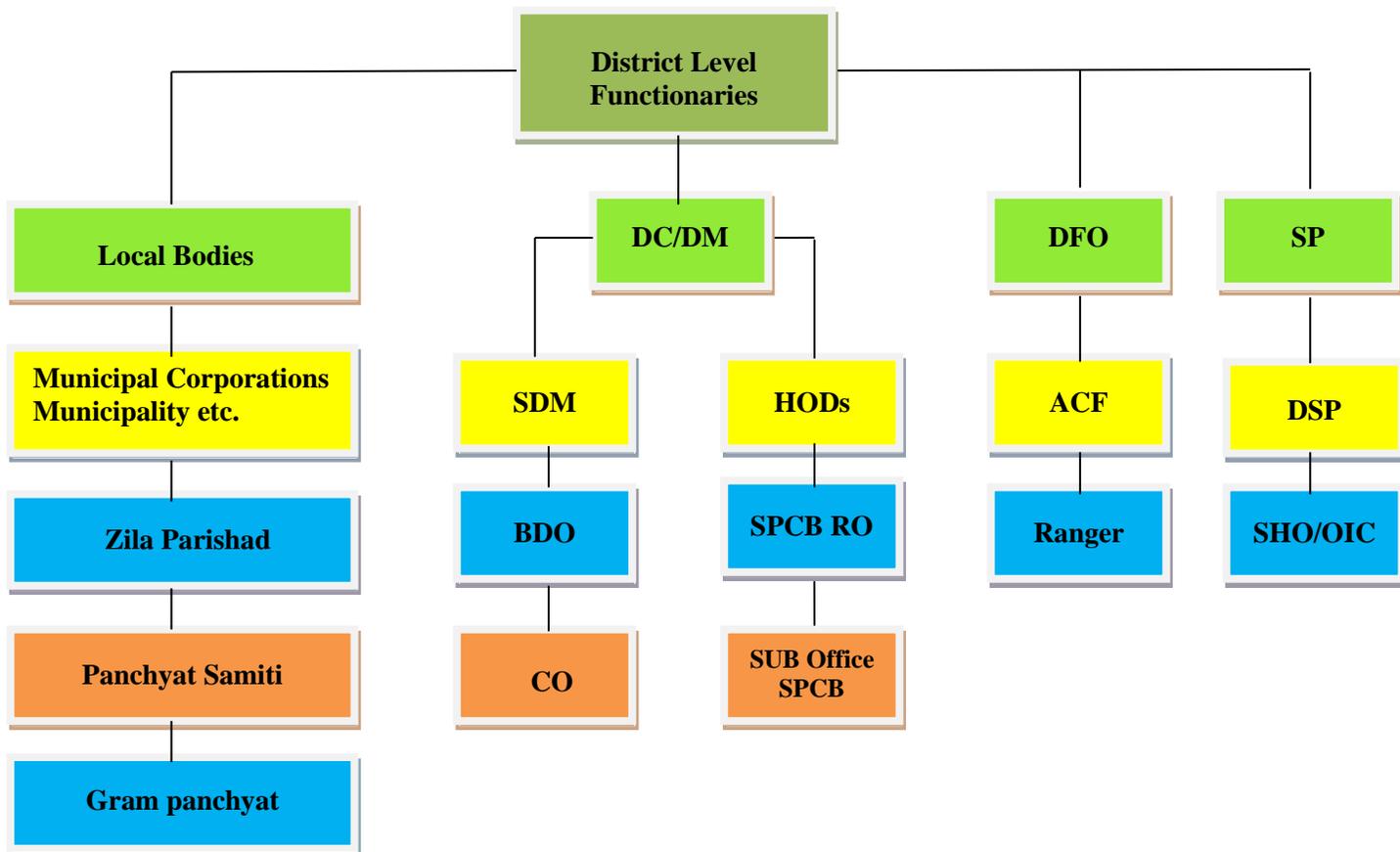


Figure 2. District Level Administrative Structure

1.3. Basic Environmental Features of Bokaro District:-

Bokaro district is one of the most industrialized zone of India. This is one of 24 districts of Jharkhand state. It was created on 1st April 1991. This is located east to Dhanbad district, west to Ramgarh district, south to Purulia district (WB) and north to Giridih, Hazaribagh and Dhanbad. This is industrial capital of Jharkhand state. Its latitudinal location – 23.26” to 23.57” N and 85.34 to 86.26” E. its elevation is 200 to 546 m from the sea level.



Figure 3. Geographical Location of Bokaro with respect to Jharkhand



Figure 4. Map showing different blocks of Bokaro along with Rivers.

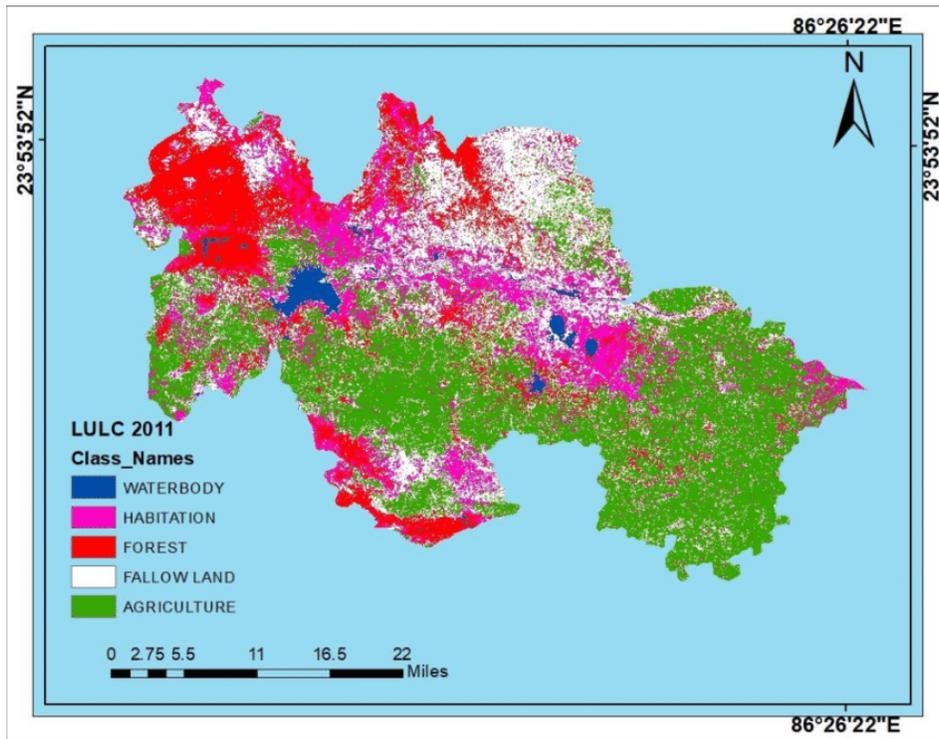


Figure 5. Land Uses in Bokaro district

Data related to Bokaro district in a glance:

Items	Statistics	
Population (2011 Census)	20.62	Lakhs
Urban Population(2011 Census)	10.78	Lakhs
Rural Population (2011 Census)	9.83	Lakhs
Area	2883	Km ²
Forest Area	784.89	Km ²
No. of Urban Local Body	3	
No of Blocks	9	
No. of Gram Panchayat	249	
No. of Revenue Villages	635	
Total solid waste generated in Urban area	157	MT/Day
Total solid waste generated in district app. (Assuming rural creation of waste as 1/5 th of Urban)	187	MT/Day
Total Liquid waste generated in urban areas	29	MLPD

2. Waste Management Plan:-

Unwanted production of any life style is referred as 'WASTEW'. Areas which are industry juncture of the country become the destination of common population for employment. This attracts the migrants for survival and eventually they start getting settled there. Facilities of basic and the most radical amenities gradually change the place in an urban area. Because of dense population waste is naturally produced. Hence, the need of waste management comes in picture. Though waste is naturally generated at all the administrative units like village, panchayat, block, municipality to a nation.

We could take look at quantity of wet waste (which can be composted) generated in the whole composition of municipal waste (in lower middle-income category) :-

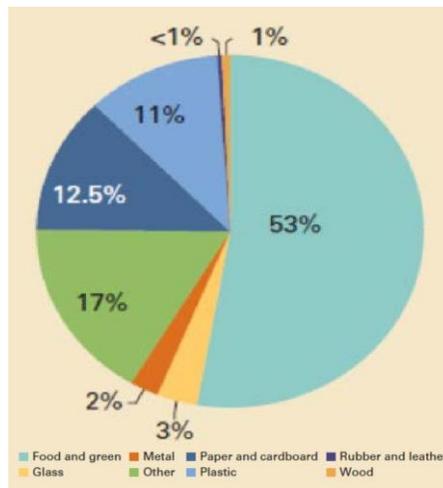


Figure-6 Typical waste Proportion in low income category country

The fact that around 55% of our waste is wet waste, should direct our policy of managing it. Source point segregation can reduce the burden on our dump yards.

It will be interesting to note that India lags far behind in segregation at source point. Costly and complex waste operations must compete for funding with other priorities such as clean water and other utilities, education, and health care. Waste management is often administered by local authorities with limited resources and limited capacity for planning, contract management, and operational monitoring. These factors make sustainable waste management a complicated proposition on the path of sustainable development.

Segregation at source can be biggest challenge for any local body. This is much more amplified because of lack of expert managers, lack of budget, poor financial health and low sources of income of local bodies.

City	State	Population (million)	Door-to-door Collection from Households (%)	Segregation at Source (%)
Vengula	Maharastra	10	100	95
Indor	Madhy Pradesh	0.5	100	90
Thiruvananthputam	Kerala	0.9	100	76
Gangtok	Sikkim	0.1	90	30
Warangal	Telangana	0.9	90	na
Tirunelveli	Tamil Nadu	0.5	100	100

Figure 7. Waste Segregation at source from few cities of India

2.1 Solid Waste Management Plan:-

A Solid Waste Management Rules, 2016, "solid waste" means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non-residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities.. There are separate rules for e- waste which would be discussed separately in this document.

Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified the Solid Waste Management Rules 2016. As per the rules, the role of local body has been specified as section 15.

2.1.1 Solid Waste Management in Bokaro Steel City:-

Keeping the provisions of CPCB (section 8.1.1 of the document elicits the details) in mind the following format of collected data gives a comprehensive review:-

- 1.Total waste generation is around 85 MT/day inside jurisdiction are of Bokaro Steel City
2. Door to Door collection according to survey is 100 percent.
3. Waste segregation is partial.
4. There is no separate disposal of segregated waste.
5. Present dumpsite is located inside the town at every turning of the city for the quarters located in every sector. The main and major dumpsite of the city is located at the exterior of sector 11.

No of Ward	Population	Waste Generation per day	No of Dumping Vehicle
10 Sectors	2 Lakhs as per 2011 census	85 to 90 MT	Trolleys- 157 Compactor Loder-02 and Dumpler Placer- 01

Tabulation of activities with objective, status, responsible functionary and timeline is as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Responsive solid & wet waste segregation and Collection	To create the facility of solid and wet waste collection in separate container and dumping it to the nearby area with an arrangement of final dumping site where waste processing could be possible.	Running	General Manager Town Administration, Bokaro Steel Plant	On Going
	To make it mandatory for citizens to segregate solid and wet waste at source. Reasonable and possible monetary support to be asked to the citizens who are availing the door to door collection facility.	Running		On Going
Sustainable Segregation and Collection	To make it possible at large scale daily door to door collection (providing carts with two separate containers for wet and dry waste and one small for sanitary waste)	Running	General Manager Town Administration, Bokaro Steel Plant	On Going
	Providing large 3 dustbins with a capacity of 1000 liters at minimum possible distance and 2 covered bins of 300 liters for commercial & institutional premises.	90%		On Going
	Providing separate storage facility for recyclable and non-recyclable materials.	Partial		1 year
	Spreading awareness about plastic hazards and charging penalty on single plastic use.	Partial		
Domestic Hazardous Waste	To create possible number of disposal points for domestic hazardous waste inside the concerned jurisdiction.	Initiated	General Manager Town Administration, Bokaro Steel Plant	6 months
	Providing the facility of door to door collection of domestic hazardous waste once a fortnight.	Not Initiated		9 months
	Ensuring safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility.	No provision		12 months
Planning	Prepare a solid waste management plan	Running	General Manager Town Administration, Bokaro Steel Plant	On Going
	Adopting the concept of composting at all the administrative level.			On Going
	Preparing estimate of budgetary needs			On Going
	Notifying the recyclers of the area.			On Going

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Participation of SHGs/NGOs/Waste Pickers	Inviting women SHGs and/or NGOs for collection and segregation of dry & wet waste.	Not Initiated	DC and General Manager Town Administration, Bokaro Steel Plant.	9 months
	Empowering the waste pickers with health security and authorization.			9 months
Integration of new sanitary landfill	Demarcation of sanitary landfill sites.	Old proposed site didn't get approval	General Manager Town Administration, Bokaro Steel Plant	1 year
	Site preparation on the permission of JSPCB			3 months
	Rehabilitation of old dumpsite	Initiated	General Manager Town Administration, Bokaro Steel Plant	1 year
Waste management awareness	Organizing Awareness Campaign on a regular interval on waste segregation, proper disposal and fines as applicable	Partial	General Manager Town Administration, Bokaro Steel Plant	3 months
Strengthening financial status.	Creating possible platforms of revenue collection(e.g. holding tax, waste collection fee...etc).	Running	General Manager Town Administration, Bokaro Steel Plant	On Going
	Levying Green Tax on all pollution causing units (e.g. vehicles, food units, factories...etc.).			

2.1.2 Solid waste management in Chas Municipal Corporation:-

Total waste generation is around 52 MT/day inside jurisdictions are of Chas Municipal Corporation.

1. Door to Door collection according to survey is only partial.
2. Waste segregation is partial.
3. There is no separate disposal of segregated waste.
4. A DPR for solid waste management is under process and expected to be accomplished shortly.
5. A processing unit of solid waste will be constructed under the proposed DPR with an aim to 100 percent door to door segregated waste collection.
6. Waste collection fee to be collected from the citizens availing the facility.
7. Currently waste collection fee is collected by Chas Enviro. Pvt. Ltd.

8. Rehabilitation of an old dumpsite on the bank of Garga River, near DC office has been done by composting in-situ and then converting it into an entertainment park. Some of the old sites have foretasted (e.g. ITI MORE landfill, by SHGs). Near NH-32 at Kamaldih Multipurpose Building and Municipal Corp. office are under construction.
9. Present dumpsite as well as processing unit is proposed at Kalapatthar in an area of 10 acres.

No of Ward	Population	Waste Generation per day	No of Dumping Vehicle	Employees (Safai Mitra)
35	141640 as per 2011 census	52 MT	Garbage Loader-1 JCB-1 Dumfar-1	Safai Mitra-70 Safai Mitra-228 (Sweeper)

Tabulation of activities with objective, status, responsible functionary and timeline is as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time After approval of DEP
Responsive solid & wet waste segregation and Collection	To create the facility of solid and wet waste collection in separate container and dumping it to the nearby area with an arrangement of final dumping site where waste processing could be possible.	Partial	Additional Municipal Commissioner/ Mayor Chas Nagar Nigam	3 months
	To make it mandatory for citizens to segregate solid and wet waste at source. Reasonable and possible monetary support to be asked to the citizens who are availing the door to door collection facility.	Initiated		1 year
Sustainable Segregation and Collection	To make it possible at large scale daily door to door collection (providing carts with two separate containers for wet and dry waste and one small for sanitary waste)	60%	Additional Municipal Commissioner / Mayor Chas Nagar Nigam	6 months
	Providing large 3 dustbins with a capacity of 1000 liters at minimum possible distance and 2 covered bins of 300 liters for commercial & institutional premises.	Partial		1 year
	Providing separate storage facility for recyclable and non-recyclable materials.	Partial		1 year
	Spreading awareness about plastic hazards and charging penalty on single plastic use.	Initiated		6 months

Domestic Hazardous Waste	To create possible number of disposal points for domestic hazardous waste inside the concerned jurisdiction.	Initiated	Additional Municipal Commissioner / Mayor Chas Nagar Nigam	6 months
	Providing the facility of door to door collection of domestic hazardous waste once a fortnight.	Not Initiated		9 months
	Ensuring safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility.	No provision		12 months
Planning	Prepare a solid waste management plan (See Reference 3)	Not Initiated	DC, Additional Municipal Commissioner / Mayor Chas Nagar Nigam	9 months
	Adopting the concept of composting at all the administrative level.			9 months
	Preparing estimate of budgetary needs			9 months
	Notifying the recyclers of the area.			6 months

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Participation of SHGs/NGOs/Waste Pickers	Inviting women SHGs and/or NGOs for collection and segregation of dry & wet waste.	Initiated	DC, Additional Municipal Commissioner/ Mayor Chas Nagar Nigam	9 months
	Empowering the waste pickers with health security and authorization.			9 months
Integration of new sanitary landfill	Demarcation of sanitary landfill sites.	Proposed	DC, Additional Municipal Commissioner/ Mayor Chas Nagar Nigam, and RO,JSPCB	1 year
	Site preparation on the permission of JSPCB			3 months
	Rehabilitation of old dumpsite	Functioning	DC, Ex Officer (NP), DFO	On Going
Waste management awareness	Organizing Awareness Campaign on a regular interval on waste segregation, proper disposal and fines as applicable	Initiated	DC, Additional Municipal Commissioner/ Mayor Chas Nagar Nigam	3 months
Strengthening financial status.	Creating possible platforms of revenue collection (e.g. holding tax, waste collection fee...etc.).	Running	Additional Municipal Commissioner/ Mayor Chas Nagar Nigam	On Going
	Levying Green Tax on all pollution causing units (e.g. vehicles, food units, factories...etc.).			

2.1.3 Solid waste management in Phusro Nagar Parishad:-

1. Total waste generation is around 15 MT/day inside jurisdiction is of Phusro Nagar Parishad.
2. Door to Door collection according to survey is only partial.
3. Waste segregation is zero.
4. There is no separate disposal of segregated waste.
5. Under Swachhha Bharat Mission solid waste management work has been tendered to Ms.Cube Bio-Energy Pvt. Ltd. which is to be started shortly.

No of Ward	Population	Waste Generation per day	No of Dumping Vehicle
28 wards	89178 as per 2011 census	15 MT	Trolleys- 04 Mini Truck- 16 Truck- 01

Tabulation of activities with objective, status, responsible functionary and timeline is as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Responsive solid & wet waste segregation and Collection	To create the facility of solid and wet waste collection in separate container and dumping it to the nearby area with an arrangement of final dumping site where waste processing could be possible.	Partial	Executive Officer / Chairman, Nagar Parishad	3 months
	To make it mandatory for citizens to segregate solid and wet waste at source. Reasonable and possible monetary support to be asked to the citizens who are availing the door to door collection facility.	Initiated		1 year
Sustainable Segregation and Collection	To make it possible at large scale daily door to door collection (providing carts with two separate containers for wet and dry waste and one small for sanitary waste)	Partial	Executive Officer / Chairman, Nagar Parishad	9 months
	Providing large 3 dustbins with a capacity of 1000 liters at minimum possible distance and 2 covered bins of 300 liters for commercial & institutional premises.	Partial		1 year
	Providing separate storage facility for recyclable and non-recyclable materials.	Not Initiated		1 year
	Spreading awareness about plastic hazards and charging penalty on single plastic use.	Not Initiated		9 months

Domestic Hazardous Waste	To create possible number of disposal points for domestic hazardous waste inside the concerned jurisdiction.	Not Initiated	Executive Officer / Chairman, Nagar Parishad	6 months
	Providing the facility of door to door collection of domestic hazardous waste once a fortnight.	Not Initiated		9 months
	Ensuring safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility.	Not Initiated		12 months
Planning	Prepare a solid waste management plan (See Reference 3)	Not Initiated	DC, DDC and Executive Officer, Nagar Parishad	9 months
	Adopting the concept of composting at all the administrative level.			9 months
	Preparing estimate of budgetary needs			9 months
	Notifying the recyclers of the area.			6 months

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Participation of SHGs/NGOs/ Waste Pickers	Inviting women SHGs and/or NGOs for collection and segregation of dry & wet waste.	Not Initiated	DC, Executive Officer / Chairman, Nagar Parishad	9 months
	Empowering the waste pickers with health security and authorization.			9 months
Integration of new sanitary landfill	Demarcation of sanitary landfill sites.	Proposed	DC, Executive Officer / Chairman, Nagar Parishad, and RO, JSPCB	1 year
	Site preparation on the permission of JSPCB			3 months
	Rehabilitation of old dumpsite.			Not Initiated
Waste management awareness	Organizing Awareness Campaign on a regular interval on waste segregation, proper disposal and fines as applicable	Partial	DC, Executive Officer / Chairman, Nagar Parishad	3 months
Strengthen in financial status.	Creating possible platforms of revenue collection (e.g. holding tax, waste collection fee...etc).	New	DC, Executive Officer/ Chairman, Nagar Parishad	Policy Decision
	Levying Green Tax on all pollution causing units (e.g. vehicles, food units, factories...etc).			

Further observations across the Bokaro urban center suggest the following:-

1. There is an awareness spreading (program run by World Green Line) among the citizens about segregation of waste.
2. The facility to encourage them to segregate waste is provided at a small possible scale by WGL. E.g. Disposal points having disposal containers for wet and dry waste.
3. Collection infrastructure mainly consists of tractor driven trolley and there is no infrastructure and system to collect and dispose the segregated waste.

2.1.4. Proposed step wise Waste Management in Urban Area:

- Step 1: Five Way Home Waste Segregation System :-



Step 2: Three way system of waste collection:-



1. Door to Door Waste Collection



2. Waste Collection from Dumpsites



3. Transportation from Dumpsite to segregation point or sanitary landfill



Step 3: Dry waste to Material Recovery Facility and Wet Waste to On-Site Composting:-



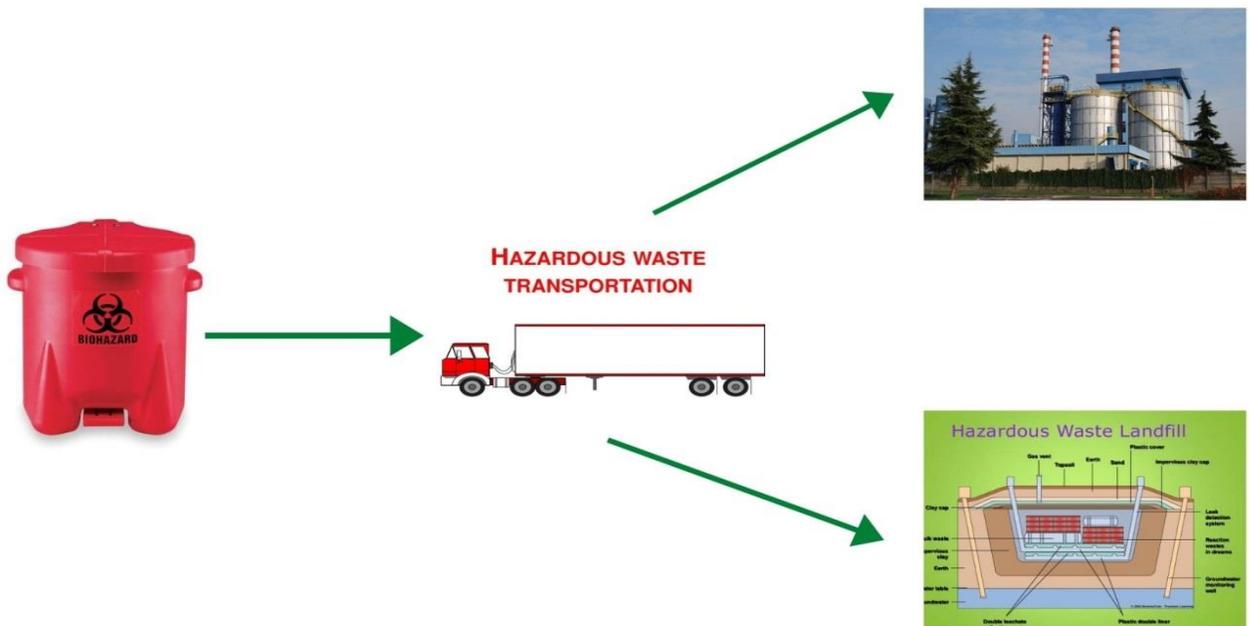
Step 4: Composting of Wet Waste at yard site:-



Step 5: Non-Recyclable Waste to Sanitary Landfill:-



Step 6: Hazardous Waste Collection and its transportation to nearest Hazardous Waste Treatment Facility:-



Waste Segregation and Management in Urban as depicted in the flow diagram:-

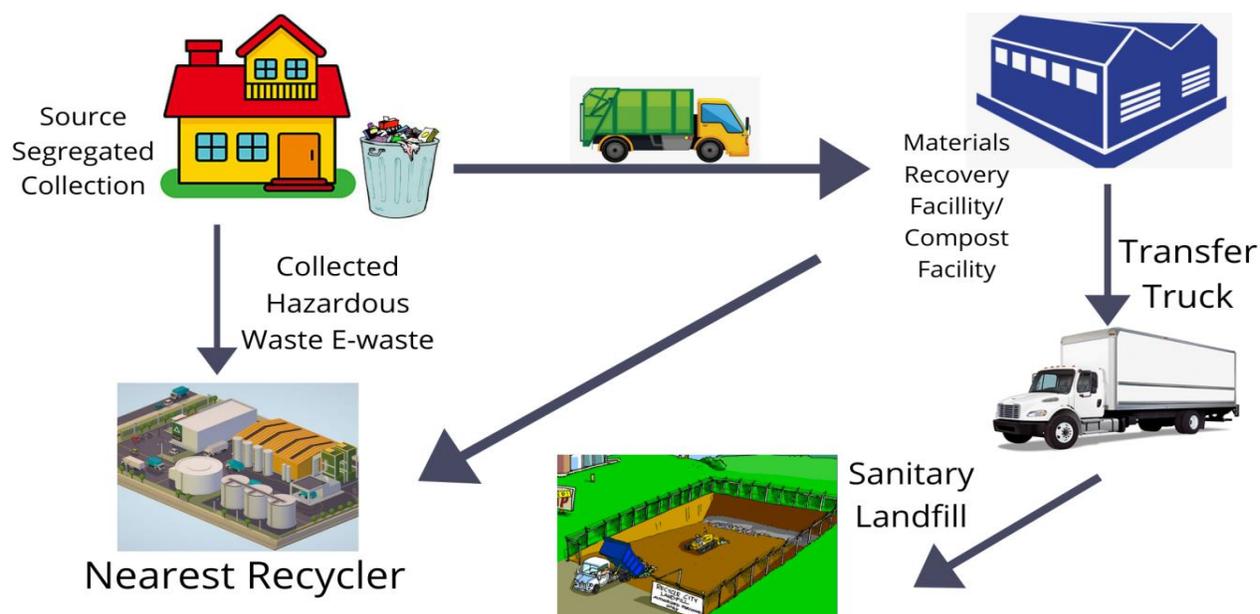


Figure 8. Suggested Flow of Solid Waste in Urban Area

2.1.5. Waste Management at Block and Village Level:-

India is the country of villages. Most population dwells in the villages. Though the population density is less than urban area yet waste generation is a by-product of lifestyle. Villages contribute almost 85% of the whole population. When it comes to Bokaro district, its population is 21 lakh (accord to 2011 census). Its villages contribute almost 10 lakh of its total population which evidently generate a huge waste and needs to have proper plan for waste management. Hence,

The Plan is formulated on the following standard:-

1. Each village should have a properly demarcated place for both dry & wet solid waste disposal.
2. Every Panchayat Samiti should appoint **waste management committee** a collection cart, which is support to look after the matter related management of the disposal sites.
3. A composting unit to make compost of possible waste and use it as fertilizer should be there in every village.
4. Prohibition of incineration of waste must be there.
5. Each block should have a properly demarcated place for both dry & wet solid waste disposal where each Gram Panchayat can deposit their dry waste.
6. Segregation of recyclable materials should be practiced by the Panchayat Samitis and as per the quantity of the waste each village (GP) should be paid.
7. Non-recyclable waste should be transported to micro sanitary land fill site by the Panchayat Samitis.

8. The collected recyclable waste from each village should finally be transported to Bokaro district recyclable waste collection point by the Panchayat Samitis and for this Panchayat Samitis should be paid the applicable rate.



Figure 9. Suggested Flow of Solid Waste at Village, Panchayat and Block Level

Approach towards Solid Waste Management in Bokaro District, considering the above are as follows:-

1. 100% segregation at source
2. 100% segregation while collection or at disposal points (No mixing of dry and wet waste)
3. Creating a culture of segregation of household waste at source.
4. Fee collection from each household for collection of segregated garbage from each household. Eg. Rs 50-110/household (to be deposited along with holding tax or separately)
5. 100% composting of wet waste. This will be done centralized in urban areas and distributed micro composting, at Village and Block level.
6. Involving SHGs/NGOs for segregation of recyclable waste and thus providing employment.
Switching to modified Padupanambur Dakshina Kannada district Zero Waste Model.
7. Rehabilitation of an old dumpsite on the bank of Garga River, near DC office has been done by composting in-situ and then converting it into an entertainment park. Some of the old sites have foretasted (e.g. ITI MORE landfill, by SHGs). And some are projected to be rehabilitated.

Ideas need to be adopted under the provisions by making by-laws are as follows:-

1. Continuous awareness program
2. Separate bin for plastic segregation.
3. Segregation at source ought to be mandatory.
4. Penalty on single plastic use.
5. Segregated collection of wet and dry waste from door to door on minimal fee.
6. Penalty levied on burning waste.

Tabulation of activities with objective, status, responsible functionary and timeline is as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Administration	Every GP should appoint a waste management committee a collection cart, which is support to look after the matter related management of the disposal sites.	Not Initiated	Panchayat Sachiv and Mukhiya	6 months
Segregation	Each village should have a properly demarcated place for both dry & wet solid waste disposal.	Not Initiated	CO, DDC and Ward Members	9 months
Collection	Collection and transportation (to block level collection point) of dry waste should be done by Each Gram Panchayat.	Not Initiated	BDO and Mukhiya	12 months
Conceptual isolation of dry waste.	An isolation center for dry waste at block level should be set up by Pachayat Samiti.	Not initiated	DDC, BDO, CO and Pramukh	3 months
Non-recyclable waste & Landfill	Non-recyclable waste should be transported to specifically demarcated micro sanitary land fill site by the Panchayat Samitis			12 months
Awareness	Gram Sabha should be organized with possible gears (i.e. posters, hoardings, handbills...etc.) specifically to promote the segregation of dry & wet waste.	Partial		6 months
Budgeting for Block level	Proper estimation and budget preparation for waste management activities year wise budget requirement.	Not initiated	BDO and Executive Officer, Panchayat Samiti	6 months

2.2. Plastic Waste Management Plan:-

It is mandatory to conceptualize the segregation, separation and minimization of recyclable and non-recyclable plastic at the source and sending the recyclable materials to the recyclers in compliance with Plastic Waste Management Rule 2016, notified by MoEF&CC.

Keeping the same in mind Government of Jharkhand has also imposed complete ban on manufacture, import, export, use & sale of plastic carry bags vide notification no. 3900, dated 15.09.2017.

Though the major producer of plastic waste in Bokaro district is Bokaro Steel City. Sub major producers are Chas Municipal Corp. and Phusro Nagar Parishad. The least producers include all the villages lying in the district. Yet the plastic wastes need to be collected from all the administrative areas.

Tabulation of activities with objective, status, responsible functionary and timeline of Bokaro Steel City as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Segregation and Disposal	Arrangement of disposal as secondary storage or material recovery facility with sufficient space for recyclable and non-recyclable plastic components.	Initiated	Town Administration, BSL	6 months
	In compliance with the guideline issued by the CPCB, it is important to fix the processing and disposal of non-recyclable fraction of plastic waste.			
Stepwise processing of collected waste	Handing over the recyclable plastic to nearest authorized plastic recycler	Initiated	Town Administration, BSL	18 months
	The concerned department should encourage the construction agencies for using non-recyclable plastic waste in their construction (e.g. roads).			
Administrative Inspections	Penalty with notice should be levied on single plastic use.	Not Initiated	Town Administration, BSL	9 months
	Sudden and unscheduled but at an interval, an inspection must be done to keep the by- laws and Gov. of Jharkhand ban in check.	Low Frequency	SDM, DSP, CO Town Administration, BSL	Continuous Process

Teachings And Awareness by District Administration	At a regular interval jute bags use and giving up of single plastic use awareness program must be organized.	Partial	Town Administration, BSL	Continuous Process
	Educating the population about harmful effect of plastic and encourage them to give up the use of plastic material.	Partial	DC, SP, DFO and Town Administration, BSL	3 months

Tabulation of activities with objective, status, responsible functionary and timeline of Chas Municipal Corporation as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Segregation and Disposal	Arrangement of disposal as secondary storage or material recovery facility with sufficient space for recyclable and non-recyclable plastic components.	Partial	DC and Additional Municipal Commissioner/ mayor CMC	12 months
	In compliance with the guideline issued by the CPCB, it is important to fix the processing and disposal of non-recyclable fraction of plastic waste.			
Stepwise processing of collected waste	Handing over the recyclable plastic to nearest authorized plastic recycler		Superintendent Engineer, PWD	18 months
	The concerned department should encourage the construction agencies for using non-recyclable plastic waste in their construction (e.g. roads).			
Administrative Inspections	Penalty with notice should be levied on single plastic use.	Partial	AMC, Chas Municipal Corporation	9 months
	Sudden and unscheduled but at an interval, an inspection must be done to keep the by- laws and Gov. of Jharkhand ban in check.	Low Frequency	SDM, DSP, CO AMC, Chas Municipal Corporation	Continuous Process
Teachings And Awareness by District Administration	At a regular interval jute bags use and giving up of single plastic use awareness program must be organized.	Partial	DEO, IPRD and Additional Municipal Commissioner, CMC	Continuous Process
	Educating the population about harmful effect of plastic and encourage them to give up the use of plastic material.	Partial	DC, SP, DFO and Additional Chas, Municipal Commissioner	3 months

Tabulation of activities with objective, status, responsible functionary and timeline of Phusro Nagar Parishad as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Segregation and Disposal	Arrangement of disposal as secondary storage or material recovery facility with sufficient space for recyclable and non-recyclable plastic components.	Not Initiated	DC and Executive Officer, Phusro Nagar Parishad	12 months
	In compliance with the guideline issued by the CPCB, it is important to fix the processing and disposal of non-recyclable fraction of plastic waste.			
Stepwise processing of collected waste	Handing over the recyclable plastic to nearest authorized plastic recycler		Superintendent Engineer, PWD	18 months
	The concerned department should encourage the construction agencies for using non-recyclable plastic waste in their construction (e.g. roads).			
Administrative Inspections	Penalty with notice should be levied on single plastic use.	Partial	Executive Officer, Phusro Nagar Parishad	9 months
	Sudden and unscheduled but at an interval, an inspection must be done to keep the by-laws and Gov. of Jharkhand ban in check.	Low Frequency	SDM, DSP, CO and Executive Officer, Phusro Nagar Parishad	Continuous Process
Teachings And Awareness by District Administration	At a regular interval jute bags use and giving up of single plastic use awareness program must be organized.	Partial	DEO, IPRD and Executive Officer, Phusro Nagar Parishad	Continuous Process
	Educating the population about harmful effect of plastic and encourage them to give up the use of plastic material.	Partial	DC, SP, DFO and all other Departmental Heads	3 months

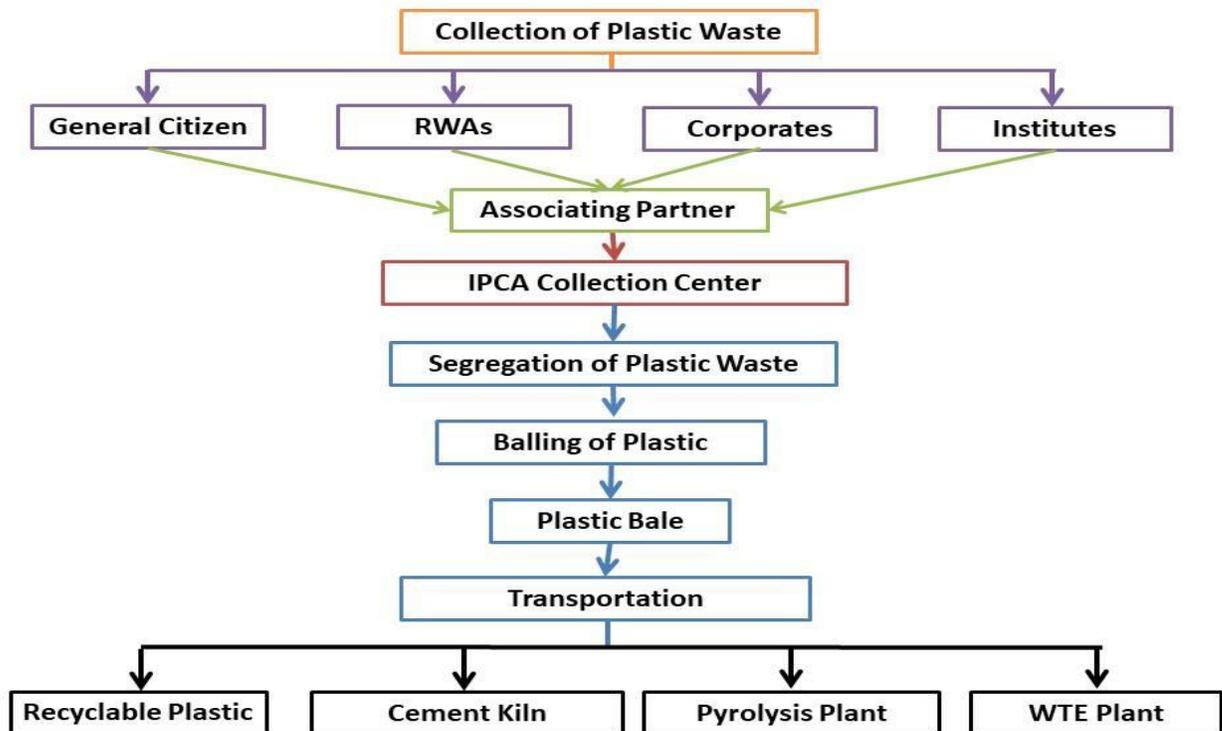


Fig. 10 Suggested Flow Chart of Plastic Waste at Urban Area

2.3 Biomedical Waste Management Plan:-

Biomedical waste: -

Biomedical waste is a broader term applied to waste generated in the diagnosis, treatment or immunization of humans, in research or in the production and testing of biological products. It also includes the waste coming out of medical treatment given at health camps

Infectious waste: -

Infectious waste includes all healthcare/ clinical waste which has the potential to transmit viral, bacterial, fungal or parasitic disease. It includes human waste, waste generated in laboratories practice. Hazardous waste is any waste with a potential to pose a threat to human health and life. Infectious waste is a part of hazardous waste.

Any waste contaminated with blood, body fluids, excretions and secretions is potentially infectious. One of the most hazardous waste is contaminated sharp waste which is a part of infectious waste and can also cause injury. The most common documented transmission of infection from waste to HCWs is through contaminated needles. Laboratory waste is a major potential reservoir of pathogenic microorganisms and requires appropriate handling.

National Rules for biomedical waste management:-

The Ministry of Environment, Forest and Climate Change published the Biomedical Waste Management Rules on 28 March 2016. These rules superseded the Biomedical Waste (Management and Handling) Rules, 1998. The 2016 Rules have been amended in 2018 and 2019. These Rules apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle biomedical waste in any form including hospitals, nursing homes, clinics, dispensaries, pathological laboratories, blood banks, Ayush hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first-aid rooms of schools, forensic laboratories and research laboratories. Safe and proper identification, handling, storage, and disposal of biomedical waste from laboratories and related facilities is the responsibility of every occupier. "Occupier" means a person having administrative control over the institution and the premises generating biomedical waste, which includes a hospital, nursing home, clinic, dispensary, pathological laboratory, blood bank, HCF and clinical establishment, irrespective of their system of medicine and by whatever name they are called. Duties of the occupier/HCF.

Waste segregation at point of generation:-

HCF/ laboratory waste requires management at every step from generation, segregation, collection, transportation, storage, and treatment to final disposal. Of the waste generated in healthcare settings, approximately 10% to 25% is hazardous but if not segregated properly, the entire waste becomes infectious thereby escalating the overall cost of waste management. The most practical approach to the management of biomedical waste is to identify and segregate infectious waste, which would in turn drastically reduce the cost of waste disposal in healthcare settings. Biomedical waste should be segregated into containers or bags at the point of generation in accordance with. This includes placing different types of waste in different color -coded-bags and containers at the site of generation. Proper segregation should identify waste according to type of waste and type of disposal/ disinfection. Color-coded bags as per national norms need to be placed in appropriate containers with the appropriate label/ logo. For example, using a biohazard symbol for infectious waste Puncture-proof containers made of plastic or metal with a biohazard symbol, in blood collection areas, injection trolleys, nursing stations and OTs should be made available for collecting metallic wastes. Syringes should be either mutilated or needles should be cut and/ or stored in tamper-proof, leak-proof and puncture-proof containers for sharps storage. Ensuring segregation of liquid chemical waste at source and ensure pretreatment or neutralization before mixing with other effluent generated from HCFs.

BIOHAZARD SYMBOL



CYTOTOXIC HAZARD SYMBOL



Collection bags:-

Solid waste is collected in leak-resistant heavy-duty bags. Colored bags made of non-chlorinated plastic with biohazard sign and labels mentioning date and details of waste are to be used. The bags are tied tightly after they are three-fourths full.

Pre-treatment, packing, storage and transport:- Laboratory waste, microbiological waste, blood samples and blood bags must be pre-treated through disinfection or sterilization on site in the manner as prescribed by the WHO guidelines on safe management of wastes from healthcare activities and then sent to a common biomedical waste treatment facility for final disposal. Standards for autoclaving are as given in Schedule II of the Biomedical Waste Management Rules 2016. The bags or containers used for waste segregation shall be labeled as per the Rule. Provision must be made within the premises of an HCF for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers, inaccessible to scavengers and protected against insects, birds, animals and rain, to ensure that there is no secondary handling, pilferage of recyclables, or inadvertent scattering or spillage by animals. The biomedical waste from such places or premises should be directly transported to the authorized common biomedical waste treatment facility for the appropriate treatment and disposal. Transport of biomedical waste to common biomedical waste treatment facility will be done only in vehicles having appropriate label as provided in Schedule.

Treatment and disposal:-

The HCF hand over segregated waste as per Schedule to the common biomedical waste treatment facility for treatment, processing and final disposal provided that the laboratory and highly infectious biomedical waste generated shall be pre-treated by equipment such as autoclave or microwave. The HCF shall treat and dispose the biomedical waste in accordance with Schedule), and in compliance with the standards provided in Schedule II of the Biomedical Waste Management Rules 2016. On-site biomedical waste treatment and disposal facility M/s. Biogenetic Laboratory Pvt. Ltd., Chotapichri, Kalyanpur, Dhanbad, Jharkhand are established common biomedical waste treatment facility is available within a distance of 35 km from Bokaro H.Q.

The duties of the common biomedical waste treatment facilities are given in Annex I.

Duties of the M/s. Biogenetic Laboratory Pvt. Ltd., Chotapichri, Kalyanpur, Dhanbad, Jharkhand:-

Annex I.

1. Take all necessary steps to ensure that the biomedical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the Central Pollution Control Board from time to time.
2. Ensure timely collection of biomedical waste from the occupier as prescribed under these rules.
3. Establish bar coding and global positioning system for handling of biomedical waste in accordance with the guidelines issued by the Central Pollution Control Board by 27 March 2019.
4. Inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated biomedical waste in accordance with these rules.
5. Provide training for all its workers involved in handling of biomedical waste at the time of induction and at least once a year thereafter

6. Assist the occupier in training conducted by them for biomedical waste management. Undertake appropriate medical examination at the time of induction and at least once in a year and immunize all its workers involved in handling of biomedical waste for protection against diseases, including hepatitis B and tetanus, that are likely to be transmitted while handling biomedical waste and maintain the records for the same.
7. Ensure occupational safety of all its workers involved in handling of biomedical waste by providing appropriate and adequate personal protective equipment (PPE).
8. Report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I (refer to rules) to the prescribed authority and also along with the annual report. Maintain a log book for each of its treatment equipment according to weight of batch, categories of waste treated; time, date and duration of treatment cycle and total hours of operation.
9. Allow occupier, who are giving waste for treatment to the operator, to see whether the treatment is carried out as per the rules.
10. Shall display details of authorization, treatment, annual report, etc. on its website; after ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated biomedical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorization or registration from the respective Jharkhand state Pollution Control Board.
11. Supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required.
12. Common biomedical waste treatment facility shall ensure collection of biomedical waste on holidays also.
13. Maintain all record for operation of incineration, hydro or autoclaving for a period of five years.
14. Upgrade existing incinerators to achieve the standards for retention time in secondary chamber and dioxin and furans within two years from the date of this notification.

Biomedical waste handlers Immunize all HCWs and others, involved in handling of biomedical waste for protection against diseases including hepatitis B and tetanus which are likely to be transmitted by handling of biomedical waste, in a manner as prescribed in the National Immunization Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time. Ensure occupational safety of all HCWs and others involved in handling of biomedical waste by providing appropriate and adequate PPE. Conduct health check-up at the time of induction and at least once in a year for all Health Care HRs and others involved in handling of biomedical waste and maintain their cords for the same.

Annual report Every HCF has to submit an annual report to the prescribed authority in Form- IV every year on or before the 30 June at Civil Surgeon cum Chief Medical officer, office, Bokaro. Training All workers involved in handling of biomedical waste must be provided training at the time of induction and at least once a year thereafter. Records of the training programmes conducted, number of personnel trained and number of personnel who have not undergone any training must be maintained.

According to the rule following comes under purview of Biomedical Waste Management Rules:

- **Hospitals including Ayush Hospitals**
- **Nursing Homes, Clinics**
- **Dispensaries**
- **Veterinary Institutions, Animal Houses**
- **Pathological Laboratories**
- **Blood Banks / Blood Donation Camps**
- **Clinical Establishments**
- **Research or Educational Institutions, Research Labs**
- **Health Camps**
- **Medical or Surgical Camps**
- **Vaccination Camps**
- **First Aid Rooms of Schools**
- **Forensic Laboratories**

BMW Waste Management Rule 2016 Follows in the Government Health Facility Bokaro District-(Annex.- II)

Sl No .	Name of Health Facility	Consent to operate (CTO) Done by JSPCB as BMW Rule 2016	Name of CTF Agency for BMW safe disposal as BMW Rule 2016 Biogenetic laboratory Pvt. LTD. Chotapichri ,Kalyanpur, Dhanbad, JH. MoU Yes OR No	BMW				Method of BMW waste disposal	
				Yellow	Blue	Red	White	Sharp Pit	Placenta Pit
1.	Sadar Hospital Bokaro	YES	YES	YES	YES	YES	YES		
2.	Community Health Centre Chas	YES	NO	NO	NO	NO	NO	YES	YES
3.	Sub divisional Hospital Chas	YES	NO	YES	YES	YES	YES	NO	NO
4.	Sub divisional Hospital Bermo	YES	NO	YES	YES	YES	YES	NO	NO
5.	Community Health Centre Bermo	YES	NO	YES	YES	YES	YES	NO	NO
6.	Community Health Centre, Chandankiyari	YES	NO	YES	YES	YES	YES	NO	NO
7.	Community Health Centre Gomia	YES	NO	YES	YES	YES	YES	NO	NO
8.	Referral Hospital Jainamore (Jaridih)	YES	NO	YES	YES	YES	YES	NO	NO
9.	Community Health Centre Kasmar	YES	NO	YES	YES	YES	YES	NO	NO
10.	Community Health Centre Nawadih	YES	NO	YES	YES	YES	YES	NO	NO
11.	Community Health Centre Peterwar	YES	NO	YES	YES	YES	YES	NO	NO
12.	Sub divisional Hospital Tenughat	YES	NO	YES	YES	YES	YES	NO	NO

**BMW Waste Management Rule 2016 Follows in the Private Health Facility, Private Labs. Bokaro District
(Annex. - II) –**

Sl. No.	Name of Health Facility	Consent to operate (CTO) Done by JSPCB as BMWM Rule 2016	Name of CTF Agency for BMWM safe disposal as BMWM Rule 2016 Biogenetic laboratory Pvt. LTD. Chotapichri ,Kalyanpur, Dhanbad, JH. MoU Yes OR No	BMW				Method of BMWM waste disposal	
				Yellow	Blue	Red	White	Sharp Pit	Placenta Pit
1.	Surya Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
2.	Kumar Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
3.	RambhaOrthopedic Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
4.	Produce Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
5.	Jyoti Reproductive Health Care Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
6.	Muskan Hospital Rech. Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
7.	Khushi Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
8.	Medinova Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
9.	Brinda Maternity Home &Surgical Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
10.	Diagnostic Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
11.	New City X-Ray & Path. Lab	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
12.	SevaSadan	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
13.	SanjivaniFracutre Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
14.	Surgy Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
15.	Chest Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
16.	Neelam Hospital & Research Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
17.	Shyama Diagnostic Lab	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
18.	Care Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
19.	City Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
20.	Krishna Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
21.	Prudence Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
22.	Shiv Shakti Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
23.	St. PoulHealthways	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
24.	Aastha Care	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
25.	Dentistree	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
26.	Dr.Shivam Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
27.	Subham Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
28.	Siddhi Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
29.	Brindavan Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
30.	Digital Patho. Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
31.	Hope Hospital & Ultrasound Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
32.	Su Khushi Hospital & Rech. Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
33.	Navjeevan Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
34.	Dr. (Mrs) PratapPathologicl Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
35.	Neuro Scan	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
36.	Indian Health Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
37.	Global Hospital &Rech. Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
38.	B.T.P.S. Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
39.	C.T.P.S. Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
40.	Dr.ShobhaSinha Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
41.	Mother Care	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
42.	Shree Sai Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
43.	Implant & Cosmetic Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
44.	Danta Multi Speciality Dental Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
45.	New Max Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR

46.	DhanwantriOrthopedic & Trauma Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
47.	Bharat Hospital &Rech. Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
48.	Swastik Hospital & Urology Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
49.	Bokaro Pathological Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
50.	BokaroPathjological Laboratory	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
51.	Hi -Tech Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
52.	Bokaro Pathological Lab.	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
53.	K. M. Memorial Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
54.	SanvikaMultispeciality Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
55.	Asha Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
56.	Life Line Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
57.	Rahat Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
58.	Bokaro Surgical & Maternity Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
59.	Electrosteel Limited	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
60.	Om Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
61.	Satyam Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
62.	Raj Hospital	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
63.	Mathur Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
64.	Multi Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
65.	IshaJanchGhar	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
66.	Baba Diagnostic Centre	NA	Yes	Yes	Yes	Yes	Yes	NR	NR
67.	Thyro Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
68.	Surgy Centre IVF	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
69.	Dalmia Social Welfare Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
70.	Shiv Shakti Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
71.	Maa Hospital &Rech Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
72.	RNB Hospital & Pal Eye Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
73.	City Care Hospital & Heart Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
74.	Relief Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
75.	Priyadarshi Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
76.	S.D. Dental & Research Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
77.	Goutam Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
78.	Life Care Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
79.	Maa Tara X Ray &Patholabs	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
80.	Kumar's Diagnostic Health Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
81.	BSM Clinilab Diagnostic & Imaging Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
82.	Life Line Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
83.	Blood Bank Red Cross Society	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
84.	Narayani Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
85.	Adhya Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
86.	Raj Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
87.	X Ray &Patholab& Sunrise Medico	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
88.	Sri Ram Hospital &Rech Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
89.	Smile Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
90.	Shree Ram Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
91.	AshaShashiHospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
92.	Dr.Shila Victor Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
93.	Jeevan Deep Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NO	NO

94.	VidyaPatho Lab	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
95.	Bokaro PAC DrLalPatho Lab	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
96.	MaaBhawani Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
97.	Sadar Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
98.	Shanti Health Care Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
99.	Prudence Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
100.	Khusi Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
101.	SaiDaignostic Laboratories	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
102.	St. Upel Nursing Home	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
103.	Maa Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
104.	Saraswati Maternity Home	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
105.	Asha Deep Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
106.	Raksha Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
107.	Mahabir Health Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
108.	Digital Diagnostic Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
109.	PoonamHospita	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
110.	Rai Dental & Implant Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
111.	Drihti Eye Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
112.	Advance Medi Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
113	Skin & Smile Leaser Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
114..	Rani Hospital & Baby Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
115.	Bhushan Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
116.	Kumar's Digital Health Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
117.	Park Digital XRay&JanchGhar	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
118.	G.K. Hospital &Rech. Centre	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
119.	Life Care Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
120.	Dy C.M.O. S.T.M.M. Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
121.	SRL Reach Limited	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
122.	SRL Diagnostic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
123.	Su KhusiDiagnostic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
124.	MM Hospital	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
125.	AbhaPatholab	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
126.	Ayub Dental Clinic	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
127.	MISSION HOSPITAL	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
128.	APEX HOSPITAL	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
129.	YOGIMAYA AAROGYAM	NA	Yes	Yes	Yes	Yes	Yes	NO	NO
130.	DCDC Kidney Care	NA	Yes	Yes	Yes	Yes	Yes	NO	NO

NA- Not Available # NR – Not Required

Tabulation of activities with objective, status, responsible functionary and timeline is as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Segregation and Record Keeping	Segregation of waste according to Annexure-8.1, of both government and private facilities	Partial	Civil Surgeon, District Veterinary Hospital In charges, Owners of Private Health Facility	3 months
	Make provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Annexure 8.1, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed.	Partial		3 months
	Not to give treated bio-medical waste with municipal solid waste	Complied		Immediate
	Provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year.	Partial		3 months
	Maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and color coding	Partial		Immediate
	Establish a process of collection of bio- medical waste from other CHCs every 48 hours, so that they can come to Bokaro for deep burial, if no Common Biomedical Waste Treatment Facility is finalized. To be sent to CBWTF when finalized.	Not Initiated		6 months

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Disposal	Each BMW producer to identify nearest Common Bio-Medical Treatment Facility and send their waste properly segregated and bar coded to them for final disposal.	Running	Civil Surgeon, District Veterinary Hospital In charge, Owners of Private Health Facility	On going
	Establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises or place for any Purpose	Partial		6 months
	If CBWTF is not within radius of 75kms, on site disposal may be allowed after the facility has taken permission from JSPCB and is following guidelines	NA	Civil Surgeon and RO, JSPCB	NA
	Avoidance of deep burial and switching over to process like autoclave, pyrolysis etc. Government run facilities to present estimates to health department regarding the same.	Partial	Civil Surgeon, Owners of Private Health Facility	3 months
	Maintain all record for operation of incineration, hydro or autoclaving etc. , for a period of five years.	Partial		3 months

2.4. Construction and Demolition (C&D) Waste Management Plan as bellow:-

Duties and responsibilities laid out by the Waste Management Rule 2016 in detailed manner to all the stakeholders ranging from waste generators to ULBs to ministries.

However, implementation of these rules has not been to full extent. Best practice in India shows that 80- 90% of C&D waste can be reused after processing in a variety of applications such as landscaping, earth work, soil erosion prevention and other applications such as road tiles etc.

Construction and demolition waste generators of Township are informed about their duties:-

- (i) Regarding the responsibility for collection, segregation of concrete, soil, and others and storages of C&D waste separately.
- (ii) To ensure that other waste does not get mixed with this waste.
- (iii) To ensure that there is no littering or deposition C&D waste so as to prevent obstruction to the traffic or the public or drains.
- (iv) Duties of service provider and their contractors:
Service providers are asked to remove all C&D waste and clean the area, appropriate storage and collection in a planned manner.
- (v) Appropriate containers for collection of waste and its removal at regular intervals.
- (vi) Collected waste is transported to appropriate site.
- (vii) Keeping track of generation of C&D waste.

After all marking of a place for disposing C&D waste is very important.

Tabulation of activities with objective, status, responsible functionary and timeline of Bokaro Steel City as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Carriage & Disposal	Service providers are asked to remove all C&D waste and clean the area, appropriate storage and collection in a planned manner. Demarcation of deposit site for C&D waste. Collected waste is transported to appropriate site.	Partial	DC and GM, TA, BSL	3 months
	To ensure that other waste does not get mixed with the C&D waste.	Initiated		Immediate
Penalty & By-law	Keeping track of generation of C&D waste. Passing of by-law, imposing fine for irresponsible disposal of C&D waste	Not initiated	GM, TA, BSL	6 months

Tabulation of activities with objective, status, responsible functionary and timeline of Chas Municipal Corporation as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Carriage & Disposal	Service providers are asked to remove all C&D waste and clean the area, appropriate storage and collection in a planned manner. Demarcation of deposit site for C&D waste. Collected waste is transported to appropriate site.	Partial	DC, & AMC, Chas Municipal Corporation	3 months
	To ensure that other waste does not get mixed with this waste.	Initiated		Immediate
Penalty & By-law	Keeping track of generation of C&D waste. Passing of by-law, imposing fine for irresponsible disposal of C&D waste	Not-initiated	AMC, Chas Municipal Corporation	6 months

Tabulation of activities with objective, status, responsible functionary and timeline of Phusro Nagar Parishad as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Carriage & Disposal	Service providers are asked to remove all C&D waste and clean the area, appropriate storage and collection in a planned manner. Demarcation of deposit site for C&D waste. Collected waste is transported to appropriate site.	Partial	DC and Executive Officer, Phusro Nagar Parishad	3 months
	To ensure that other waste does not get mixed with this waste.	Not Initiated	Executive Officer, Phusro Nagar Parishad	Immediate
Penalty & By-law	Keeping track of generation of C&D waste. Passing of by-law, imposing fine for irresponsible disposal of C&D waste	Not-initiated	Executive Officer, Phusro Nagar Parishad	6 months

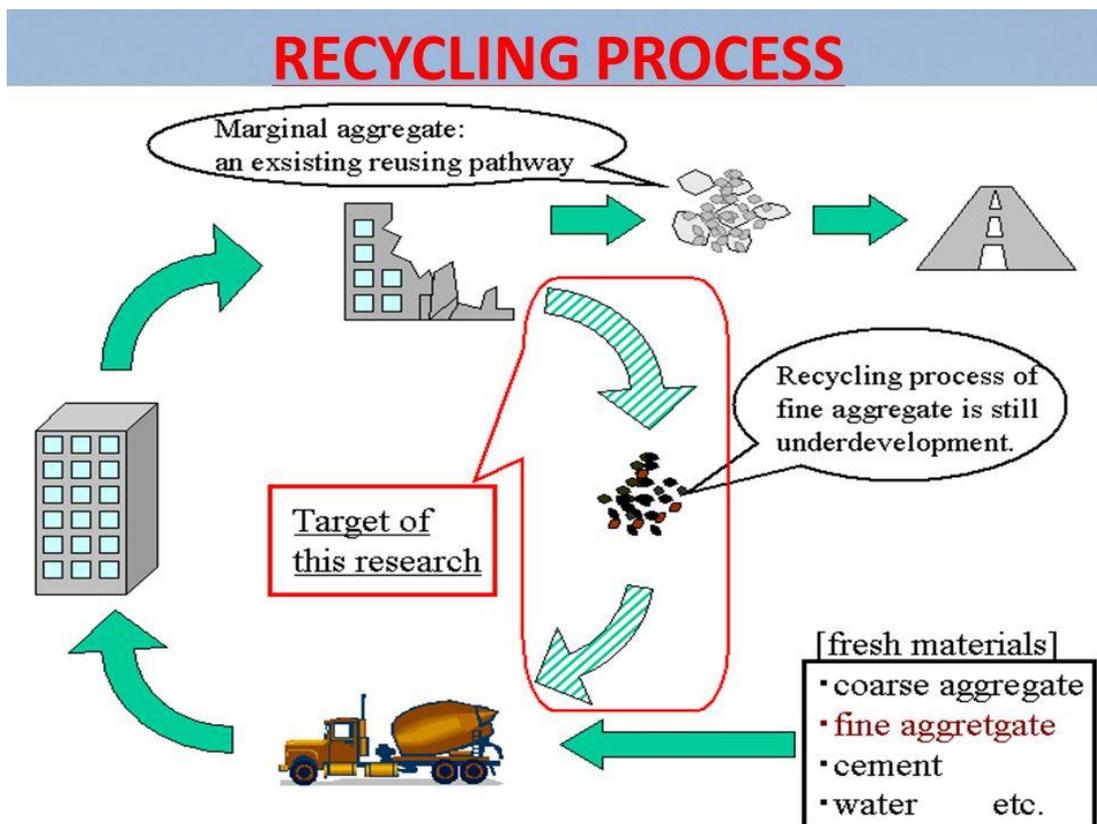


Figure 10. Proposed Construction and demolition waste management in urban area

2.5. Hazardous Waste Management Plan:-

The term **Hazardous waste** interprets as “any substance, excluding domestic and radioactive wastes, which causes significant hazards to human health or environment because of its quantity and/or corrosive, reactive, ignitable, toxic and infectious property when improperly treated, stored, transported and disposed.

As per the Hazardous Management Rule 2016, a list of activities (as well as metals in excess of certain concentration and many other compounds classified as hazardous) that create hazardous waste can be tabulated as follows:-

Tabulation of activities with objective, status, responsible functionary and time line as below:-

Activity	Objective	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Disposal & processing of Industrial HW	Storage of HW generated by the industrial units has to be done in an appropriate & safe manner by themselves. HW generating units have to get a registration under JSPCB.	Periodically updated	G.M, DIC and RO, JSPCB	3 months
	Maintaining a track record of all the activities/industrial processes which can create hazardous waste to ensure that they follow Hazardous Waste Rules 2016.			
	There should be authorized disposal or authorized user to buy the hazardous wastes generated while the establishment of an industrial unit.	Not-initiated		3 months

Tabulation of activities with objective, status, responsible functionary and timeline of Bokaro Steel City as below:-

Processing & Collection of Domestic HW	The administration is supposed to create possible and required number of safe disposal points in its jurisdiction for the disposal of domestic hazardous waste.	Not-initiated	GM, TA Bokaro Steel City	6 months
	To provide the facility of door to door domestic hazardous waste collection once a month.			9 months

Tabulation of activities with objective, status, responsible functionary and timeline of Chas Municipal Corporation as below:-

Processing & Collection Of domestic HW	The administration is supposed to create possible and required number of safe disposal points in its jurisdiction for the disposal of domestic hazardous waste.	Not-initiated	AMC, Chas Nagar Nigam.	6 months
	To provide the facility of door to door domestic hazardous waste collection once a month.			9 months

Tabulation of activities with objective, status, responsible functionary and timeline of Phusro Nagar Parishad as below:-

Processing & Collection Of Domestic HW	The administration is supposed to create possible and required number of safe disposal points in its jurisdiction for the disposal of domestic hazardous waste.	Not-initiated	Executive Officers , Phusro Nagar Parishad	6 months
	To provide the facility of door to door domestic hazardous waste collection once a month.			9 months

M/s. Trident Metal Energy Pvt. Ltd., At+PO- Karharia, Dist- Bokaro is nearest recycler.

Standard Operating Procedure at SAIL/Bokaro Steel Plant for ensuring Compliance to Hazardous & Other Wastes (Management & Trans boundary Movement) Rules' 2016.

SAIL/ Bokaro Steel plant has standard practice for management of Hazardous wastes generated at different shops in consonance with Hazardous & Other Wastes (Management & Transboundary Movement) Rules'2016 and amendments thereof. The standard operating procedure is as under:-

- M/s SAIL/ Bokaro Steel Plant is operating with valid Hazardous Waste authorization from Jharkhand state Pollution Control Board. HW Authorization (Ref. No. JSPCB/HO/RNC/HWM-6676084/2020/23, Dated: 29-07-2020) is valid up to 31st December2020. Online Application has been submitted to JSPCB for its renewal for next four years.
- The Various Hazardous Wastes generated out of steel making processes have been identified and characterized as per Hazardous & Other Wastes (Management & Trans boundary Movement) Rules'2016.
- The Quantity & type of Hazardous Waste generated & disposed are being maintained by various shops and are submitted to Environment Control Department in form-3. Total Hazardous Waste generated & disposed is compiled on annual basis by ECD.

- Annual return in Form-4 is submitted to board before 30th June for the previous fiscal. The Hazardous Waste return for 2019-20 was submitted to JSPCB on 12th 2020.
- BSL is following the philosophy off RRR, i.e. Reduce, Reuse, Recycle and Eco-friendly disposal in Secured Land Fill.
- Hazardous Waste manifest System is maintained by stores department for the HW sold to Authorized Recyclers. The copy of the same is submitted to board as & when received from stores.
- The non-usable & non-saleable Hazardous Wastes are dumped in our captive secured land fill.
- In compliance to Honorable Supreme Court order the details of Hazardous Wastes has been displayed at our Main gate.
- All the conditions of HW authorization are complied with. The compliance Report to the conditions of Hazardous Waste authorisation is submitted to the board on regular basis.

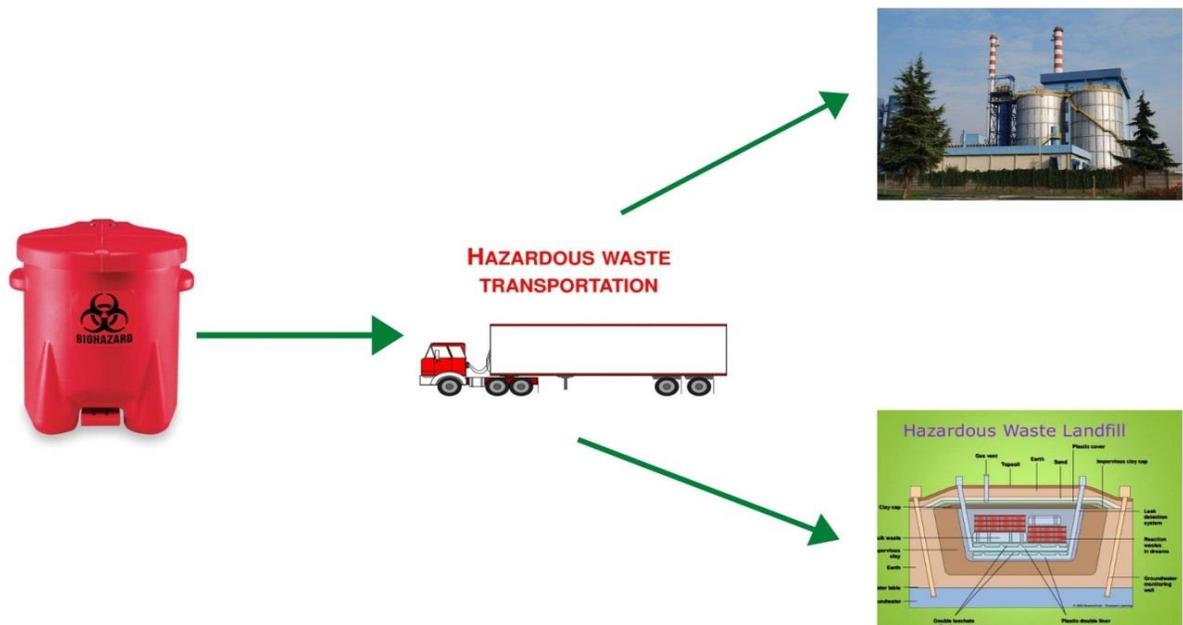


Figure 11: Proposed Construction and demolition waste management in urban area

2.6 E-Waste Management Plan:-

In this highly technological age Electrical and electronic equipment dominate. The matter of fact is that we can't imagine this century without electronics and electrical. Scientifically every electronics and electrical lose the favorable status of use after 3 years. After 3 years of use it becomes a scrap and termed as E-Waste. It includes the components, parts and spares, CPU, Laptops, electrical-typewriters, telex, telephone, cellular phones, printers including cartridges, T.V, LED, Refrigerator, Washing Machine, A.C, fluorescent and mercury containing lamps etc.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Disposal point & collection	Demarcated and identified disposal point within the concerned jurisdiction with proper safety measures (bin cover).	Partial	TA BSL, Chas AMC Chas Nagar Nigam, Executive Officers ,Phusro Nagar Parishad	6 months
	Preparing a record of E-waste collectors and making them publically well known.			6 months
	Inviting and facilitating the agencies to set up their collection Centre in the district.			1 year
Transportation & Recycling	Ensuring transportation of collected E-waste in an interval to the nearest authorized E-Waste recycler for recycling.	Partial	DC GM,TA BSL, AMC, Chas Nagar Nigam, Executive Officers ,Phusro Nagar Parishad	9 months
E-waste awareness program	A wide range awareness program to make common people aware about e-waste as it generated by every individual family.	Not Initiated	DC, GM,TA BSL, AMC Chas Nagar Nigam, Executive Officers , Phusro Nagar Parishad	Immediate
	To make sure that people must not treat e-waste as other general solid waste.			

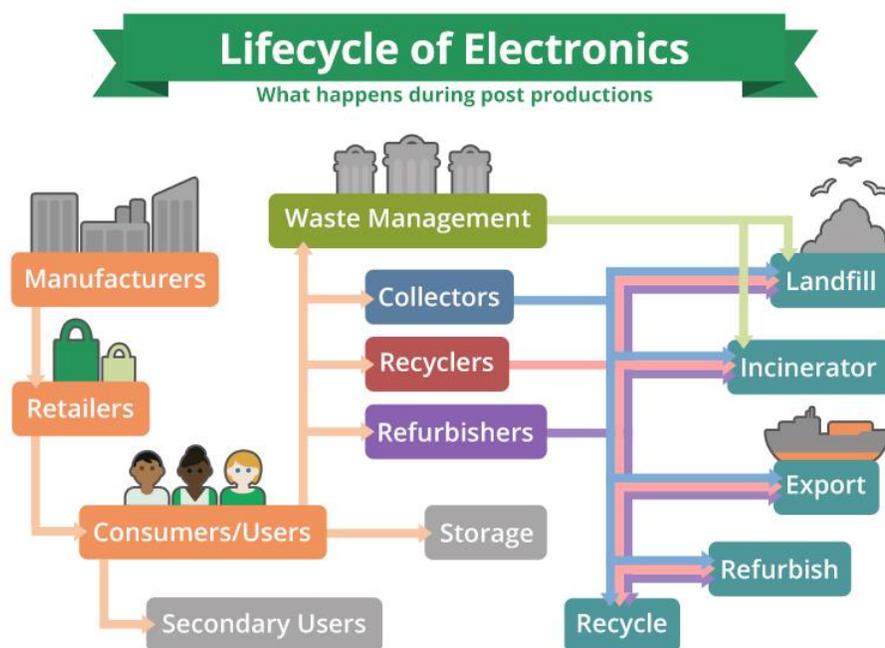


Figure 12. Proposed Cycle of E-waste management.

3. Water Resources Management Plan:-

An attitude of ignorance causes waste. Water one of the basic amenities essential for living is misused and thus changes into waste water. This is the major problem that is causing the whole living community suffer. The waste water even contaminates the ground water and breed pathogens, contributes to significant part of population dealing with water borne diseases.

India has rich resources of surface water nevertheless it depends on ground water. Ground water extraction has increased so much in the last two decades. Because of depletion of resources we are at the stage of water crisis in most part of the nation.

Bokaro is in industrial zone and thus the water requirement here is more. The town areas have the facility of supply drinking water facility. Villages do not have proper drinking water facility. For water they totally depend on ground water. Extraction of ground water at such a high level is exhausting the ground water level. Most places directly dump their drainage water into the existing drains which finally leads to the rivers through nalas and pollute the river water.

Waste water can be recycled or reused in many ways which can help fight water crisis to a greater extent along with water harvesting system of rain water.

As per According to a data publish by the Central Ground Water Board's 2017, **1,592 blocks**, identified as “water-stressed”, 313 critical blocks, 1,000-odd over- exploited blocks and 94 blocks with least water availability (for states without water-stressed blocks).

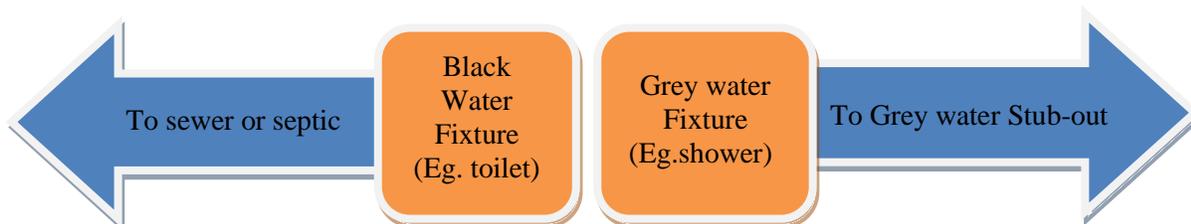
Bokaro district has 57258 no. of water bodies. The number includes **04** lakes, **1631** (GOV) ponds, **55614** Small Ponds (DHOBAs), wells, 9 rivers.

3.1.Domestic Sewage Management Plan:-

Liquid waste flowing through the Sewage of the district consists of liquid waste generated in residences, industries waste discharge and inflow of rain/flood/storm water.

Hence basically sewage contains three components:

- Sanitary or domestic sewage
- Industrial wastes
- Infiltration, Inflow and storm-water.



Scenario in Bokaro:-

1. Only few parts of the district (Bokaro Steel City) has proper sewerage system (260 kms.). Rest of the district drastically lacks the sewerage system. Some of the places (Chas Municipal and Phusro Nagar Parishad) have open drainage system. The destination point of most of the sewage and drains is Garga River via depression and nalas.
2. A DPR has been formulated for proper sewerage system and sewerage treatment plant of 20 MLD at Chas Municipal Corp and project of 196.41crore has been sanctioned by Phusro Municipality.
Most of the household in the district have backyard sump as way of disposal of domestic waste water (grey water).
3. No part of liquid waste is treated

Considering above, the proposals for management of waste water are:

1. Bokaro district lacks centralized sewerage system and not advisable at this juncture as well.
2. Rather, **decentralized sewerage system for each ward**, should be attempted for managing the grey water.
3. Chas Municipal Corp. is under process to formulate STP of 20MLD capacity.
Decentralized sewerage system is the collection, treatment, disposal / reuse of sewage from individual homes, clusters of homes, isolated communities or institutional facilities, as well as from portions of existing communities at or near the point of waste generation.
4. Chas Municipal Corp. is under process to formulate project about 196.41 crore.
Decentralized sewerage system is the collection, treatment, disposal / reuse of sewage from individual homes, clusters of homes, isolated communities or institutional facilities, as well as from portions of existing communities at or near the point of waste generation.

The decentralization concepts and technologies in sewerage management of grey water need to be systematically investigated, with focus on its development and practical implementation in Bokaro. It may be borne in mind that the approach adopted for decentralized sewage management system (DSMS) is area specific and governed by number of issues and conditions prevailing, and also the methodology adopted and is influenced by:-

- (i) Technical aspects
- (ii) Financial aspects,
- (iii) Social aspects,
- (iv) Environmental aspects, and
- (v) Legal aspects.

Hence, the district administration needs to plan it properly. One can take up one habitation of 60-100 households respectively and plan implementation of DSMS of 1-2 MLD capacity.

One example of Decentralized Wastewater Treatment System with treatment sequence is given below:

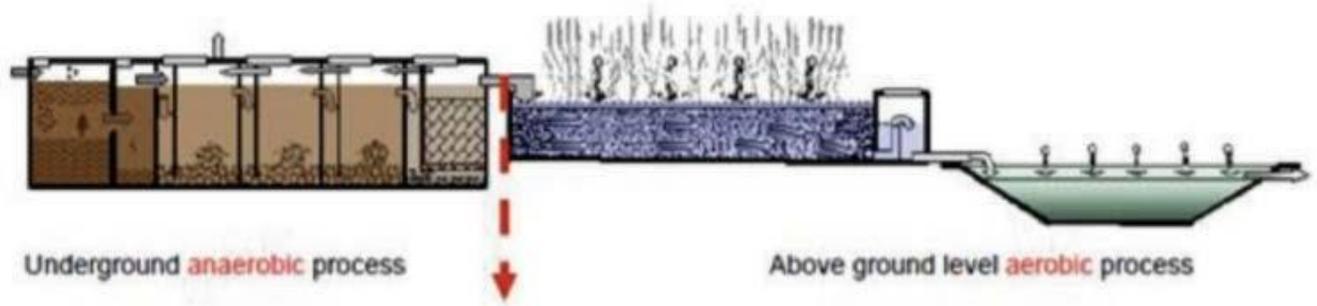


Figure 12. Schematic process flow diagram of DSMS

Tabulation of activities with objective, status, responsible functionary and timeline of Bokaro Steel City as bellow:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Formulation	Preparation and submission of the map of existing sewerage network and their outlet points in Bokaro Steel City to District Environment Committee.	Running	GM, TA, BSL,	1 Month
	(a) DPR preparation for development of sewerage and treatment system of domestic sewage and estimation of capacity of STP needed.	Old is Running & Modern Projected		On Going
	(b) Development of DPR for Decentralized Waste Water Collection and Treatment System (DWWCTS) - Sector WISE for in the Bokaro Steel City.	Running		On Going
Installation of sewerage network and STP	Placement and initiation of first unit of DWWCTS in one of the Sector of Bokaro Steel City.	Old is Running & modern Projected	GM,TA, Bokaro Steel City.	1.5 years
	Making of STP at Bokaro Steel City.		GM,TA, Bokaro Steel City.	1 years
	Installation of separate Effluent Treatment plant for sewage from DMCH		Civil Surgeon&	1 year
By-Laws	Making it mandatory in by law for complete ban on flow of grey water from households to water bodies like river, lakes and ponds.	Initiated	GM,TA, Bokaro Steel City.	1.5 years
	A compulsory backyard sump for household snot connected to sewerage system.			ASAP

Tabulation of activities with objective, status, responsible functionary and timeline of Bokaro Steel City as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Formulation	Preparation and submission of the map of existing sewerage network and their outlet points in Bokaro Steel City to District Environment Committee.	Running	GM, TA, BSL,	1 Month
	(a) DPR preparation for development of sewerage and treatment system of domestic sewage and estimation of capacity of STP needed.	Old is Running & Modern Projected		On Going
	(b) Development of DPR for Decentralized Waste Water Collection and Treatment System (DWWCTS) - Sector WISE for in the Bokaro Steel City.	Running		On Going
Installation of sewerage network and STP	Placement and initiation of first unit of DWWCTS in one of the Sector of Bokaro Steel City.	Old is Running & modern Projected	GM,TA, Bokaro Steel City.	1.5 years
	Making of STP at Bokaro Steel City.		GM,TA, Bokaro Steel City.	1 years
	Installation of separate Effluent Treatment plant for sewage from DMCH		Civil Surgeon&	1 year
By-Laws	Making it mandatory in by law for complete ban on flow of grey water from households to water bodies like river, lakes and ponds.	Initiated	GM,TA, Bokaro Steel City.	1.5 years
	A compulsory backyard sump for household snot connected to sewerage system.			ASAP

Tabulation of activities with objective, status, responsible functionary and timeline of Chas Municipal Corporation as bellow:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Formulation	Preparation and submission of the map of existing sewerage network and their outlet points in Chas Municipal Corporation to District Environment Committee.	Initiated	AMC, Chas Municipal corporation	1Month
	(A) DPR preparation for development of sewerage and treatment system of domestic sewage and estimation of capacity of STP needed.	Initiated		Running
	(b) Development of DPR for Decentralized Waste Water Collection and Treatment System (DWWCTS) - WARD WISE for in the Chas Mun. Corp.	Not initiated		1 year
Installation of sewerage network and STP	Placement and initiation of first unit of DWWCTS in one of the wards of Chas Mun. Corp.	Initiated	AMC, Chas Municipal corporation	1.5 years
	Making of STP at Chas Mun. Corp.		AMC, Chas Municipal corporation	1 years
	Installation of separate Effluent Treatment plant for sewage from DMCH		Civil Surgeon	1 year
By-Laws	Making it mandatory in by law for complete ban on flow of grey water from households to water bodies like river, lakes and ponds.	Initiated	AMC, Chas Municipal corporation	1.5 years
	A compulsory backyard sump for households not connected to sewerage system.			ASAP

Tabulation of activities with objective, status, responsible functionary and timeline of Phusro Nagar Parishad as bellow:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Formulation	Preparation and submission of the map of existing sewerage network and their outlet points in Phusro Nagar Parishad to District Environment Committee.	Initiated	Executive Officer, Phusro Nagar Parishad	1 Month
	(a) DPR preparation for development of sewerage and treatment system of domestic sewage and estimation of capacity of STP needed.	Initiated		Running
	(b) Development of DPR for Decentralized Waste Water Collection and Treatment System (DWWCTS) - WARD WISE for in the Phusro Nagar Parishad	Initiated		1 year
Installation of sewerage network and STP	Placement and initiation of first unit of DWWCTS in one of the wards of Phusro Nagar Parishad	Initiated	Executive Officer, Phusro Nagar Parishad	1.5 years
	Making of STP at Phusro Nagar Parishad.		Executive Officer, Phusro Nagar Parishad	1 years
	Installation of separate Effluent Treatment plant for sewage from DMCH		Civil Surgeon	1 year
By-Laws	Making it mandatory in by law for complete ban on flow of grey water from households to water bodies like river, lakes and ponds.	Initiated	Executive Officer, Phusro Nagar Parishad	1.5 years
	A compulsory backyard sump for households not connected to sewerage system.			ASAP

3.2. Industrial Wastewater Management Plan:-

Water is one of the most important factors of industrial settlement. Without water we cannot impart an industry. Same time industry's discharge mixes with water and pollutes it. Thus the water is termed as industrial waste water. If we take it at national level its quantity is tremendously huge as India is at the stage of industrialization.

Bokaro is an industrial zone of the country. Here Asia's largest steel plant (SAIL BOKARO) is located. Other than that some more industries (ELECTRO Steel, JIADA, JP Cement ...et.) are there. Hence generation of waste water is evident and needs **Industrial Waste Water Management Plan.**

3.3. Polluted Rivers Extending In Bokaro:-

According to the guidelines issued by the Hon'ble NGT in its order dated 20.09.2018 in O.A No. 673/2018, CPCB has classified the polluted river stretches in five priority categories i.e., I, II, III, IV, V depending upon the level of BOD.

- Criteria for Priority I - BOD greater than or equal to 30mg/L
- Criteria for Priority II - BOD between 20-30mg/L.
- Criteria for Priority III - BOD between 10-20mg/L.
- Criteria for Priority IV - BOD between 6-10mg/L.
- Criteria for Priority V - BOD between 3-6mg/L.

Seven river stretches have been identified in Priority IV & V as polluted stretches in Jharkhand.

Sl. No.	River	River Stretch	Approx. Length Of The Stretch (Km)	District
1	Garga	Along Telmuchu	22	Bokaro
2	Sankh	Kongserabasar To Bolba	10	Simdega
3	Subarnarekha	Hatia Dam To Jamshedpur	120	Ranchi, Khunti, SeraikelaKharsawan & East Singhbhum
4	Damodar	Phusro Road Bdg To Turio	12	Bokaro
5	Jumar	Kanke Dam To Kadal	10	Ranchi
6	Konar	Along Tilaya And Konar	-	Koderma & Hazaribagh
7	Nalkari	Along Patratu	-	Ramgarh

According to the above table the river “Garga” (flowing through only Bokaro district) is the most polluted and endangered river that mandatorily needs to be monitored and for this Chas Municipal Corp. has submitted a plan emphasizing the expedition to make ‘Garga’ pollution free. The plan also consists of making of DPR for constructing sewerage with treatment plant of 20MLD capacity.

The district enjoys the inflow of 09 rivers. Out of which most are under the risk of disappearance. Some major rivers we could take a glance of are:-

Damodar:- The river has been revitalized by restricting the disposal of ashes from **THERMAL PLANTS**. Tributaries of Damodar river are affected by idol immersion and plastic wastes. It is projected to keep a proper vigilance after the DEP gets approval.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Cleaning & Mandatory Monitoring of Rivers	A planned expedition to clean ‘Garga’ river and appointing a committee to monitor the health of the rivers half yearly.	Initiated (DPR Submitted to Gov. of Jharkhand For constructing sewerage & treatment plant)	DC,RO,JSPCB,DF O& TA BSL, Chas Nagar Nigam,	Running
	In no way mixing of pollutants and letting the sewerage and nals to join the ‘Garga’ / rivers. For this a proper vigilance should be mandatory.	Initiated		

3.4. Ground Water Extraction, Contamination and Recharge Plan:-

The original India dwells in villages. One of the major problems that our country faces is drinking water problem. And on that mostly this problem is dominant in the villages. Villages mostly depend on ground water. Extraction of ground water is done in different ways like, well, hand pumps, bore well...etc. continuous extraction of ground water to meet the demand of rising population has exhausted around 56 percent in many of the states.

Bokaro district has the same scenario as the whole nation. Mostly villages depend on ground water for their need. Different resources have different purpose of use e.g. pond and river- irrigation, well, hand pumps & bore wells- drinking and other domestic use.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Listing & networking the deprived villages and Convergence	Listing and networking of villages having water scarcity.	On-going	DC, Executive Engineer, Drinking Water and Sanitation Dept.	6 months
	Execution of all the schemes ensuring provision of drinking water for deprived villages.			1 year
Awareness camps for Rain Water Harvesting	Creating infrastructure for rain water harvesting structures on department buildings.	Partial	Departmental Heads	Before next monsoon
	Creating infrastructure for rain water harvesting compulsorily and passing of by-law for that.	Not-Initiated	DC & Departmental Heads	1 year
	Organizing awareness camps for making of rainwater harvesting structures like backyard sump.	Not-Initiated	DC, DFO, DDC, BDO and Head of Local Bodies	Continuing

3.5. Revitalization of Water Bodies:-

Considering India with respect to population it more prone about getting its water bodies like ponds and lakes dead, dry and disappear. These water bodies have been the dumping sites/points for urban as well as rural areas. In urban areas water bodies are the means of recreation which results into dumping of plastic materials, papers, water bottles by visitors. Other than that immersion of idols in both urban and rural areas are done into these water bodies. Thus, there a need of mandatory action to be taken so that these water bodies can be saved from siltation, sedimentation and weed growth. Water bodies under such condition must be re-charge so that they can get back to status of natural water retention.

Further they are polluted due to human activities such as bathing and washing of clothes.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Inventory of Water Bodies	Creating a datasheet of lakes, ponds, and rivers including the new ones constructed under schemes like MGNREGS	Partial	DC,DDC,CO	9 months
Cleaning and De-siltation of Water Bodies	Planned expedition for cleaning and de-siltation of lakes and other required water bodies.	Not-Initiated	DC,DDC, TA BSL, Chas Nagar Nigam, Phusro Nagar Parishad	12 months
Restriction	Putting a restriction on the use of soap and bathing in certain lakes and ponds by creating by-laws. Alternate supply of water to the hot spots used for bathing and washing.			15 months
Treatment provision	Creating provision for the treatment of effected water bodies.		DC,DDC, DFO,TA BSL, Chas Nagar Nigam, Phusro Nagar Parishad	18 months

The following table (status of Industries in Bokaro District) shows the Water status in the district:-

Status of industries in Bokaro District			
S.N.	Type of Industries	Pollution Control Arrangement	
		Air	Water
1	Coal Mines	Water spraying by tanker, Controlled Blasting,	Siltation Pond, Garland drain
2	Coal Washeries	Dust suppression by water spraying	Settling pond provided with
3	Hard Coke Plants	Down Draft / Double Tunnel with stack, Bag filter in coal crusher	Settling tank with recirculation system has been provided.
4	Soft Coke & Briquette Industries	Wet Scrubber with stack	Settling tank with recirculation
5	Refractories	Bag filter, water spraying	N/A
6	Stone Crushers	Crusher & Screen Covered, Tree plantation, Water spraying, Boundary Wall Provided.	N/A
7	Stone Mines	Tree Plantation, Manual Water spraying arrangement	
8	Thermal Power Plants	ESP, Water spraying	Ash settling pond,
9	Cement Plants	Bag House / Bag filters, Water spraying	N/A
10	Integrated Steel Plants	ESP, Bag filters, Cyclone, etc	Combined Effluent Treatment Plant
11	Sponge Iron Plant	ESP, Bag filters, Water spraying	Settling tank for recirculation.
12	Steel Products Mfg. Ind.	Fume extraction system, Water spraying etc	Cooling tower with recirculation system.
13	Red Bricks Ind.	onal Dust Settling Chamber / Induced dra	N/A
14	Quartz Grinding Ind.	Bag filter, Crusher & Screen covered, Fixed type water sprinkler installed for dust suppression	N/A
15	Flour Mills	Cyclone With Bag filter	N/A
16	Chemical Ind.	Water spraying	ETP
17	Misc. Ind.	As per list attached	As per list attached

Status of BMW Management & Disposal			
S.No.	No. of HCf	BMW Generation (Kg/day)	Pollution Control Arrangement
1	Bedded - 106	255.912	ETP/ BMW Disposed through CBWTF / Deep Burial
2	Non Bedded - 34	26.0422	BMW Disposed through CBWTF / Deep Burial

Water Quality Management
Data of NWMP for the year 2019 is enclosed

Air Quality Management
OCEMS has been installed in total 07 no. of industries falling under 17 categories for online monitoring
Installation of PM10 has been made mandatory at the industries for monitoring of Real Time Air Quality
Notification enclosed

Status of River Garga
Domestic Waste water discharge from BSL Township falls into river Garga
Municipal drains from Chas town are also falling into river Garga
Installation of STP(s) is/are required for treatment of domestic discharge to make river Garga Pollution free.

Note : Complete Details are as enclosed in Excel File containing corresponding sheets.

4. Air Management Plan:-

Air crisis is the most serious problem of not only India but also the world. Human activities and scientific development has taken this problem to the next level. Air pollution has become the matter of great concern for the whole globe.

In no way the scene of Bokaro district in this regard is different. Being the industrial zone of the country the district has put itself at the stage of air crisis.

Following are the factors causing Air Pollution in Bokaro:-

1. Bokaro Steel Plant (SAIL BOKARO)
2. Electro Steel Plant (Talgaria)
3. Burning of solid municipal waste & domestic fuel burning emission.
4. Coal mining, Stone Mining and Crushing (will be dealt with in Section6)
5. BTPS (Kathara), CTPS (Chandrapura)
6. Vehicular Emissions
7. Other industries like Cement factory (Dalmia), JIADA.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Vigilance on Air Quality	Setting up a Continuous Ambient Air Quality Monitoring Station (CAAQMS) and maintain a record of its readings for future reference.	Not Initiated	DFO and RO, JSPCB	1 year
Vehicular Emissions and Dust	Mandatory pollution check points for vehicles keeping loading norms of vehicular emission rules in mind as vehicle emits more smoke.	Initiated	DTO	Continuous
	Check posts must check sand and coal laden vehicles if they are covered.			
Complete restriction on burning waste	A by-law that must make sure that burning of municipal waste in entire district is totally and strictly prohibited.	Partial	Head of all Local Bodies	6 months
Vigilance on Emissions from Designated Industrial Area	Strict instruction must be given to the industries periodical to maintain air pollution levels.	Initiated	RO, JSPCB	Twice a year

Also, the abandoned mines pose a huge opportunity for land reclamation.

The following table (status of Industries in Bokaro District) shows the Air status in the district:-

Status of industries in Bokaro District			
S.N.	Type of Industries	Pollution Control Arrangement	
		Air	Water
1	Coal Mines	Water spraying by tanker, Controlled Blasting,	Siltation Pond, Garland drain
2	Coal Washeries	Dust suppression by water spraying	Settling pond provided with
3	Hard Coke Plants	Down Draft / Double Tunnel with stack, Bag filter in coal crusher	Settling tank with recirculation system has been provided.
4	Soft Coke & Briquette Industries	Wet Scrubber with stack	Settling tank with recirculation
5	Refractories	Bag filter, water spraying	N/A
6	Stone Crushers	Crusher & Screen Covered, Tree plantation, Water spraying, Boundary Wall Provided.	N/A
7	Stone Mines	Tree Plantation, Manual Water spraying arrangement	
8	Thermal Power Plants	ESP, Water spraying	Ash settling pond,
9	Cement Plants	Bag House / Bag filters, Water spraying	N/A
10	Integrated Steel Plants	ESP, Bag filters, Cyclone, etc	Combined Effluent Treatment Plant
11	Sponge Iron Plant	ESP, Bag filters, Water spraying	Settling tank for recirculation.
12	Steel Products Mfg. Ind.	Fume extraction system, Water spraying etc	Cooling tower with recirculation system.
13	Red Bricks Ind.	onal Dust Settling Chamber / Induced dra	N/A
14	Quartz Grinding Ind.	Bag filter, Crusher & Screen covered, Fixed type water sprinkler installed for dust suppression	N/A
15	Flour Mills	Cyclone With Bag filter	N/A
16	Chemical Ind.	Water spraying	ETP
17	Misc. Ind.	As per list attached	As per list attached

Status of BMW Management & Disposal			
S.B.	No. of HCf	BMW Generation (Kg/day)	Pollution Control Arrangement
1	Bedded - 106	255.912	ETP/ BMW Disposed through CBWTF / Deep Burial
2	Non Bedded - 34	26.0422	BMW Disposed through CBWTF / Deep Burial

Water Quality Management
Data of NWMP for the year 2019 is enclosed

Air Quality Management
OCEMS has been installed in total 07 no. of industries falling under 17 categories for online monitoring
Installation of PM10 has been made mandatory at the industries for monitoring of Real Time Air Quality
Notification enclosed

Status of River Garga
Domestic Waste water discharge from BSL Township falls into river Garga
Municipal drains from Chas town are also falling into river Garga
Installation of STP(s) is/are required for treatment of domestic discharge to make river Garga Pollution free.

Note : Complete Details are as enclosed in Excel File containing corresponding sheets.

4.1. 122 Non-Attainment Cities

Bokaro is not in the list of Non-attainment cities.

5. 100 Industrial Clusters

Bokaro is not a polluting industrial cluster.

6. Mining Activity Management Plan:-

Bokaro district has mainly coal mining, stone mining and sand mining and the related activities.

Activity	Licensed Units
Coal	09
Stone Mining	19
Sand Mining	02

Mining creates occupational illness. Coal mining and stone mining are kinds of mining which create high life risk. Sand mining creates a low risk. Related activities like loading, dumping, furnace use and stone crusher also create occupational illness. Stone crushers even cause respiratory risk to passers by.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Prevention of Dust around Crushers	Quarterly report submission in compliance with CTO by crusher units, Non-complying units to be taken under surveillance.	Partial	DMO, JSPCB	3 months
	Crushers to be set up with dust soakers and sprinklers compulsorily.	Partial initiated		
	Crushers to have fencing of dust-cum-visual barrier.			
Occupational Safety	Wearing of dust preventive masks by every employee to ensure occupational safety.	Initiated		

6.1. Sustainable Sand Mining:-

Guidelines issued by MoEF&CC as well as Jharkhand state regarding sustainable sand mining ensures the future of sand mining.

The salient features of Sand Mining Policy notified by Jharkhand State in 2017 are as follows:-

District Survey Report to be prepared mandatorily.

1. Streams/River to be categorized.
2. The District Survey Committee shall fix the sand order available in different order of streams such as 1st, 2nd, 3rd, 4th, ...etc. based on its size and capacity
3. Management of Sand Deposits of Category-1Streams/Rivers
4. Management of Sand Deposits of Category-2Streams/Rivers
5. The sand deposits of Category-1 stream/rivers will be kept fully free from domain of grant of mining lease.
6. The Sand deposits of Category-2 shall be managed by State Government.

Mining policy 2017 states that each district has to prepare District Survey Report (DSR), stating the available potential of minor mineral in a district and also to calculate sustainable mining rates for different sand mining river points.

DSR of Bokaro is under procedure that will reveal the depth as well as amount of annual sand that can be mined. Thus, immediate update is expected.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary(ies)	Expected Time after approval of DEP
Preparation & Submission of DSR	Review and updating of DSR to calculate the rate of annual sustainable sand mining (Ghat wise) and categorize the river stream.	Partial	Geologist, District Geology Office	6 months
Record of amount of extraction	Balu Ghats Lease holders to keep the record of the amount of sand extracted from their lease area and its random checking.		SP, DMO, Mining Task Force,	Continuous
Vigilance on Illegal Sand Mining	Monsoon sand mining to be totally prohibited. Proper vigilance on illegal extraction and sale of sand.			

6.2 Sustainable Stone Mining:-

DSR of Bokaro is under procedure that will reveal the depth as well as amount of annual Stone that can be mined. Thus, immediate update is expected.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Preparation & Submission of DSR	Review and updating of DSR to calculate the rate of annual sustainable Stone mining (Stone Mining wise) and categorize the hilly area.	Partial	Geologist, District Geology Office	6 months
Record of amount of extraction	Stone Mining Lease holders to keep the record of the amount of stone extracted from their lease area and its random checking.		SP, DMO, Mining Task Force,	Continuous
Vigilance on Illegal Stone Mining	Proper vigilance on illegal extraction and sale of stone.			

6.3 Sustainable Coal Mining:-

DSR of Bokaro is under procedure that will reveal the depth as well as amount of annual sand that can be mined. Thus, immediate update is expected.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Preparation & Submission of DSR	Review and updating of DSR to calculate the rate of annual sustainable coal mining (mine wise).	Partial	Geologist, District Geology Office	6 months
Record of amount of extraction	Coal mining Lease holders to keep the record of the amount of COAL.		SP, DMO, Mining Task Force,	Continuous
Vigilance on Illegal Coal Mining	Monsoon COAL mining to be totally prohibited. Proper vigilance on illegal extraction and sale of COAL.			

7. Noise Pollution Management Plan:-

Noise pollution causes a kind of physical disability. This is one of the major environmental problems in our country. Mainly it is caused by vehicles, industries, loud music....etc.

Since Bokaro is an industrial area hence noise pollution is evident here. Measures taken by the district administration for maintaining a peaceful ambience are as follows:-

1. Educational institutions and hospitals to be kept free from noise creating elements.
2. No noise causing element should lie in an area of 100 mtrs. From a school/hospital.
3. Penalty on violating the noise norms.
4. Awareness programs about the harms of creating noise and noise is a kind of pollution.
5. Loud horns, amplifiers, DJ, to be strictly restricted according to Noise Control Regulation Act-1951-2000.
6. Low sound explosive and siren to be used by the industries.

Tabulation of activities with objective, status, responsible functionary and timeline as below:-

Activity	Objectives	Status	Responsible Functionary (ies)	Expected Time after approval of DEP
Restriction on high noise creating elements	Loud horns, amplifiers, DJ, to be strictly restricted according to Noise Control Regulation Act-1951-2000.	Initiated	SP, SDM	Continuous
Educational institutions/hospitals	Educational institutions and hospitals to be kept free from noise creating elements. No noise causing element should lie in an area of 100 mtrs. From a school/hospital		SP, SDM	Continuous
Industries & vehicles	Penalty on violating the noise norms. Proper vigilance on loud noise explosive, siren & vehicle horns.			

8. Financial Projections:-

Will be done in due course of time.

References:-

1. www.downtoearth.org.in
2. **What a waste 2.0** published by World Bank
3. **Municipal Solid waste management manual, part –ii** Published by CPHEEO, MoUHD
4. **Success story of ambika Pur zero waste model**
5. **TGM_ Commam Hazardous Waste Treatment, MoEF&CC**

9. Data Submitted to DEC

1.0 Waste Management Plan

(i) Solid Waste Management Plan

No.	Action Areas	Details of Data Requirement	Please enter Measurable Outcome for District	ULB1	ULB2	ULB3
	Name of Urban Local Body (ULB)			Bokaro Steel City, Township (BSL), Town administration Department.	Chas Municipal Corporation	Phusro Municipality
	No of ULBs in the District					
	Population			2 Lakh	141640	89178
SW1	Report on inventory of total solid waste Generation					
SW1a		Total solid waste Generation		85-90 MT	52 MT	15.16 MT
SW1b		Qty. of Dry Waste segregated		36 MT	16.68 MT	3 MT
SW1c		Qty. of Wet Waste segregated		4.5	32	1
SW1d		Qty. of C&D Waste segregated			1 MT	1.18 MT

SW1e		Qty. of Street Sweeping			0.5 MT	N.E.
SW1f		Qty. of Drain Silt			1 MT	N.E.
SW1g		Qty. of Domestic Hazardous Waste(DHW) collected			0.02 MT	N.F.
SW1h		Qty. of Other Waste (Horticulture, sanitary waste, etc.)			0.8 MT	N.E.
SW1i		No of Old dump sites		None	0	1
SW1j		Qty stored in dumpsites		Not estimated	NA	N.E.
SW1k		No of Sanitary landfills		None	0	0
SW1l		No of wards		10 Sectors / nos	35	28
SW2	Compliance by Bulk Waste Generators			Nil		
SW2a		No of BW Generators		inventory not done	12	2
SW2b		No of on-site facilities for Wet Waste		No data	3	2
SW3	Compliance in segregated waste Collection SW Collection			Partial		
SW3a		Total generation			52	
SW3b		Wet Waste			NA	1 MT
SW3c		Dry Waste			NA	3 MT
SW3d		C&D Waste			NA	1.18
SW4	Waste Management Operations					

SW4a		Door to Door Collection		100%	60%	50%
SW4b		Mechanical Road Sweeping		Initiated but Stopped.	0	0%
SW4c		Manual Sweeping		100%	100%	100%
SW4d		Segregated Waste Transport		partial	10%	50%
SW4e		Digesters (Bio-methanation)		Not Initiated	Not initiated	0%
SW4f		Composting operation		Not Initiated	10%	20%
SW4g		MRF Operation		MRF used	MRF Used	N.I.
SW4h		Use of Sanitary Landfill		no SLF	No SLF	NO SLF
SW4i		Reclamation of old dumpsites		initiated	3	N.I.
SW4j		Linkage with Waste to Energy Boilers / Cement Plants			Not initiated	N.I.
SW4k		Linkage with Recyclers		not initiated	Not initiated	N.I.
SW4l		Authorization of waste pickers		initiated	Initiated	Initiated
SW4m		Linkage with TSDF / CBMWTF		not initiated	Initiated	N.I.
SW4n		Involvement of NGOs		not initiated	Initiated	Initiated
SW4o		Linkage with Producers / Brand Owners		not initiated	Not initiated	Initiated
SW4p		Authorisation of Waste Pickers		not initiated	Initiated	

SW4q		Issuance of ID Cards			Initiated	N.I.
SW5	Adequacy of of Infrastructure			Adequate for collection, storage and transportation		
SW5a		Waste Collection Trolleys		157 Nos. Required / 157 Nos. Available	75/40	4
SW5b		Mini Collection Trucks		Not required.	40/17	16
SW5c		Segregated Transport		yes 20 %	Yes/25%	11%
SW5d		Bulk Waste Trucks		02 Compactor Loader and 01 Dumper Placer . Required] /01 Compactor Loader and 01 Dumper Placer Available]	10/05	1
SW5e		Waste Transfer points		Not. Required	NA	0
SW5f		Bio-methanation units		Not. Required	NA	N.A.
SW5h		Composting units		01 Nos. Required / Not. Available]	4/2	N.A.
SW5i		Material Recovery Facilities		Not Available	1 in Use	N.A.
SW5k		Waste to Energy (if applicable)		Not. Required	NA	N.A.
SW5l		Waste to RDF		Required	NA	N.A.
SW5m		Sanitary Land fills		Not Available	NA	N.A.
SW5n		Capacity of sanitary landfills		Nost. Available	NA	N.A.
SW5o		Waste Deposit Centers (DHW)		612 Bins Available	1	N.A.
SW5p		Other facilities		JCB		
SW6	Notification and Implementation of By-Laws					

SW6a		Notification of By-laws			Done	Done
SW6b		Implementation of by-laws			In Progress	In Progress
SW7	Adequacy of Financial Status of ULB					
SW7a		CAPEX Required			20 Crore	
SW7b		OPEX			3 Crore	
SW7c		Adequacy of OPEX			No	

(ii) Plastic Waste Management (for each ULB)

No.	Action Areas	Details of Data Requirement	Please enter Measurable Outcome for District	ULB1	ULB2	ULB3
	Name of ULB			Bokaro Steel City, Township (BSL), Town administration Department.	Chas Municipal Corporation	Phusro Municipality
	Population			2 Lakh (Approx.)	141640	89178
PW1	Inventory of plastic waste generation					
PW1a		Estimated Quantity of plastic waste generated in District		4.5 MT/day	1 MT/Day	2.2 MT/day
PW2	Implementation of Collection					

PW2a		Door to Door collection		100%	10%	partial
PW2b		Segregated Waste collection		80%	Partial	partial
PW2c		Plastic waste collection at Material Recovery Facility		not installed	MRF in Use	N.I.
PW2d		Authorization of PW pickers		not initiated	33	N.I.
PW2e		PW collection Centers		not established	1	N.E.
PW3	Establishment of linkage with Stakeholders					
PW3a		Established linkage with PROs of Producers		not established	Not established	N.E.
PW3b		Established linkage with NGOs		not established	1	Established
PW4	Availability of facilities for Recycling or utilization of PW					
PW4a		No. of PW recyclers		Not Known	0	0
PW4b		No Manufacturers		Not Known	0	0
PW4c		No of pyrolysis oil plants		Not Known	0	0
PW4d		Plastic pyrolysis		Not Known	0	0
PW4e		Use in road making		Nil	Not per Month	0
PW4f		Co-processing in Cement Kiln		Nil	Not per Month	0
W5	Implementation of PW Management Rules, 2016					
W5a		Sealing of units producing < 50-micron plastic			Partial	Sealed
PW5b		Prohibiting sale of carry bags < 50 micron			Partial	Prohibited

PW5c		Ban on Carry bags and other single use plastics as notified by State Government			Partial	Banned
PW6	Implementation of Extended Producers Responsibility (EPR) through Producers/Brand-owners					
PW6a		No of Producers associated with ULBs			None	None
PW6b		Financial support by Producers / Brand owners to ULBs			None	None
PW6c		Amount of PRO Support			None	
PW6d		Infrastructure support by Producers / Brand owners to ULBs			None	None
PW6e		No of collection centers established by Producers / Brand owners to ULBs			None	None

(iii) C&D Waste Management

No.	Action Areas	Details of Data Requirement	Please enter Measurable Outcome for District	ULB1	ULB2	ULB3
	Name of ULB			Bokaro Steel City, Township (BSL), Town administration Department.	Chas Municipal Corporation	Phusro
	Population			2 Lakh (Approx.)	141640	89178
CD1	Inventory of C&D waste generation					
CD1a		Estimated Quantity		Not estimated	1000Kg/Day	1018
CD2	Implement scheme for permitting bulk waste generators					
CD2a		Issuance of Permissions by ULBs		Not initiated	NA	Initiated
CD3	Establishment of C&D Waste Deposition centers					
CD3a		Establishment of Deposition Points		No	Yes	No
CD3b		C&D Deposition point identified		No	Yes	No
CD4	Implementation of By-Laws for CD Waste Management					
CD4a		Implementation of By-laws		Not Notified	Notified	Notified
CD4b		Collection of Deposition / disposal Charges			Initiated	Not Initiated

CD5	Establishment of C&D Waste recycling plant or linkage with such facility					
CD5a		Establishment CD Waste Recycling Plant		No facility exists	Sent to Shared Facility	No facility
CD5b		Capacity of CD Waste Recycling Plant		Not available	NA	N.A.

(iv) Bio- Medical Waste

No.	Action Areas	Details of Data Requirement	Please enter Measurable Outcome for District	ULB 1	ULB 2	ULB 3	ULB 4	ULB 5	ULB 6	ULB 7	ULB 8	ULB 9	ULB 10	ULB 11
	Name of ULB			DH Bokaro	SDH Chas	SDH Bermo	SDH Tenughat	CHC Chas	CHC Jaridih	CHC Chandankiyari	CHC Peterwar	CHC Gomia	CHC Kasmar	CHC Nawadih
	Population	20.62 Lakhs	20.62 Lakhs	813402		321939			104988	230238	132150	231185	89674	138454
BMW1	Inventory of Biomedical Waste Generation													

BMW1a		Total no. of Bedded Hospitals	360	80	30	30	25	15	30	30	30	30	30	30
BMW1b		Total no. of non-bedded HCF	0	0	0	0	0	0	0	0	0	0	0	0
BMW1c		Total no. Clinics	67	47					4	3	4	6	0	3
BMW1d		No of Veterinary Hospitals	18											
BMW1e		Path labs	44	28					5	0	4	5	0	2
BMW1f		Dental Clinics	21	19					2	0	0	0	0	0
BMW1g		Blood Banks	2	2										
BMW1h		Animal Houses												
BMW1i		Bio-research Labs	11	1	1	1	1	1	1	1	1	1	1	1
BMW1j		Others												
BMW2	Authorizati on of HCFs by SPCBs / PCCs													
BMW2a		Bedded HCFs	11	1	1	1	1	1	1	1	1	1	1	1

BMW2b		Non-bedded HCFs	11											
BMW3a	Biomedical Waste Treatment and Disposal Facilities (CBMWTFs)		11	1	1	1	1	1	1	1	1	1	1	1
BMW3a		No of CBMWTFs	11	1	1	1	1	1	1	1	1	1	1	1
BMW3b		Linkage with CBMWTFs	11	1	1	1	1	1	1	1	1	1	1	1
BMW3c		Capacity of CBMWTFs	11	1	1	1	1	1	1	1	1	1	1	1
BMW3d		Requirements of CBMWTFs	11	1	1	1	1	1	1	1	1	1	1	1
BMW3e		Captive Disposal Facilities of HCFs												
BMW4	Compliance by CBMWTFs													
BMW4a		Compliance to standards		Meeting	Not Meeting									

BMW4b		Barcode tracking by HCFs / CBMWTFs		100 %	MOU under processes	MOU under process								
BMW4c		Daily BMW lifting by CBMWTFs	8 kg/day	8 kg/day	0	0	0	0	0	0	0	0	0	0
BMW5	Status of Compliance by Healthcare Facilities													
BMW5a		Pre-segregation	100 %	100 %	100%	100%	100%	100%	100%	100%	100 %	100%	100%	100%
BMW5b		Linkage with CBMWTFs		100 %	MOU Uner Processes	MOU Uner Process								

(v) Hazardous Waste Management

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
HW1	Inventory of Hazardous Waste			
HW1a		No of HW Generating Industry	[Nos.]	42
HW1b		Quantity of HW	[MT/Annum]	61062.4279 MT/Annum
HW1c		Quantity of Incinierable HW	[MT/Annum]	1348.925 MT/Annum
HW1d		Quantity of land-fillable HW	[MT/Annum]	2830.2922 MT/Annum
HW1e		Quantity of Recyclable / utilizable HW	[MT/Annum]	11016.5607 MT/Annum
HW2	Contaminated Sites and illegal industrial hazardous waste dumpsites			
HW2a		No of HW dumpsites	[Nos] / [None]	[None]
HW2c		Probable Contaminated Sites	[Nos] (provide list)	1. Chandrapura Thermal Power Station, DVC, Bokaro, Jharkhand
HW3	Authorization by SPCBs/PCCs			
HW3a		No of industries authorized	[Nos]	42
HW3b		Display Board of HW Generation in front of Gate	[Nos]	37
HW3	Availability of Common Hazardous Waste TSDF			
HW3a		Common TSDF	[Exists] / [No] / [Sent to Other District within State]	[Sent to Other District within State]
HW3b		Industries linkage with TSDF	[Nos.]	[Not Available]
HW4	Linkage of ULBs in District with Common TSDF			

HW4a		ULBs linked to Common TSDFs for Domestic Hazardous Waste	[Yes] / [No]	[N/A]
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(vi) E-Waste Management

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
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]	None
EW1d		Collection centers established by Producers or their PROs in the District	[Nos] / [None]	None
EW1e		Does the district has linkage with authorized E-Waste recyclers / Dismantler	[Yes] / [No]	No
EW1f		No authorized E-Waste recyclers / Dismantler	[Nos] / [None]	None
EW2	Status of Collection of E-Waste			
EW2a		Authorizing E-Waste collectors	[Authorized] / [None]	None
EW2b		Involvement of NGOs	[Yes] / [No] / [Nos]	No
EW2c		Does Producers have approached NGOs/ Informal Sector for setting up Collection Centers.	[Yes] / [No] / [Nos]	No

EW2d		Does ULBs have linkage with authorized Recyclers / Dismantlers	[Yes] / [No]	No
EW4	Control E-Waste related pollution			
EW4a		Does informal trading, dismantling, and recycling of e-waste exists in District	[Yes] / [No]	No
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]	None
EW5	Creation of Awareness on E-Waste handling and disposal			
EW5a		Does PROs / Producers conducted any District level Awareness Campaigns	[Yes] / [No] / [Nos]	No
EW5c		Does District Administration conducted any District level Awareness Campaigns	[Yes] / [No] / [Nos]	No

2.0 Waste Water Management Plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
WQ1	Inventory of water resources in District			
WQ1a		Rivers	[Nos] and [Length in Km]	River- 9
WQ1b		Length of Coastline	[in Km]	NA
WQ1c		Nalas/Drains meeting Rivers	[Nos]	Not Estimated
WQ1d		Lakes / Ponds	[Nos] and [Area in Hectares]	1667
WQ1e		Total Quantity of sewage and industrial discharge in District	[Automatic] (SW1a+IW1b)	Automatic
	Control of Groundwater Water Quality			
WQ2a		Estimated number of bore-wells	[Nos]	30,566
WQ2b		No of permissions given for extraction of groundwater	[Nos]	869(CMC & Phusro Nagar Parishad)
WQ2c		Number of groundwater polluted areas	[Nos]	Null
WQ2d		Groundwater Availability	[adequate] / [not adequate]	Not Adequate
WQ3	Availability of Water Quality Data			
WQ3a		Creation of monitoring cell	[Yes] / [No]	Yes

WQ3b		Access to Surface water and groundwater quality data at DM office	[Available] or [Not available]	Available
WQ4	Control of River side Activities			
WQ4a	Control of River side Activities	River Side open defecation	[Fully Controlled] / [Partly controlled] / [no Measures taken]	Fully Controlled
WQ4b		Dumping of SW on river banks	[Fully Controlled] / [Partly controlled] / [no Measures taken]	Partly controlled
WQ4c		Control measures for idol immersion	[Measures taken] / [Measures taken post immersion] / [No Measures taken]	No measures taken
WQ5	Control of Water Pollution in Rivers			
WQ5a		Percentage of untreated sewage	[%] (automatic SM1g/SM1a)	Automatic SM1g/SM1a
WQ5b		Monitoring of Action Plans for Rejuvenation of Rivers	[Monitored] / [Not monitored] [not applicable]	Monitored
WQ5c		No of directions given to industries for Discharge of Untreated industrial wastewater in last 12 months	[Nos]	0
WQ6	Awareness Activities			
WQ6a		District level campaigns on protection of water quality	[Nos in previous year]	From 3rd- 8th Oct Under Jal Jeevan Mission
WQ6b	Oil Spill Disaster Contingency Plan			
WQ6a		Creation of District Oil Spill Crisis Management Group	[Created] / [Not Created]	Not Created

WQ6b		Preparation District Oil Spill Disaster Contingency Plan	[Prepared] / [Not Prepared]	Not Prepared
WQ7	Protection of Flood plains			
WQ7a		Encroachment of flood plains is regulated.	[Yes] / [No]	No
	Rainwater Harvesting			
WQ8a		Action plan for Rain water harvesting	[Implemented] / [Not implemented]	Implemented

3.0 Domestic Sewage Management Plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
SM1	Inventory of Sewage Management			
SM1a		Total Quantity of Sewage generated in District from Class II cities and above	[MLD]	29 MLD
SM1b		No of Class-II towns and above	[Nos]	2
SM1c		No of Class-I towns and above	[Nos]	1
SM1d		No of Towns needing STPs	[Nos]	4
SM1e		No of Towns STPs installed	[Nos]	Null
SM1f		Quantity of treated sewage flowing into Rivers (directly or indirectly)	[MLD]	29
SM1g		Quantity of untreated or partially treated sewage (directly or indirectly)	[Automatic]	NA
SM1h		Quantity of sewage flowing into lakes	[MLD]	4

SM1i		No of industrial townships	[Nos]	1
SW2	Adequacy of Available Infrastructure for Sewage Treatment			
SM2a		% sewage treated in STPs	[Automatic]	Nil
SM2b		Total available Treatment Capacity	[MLD]	NA
SM2c		Additional treatment capacity required	[MLD]	NA
SM3	Adequacy of Sewerage Network			
SM3a		No of ULBs having partial underground sewerage network	[Nos]	1
SM3b		No of towns not having sewerage network	[Nos]	1
SM3c		% population covered under sewerage network	[Automatic]	2 Lakh people Covered

4.0 Industrial Wastewater Management Plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
IWW1	Inventory of industrial wastewater Generation in District			
IWW1a		No of Industries discharging wastewater	[Nos]	01
IWW1b		Total Quantity of industrial wastewater generated	[MLD]	8100 KLD
IWW1c		Quantity of treated IWW discharged into Nalas / Rivers	[MLD]	8100 KLD
IWW1d		Quantity of un-treated or partially treated IWW discharged into lakes	[MLD]	N/A
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	Integrated Steel, TPP, Coal Mines & Washeries
IWW1f		Common Effluent Treatment Facilities	[Nos] / [No CETPs]	Null

IWW2	Status of compliance by Industries in treating wastewater			
IWW2a		No of Industries meeting Standards	[Nos]	12 (GPI & 17 Cat Ind.)
IWW2b		No of Industries not meeting discharge Standards	[Automatic]	Nil
IWW2c		No of complaints received or number of recurring complaints against industrial pollution in last 3 months	[Nos]	Nil
AWW4	Status of Action taken for not meeting discharge standards			
IWW4a		No industries closed for exceeding standards in last 3 months	[Nos]	Nil
IWW4b		No of industries where Environmental Compensation was imposed By SPCBs	[Nos]	02

5.0 Air Quality Management Plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
AQ1	Availability of Air Quality Monitoring Network in District			
AQ1a		Manual Air Quality monitoring stations of SPCBs /CPCB	[Nos] / [None]	[0]
AQ1c		Automatic monitoring stations Operated by SPCBs / CPCB	[Nos] / [None]	[0]
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)	Large Industry (Integrated Steel/ Thermal Power Plants / Coal Mine & its Transportation)
AQ2b		No of Non-Attainment Cities	[Nos] / [None]	Vehicular exhaust
AQ2c		Action Plans for non-attainment cities	[Prepared] / [Not yet prepared]	[0]
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]	[N/A]
AQ4	Control of Industrial Air Pollution			

AQ4a		No of Industries meeting Standards	[Nos]	[Non]
AQ4b		No of Industries not meeting discharge Standards	[Nos]	[Non]
AQ5	Control of Non-industrial Air Pollution sources			
AQ5a		Control open burning of Stubble -during winter	[Nos of fire incidents]	[N/A]
AQ5b		Control Open burning of Waste - Nos of actions Taken	[Nos]	[N/A]
AQ5c		Control of forest fires	[SOP available] / [No SoP]	[N/A]
AQ5d		Vehicle pollution check centers	[% ULBs covered]	[N/A]
AQ5e		Dust Suppression Vehicles	[% ULBs covered]	[N/A]
AQ6	Development of Air Pollution complaint redressal system			
AQ6a		Mobile App / Online based air pollution complaint redressing system of SPCBs.	[Available] / [Not available]	[No]

6.0 Mining Activity Management plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
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	09 Coal Mining, 19 stone, 02 sand & 05 Quatrzit
MI1b		No of Mining licenses given in the District	[Nos]	35
MI1c		Area covered under mining	[Sq. Km]	Non Inventory
MI1d		Area of District	[Sq. Km]	2883
MI1e		Sand Mining	[Yes] / [No]	Yes 38 sand Ghats Auctioned in Financial Years 2015-16 for Three Year.
MI1f		Area of sand Mining	[River bed] / [Estuary] / [Non -river deposit]	River Bed
MI2	Compliance to Environmental Conditions			
MI2a		No of Mining areas meeting Environmental Clearance Conditions	[Nos]	35
MI2b		No of Mining areas meeting Consent Conditions of SPCBs / PCCs	[Nos]	35

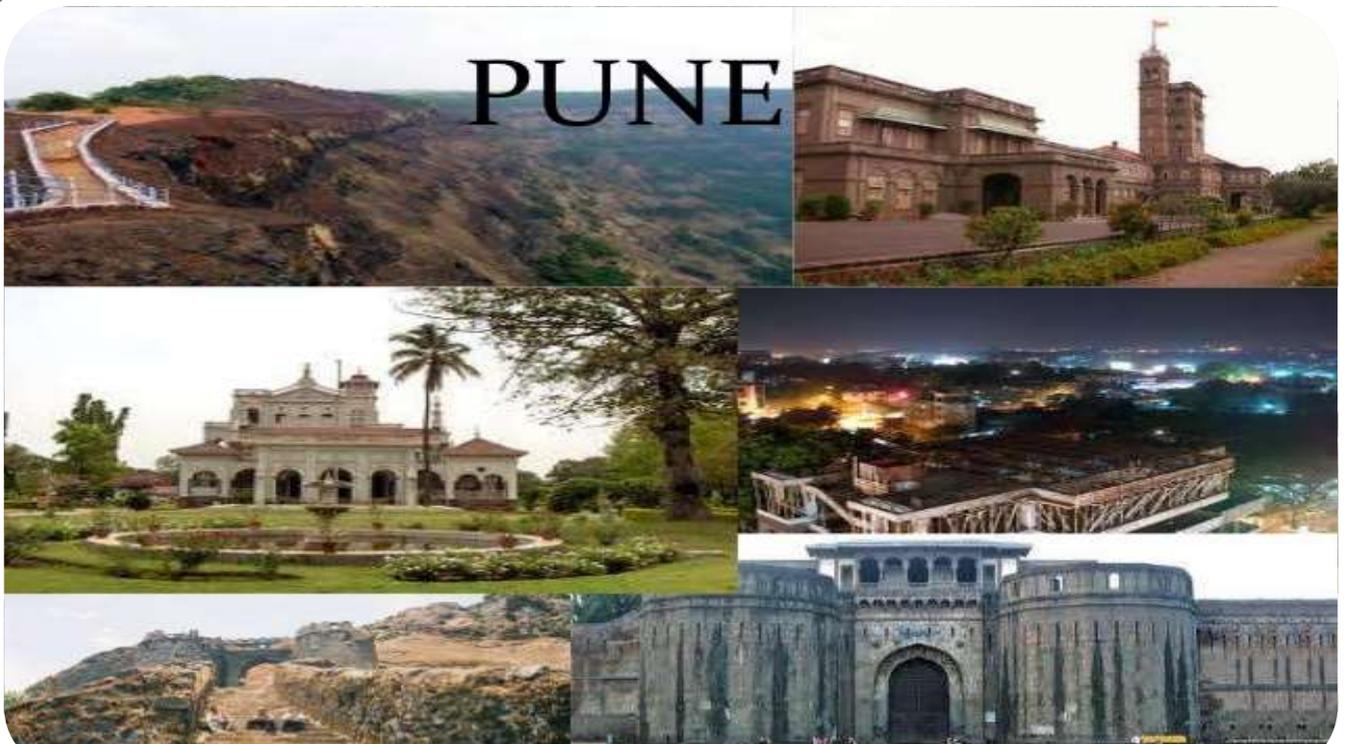
MI3a	Mining related environmental Complaints			
MI3b		No of pollution related complaints against Mining Operations in last 1 year	[Nos]	Nil
MI4	Action against non-complying mining activity			
MI4a		No of Mining operations suspended for violations to environmental norms	[Nos]	Nil
MI4b		No of directions issued by SPCBs	[Nos]	Nil

7.0 Noise Pollution Management Plan

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
NP1	Availability Monitoring equipment			
NP1a		No. of noise measuring devices with district administration	[Nos] / [None]	2
NP1b		No. of noise measuring devices with SPCBs	[Nos] / [None]	3
NP2	Capability to conduct noise level monitoring by State agency / District authorities			
NP2a		capability to conduct noise level monitoring by State agency / District authorities	[Available] / [Not available]	Available
NP2	Management of Noise related complaints			
NP2a		No of complaints received on noise pollution in last 1 year	[Nos]	18
NP2b		No of complaints redressed	[Nos]	18
NP3	Compliance to ambient noise standards			
NP3a		Implementation of Ambient noise standards in residential and silent zones	[Regular Activity] / [Occasional] / [Never]	As per Noise Regulation Rule, 2000 District Administration is the authority for compliance of ambient noise standard.

NP3b		Noise monitoring study in district	[carried out] / [not carried out]	DO
NP3c		Sign boards in towns and cities in silent zones	[Installed] / [Partial] / [Not Installed]	DO

District Environment Plan



Prepared By



Environment Department, Government of Maharashtra



Maharashtra Pollution Control Board

Pune

1.0 Preamble

Hon'ble National Green Tribunal vide order dated 26/09/2019 in O.A. No. 360 of 2018 filed by Shree Nath Sharma Vs Union of India and Others directed that CPCB shall facilitate the District Magistrates in preparation of District Environmental Plan by placing Model plan on its website. This model plan may be adopted as per local requirements by all Districts under supervision of District Magistrate.

The said Order also directs that Department of Environment in respective States / UTs should collect district plans to prepare State Environment Plan, which shall be monitored by respective Chief Secretaries of State/UT by 15/12/2019.

Based on State Environmental plans, CPCB and Ministry of Environment, Forest & Climate Change shall prepare National Environmental Plan, under the supervision of Secretary, MoEF&CC and Chairman, CPCB by 31/01/2020. The National Action Plan needs to be submitted before Hon'ble NGT 15/02/2020.

In compliance to above directions and as per the model DEP prepared by CPCB, Environment Action plan for the District is prepared.

2.0 Introduction

The eighth largest metropolis city in India, Pune is located in the state of Maharashtra. It is the second largest city in the state after Mumbai, and is an important city in terms of its economical and industrial growth. The city leads as the 'veritable heartland' of cultural Maharashtra. Pune also has made its mark as the educational epicentre winning itself the sobriquet, 'The Oxford of the East'. Not just that, it has a growing industrial hinterland, with information technology, engineering and automotive companies sprouting. General Pune district profile is presented in the **Table 1** and location is shown in **Figure 1**.

Table 1 District Profile

Description	Details
Average Climate	Summer: 22°C To 41°C. Winter :8°C To 25°C. Rainfall: 650 To 700 mm.
Geographical Location	It lies between 18° 32" North Latitude and 73° 51" East Longitude. It lies on the foothills of Sahyadri Mountains. The landscape of Pune district is distributed triangularly in western Maharashtra at the foothills of the Sahyadri Mountains and is divided into three parts: "Ghatmatha", "Maval" and "Desh". Pune district forms a part of the tropical monsoon land and therefore shows a significant seasonal variation in temperature as well as rainfall conditions
Area	15,643 Sq. km.
Boundaries	Ahmadnagar district on North - East, Solapur district on the South - East, Satara district on South, Raigad district on the West and Thane district on the North - West
Languages Spoken	Marathi, Hindi, English are major languages but all Indian languages are spoken
Population	Total: 55,59,058 [According to 2011 Census Report]
Population Density	603 Per Sq. km.
Literacy Rate	87.2
Rivers	Bhima, Nira , Indrayani, Mula, Mutha, Ghod, Meena ,Kukdi, Pushpavati, Pavna, Ramnadi

Description	Details
ULBs	16 Numbers + 2 Municipal Corporations
Municipal Corporations	2 Numbers 1. Pune Municipal Corporation [PMC] 2. Pimpri-Chinchwad Corporation [PCMC]
Cantonment Boards	3 Numbers Pune, Dehu Road and Khadki
Sub districts	14 Numbers
Villages	1,877 Numbers
Statutory Towns	16 Numbers
Tahsils	14 Numbers Haveli, Pune city, Maval, Mulshi, Shirur, Baramati, Indapur, Daund, Bhor, Velha, Purandar, Khed, Junnar, Ambegaon
Pin code	411001 - 411053



Figure 1 Location of District

3.0 Waste Management Plan

Urban India is facing an ever increasing challenge of providing for the incremental infrastructural needs of a growing urban population. According to the 2011 census, the population of India was 1.21 billion; of this 31% live in cities. It is further projected that by 2050 half of India's population will live in cities. With this increasing population, management of Municipal Solid Waste (MSW) in the country has emerged as a severe problem not only because of the environmental and aesthetic concerns but also because of the sheer quantities generated every day.

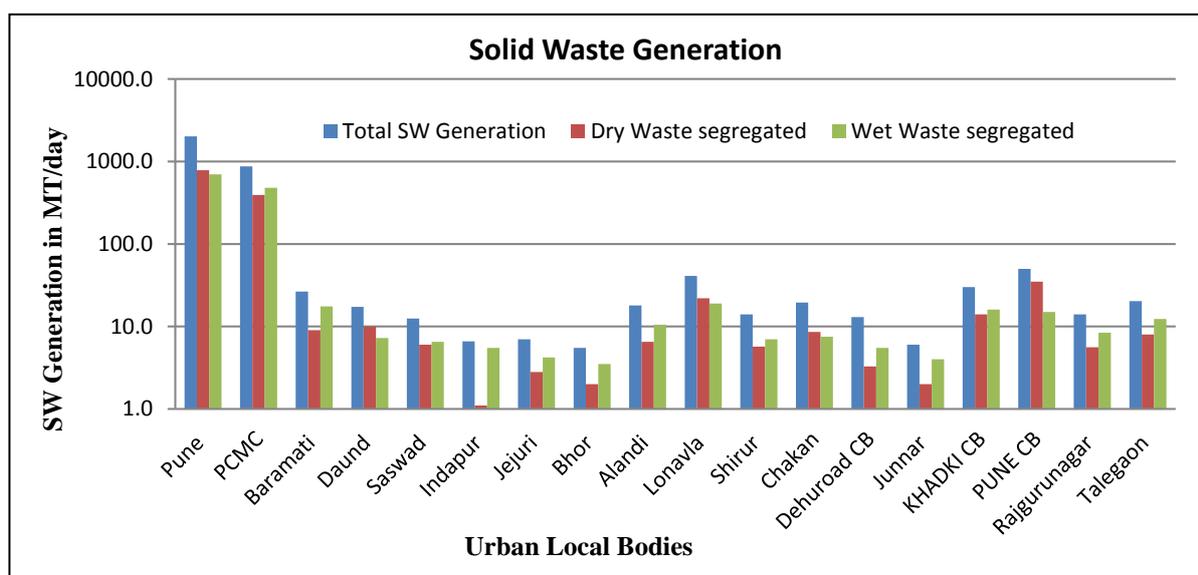
Solid waste management is among the basic essential services provided by municipal authorities in the country to keep cities clean. In Pune city primary sources of solid waste are local households, commercial establishments, hospitals, hotels, restaurants, and markets. Local Bodies are responsible for collection, storage, segregation, transportation and disposal of all solid waste generated in the city. There are 18 Urban Local Bodies [ULBs]. in Pune district. **Table 2** represents the list of ULBs along with population. Following section gives insight about waste management of Pune districts.

Table 2 List of ULB With Population

Sr. No.	Urban Local Bodies	Population
1.	Pune Municipal Corporation	3,124,458
2.	Pimpri Chinchwad Municipal Corporation	1,723,629
3.	Baramati	108,152
4.	Daund	49,450
5.	Saswad	31,821
6.	Indapur	25,515
7.	Jejuri	14,515
8.	Bhor	18,453
9.	ALANDI MUNICIPAL COUNCIL	28,645
10.	Lonavla Municipal Council	54,119
11.	Shirur Municipal Council	37,111
12.	Chakan	41,113
13.	Cantonment Board Dehuroad	48,961
14.	Junnar Municipal Council, Junnar	25,325
15.	KHADKI CANTONMENT BOARD	70,933
16.	PUNE CANTONMENT BOARD	71,831
17.	Rajgurunagar Municipal Council	28,592
18.	Talegaon Dabhade Municipal Council	56,435

3.1 Domestic Solid Waste Management Plan

Pune district is having 18 ULBs with 203 Wards. Municipal Solid Waste [Dry & Wet] generated from each ULBs is given in the **Figure 2** and details of Other Types of Waste is presented in **Figure 3** due to its less quantity and for easy representation. As per collected data, total solid waste generation of Pune district is 3,191.2MTD. wherein, Dry Waste generation is 1,318.3MTD and Wet waste is 1,329.9MTD.

**Figure 2 Details of Domestic Solid Waste Generation**

It seems that Wet waste comprises of approximately 41.3% of total waste generated of the district and Dry waste contributes 41.6%.] Pune Municipal Corporation stands on top with the highest quantity i.e. 2015MTD out of which dry waste is 783MTD and wet waste is 699MTD. Junnar Municipal Council generates lowest quantity i.e. 6MTD out dry waste is 2MTD and

wet waste is 4MTD. It is observed that quantity of solid waste generation is in line with the respective population of ULBs. As per the data presented in the **Figure 3**, details of other types of waste generation is presented as below;

Pune district generates 40.5MTD of Street Sweeping Waste. Maximum quantity of Street Sweeping Waste is generated by Pune Cantonment Board with total quantity of 20MTD followed by Pune Municipal Corporation with 15MTD and Daund Municipal Council stands lowest with 0.02MTD. Though PCMC is second largest corporation in Pune district, data of Street Sweeping Waste is not estimated.

Total quantity of Drain Silt Waste generated is 685.1MTD. It seems that maximum quantity of Drain Silt Waste is generated by Pune Cantonment Board with total quantity of 500MTD followed by Pune Municipal Corporation with 122MTD. Shirur & Rajgurunagar Municipal Council stands lowest with 0.1MTD. However it is observed that quantity of Drain Silt waste is not estimated by other ULBs like Saswad, Indapur, Jejuri and Alandi.

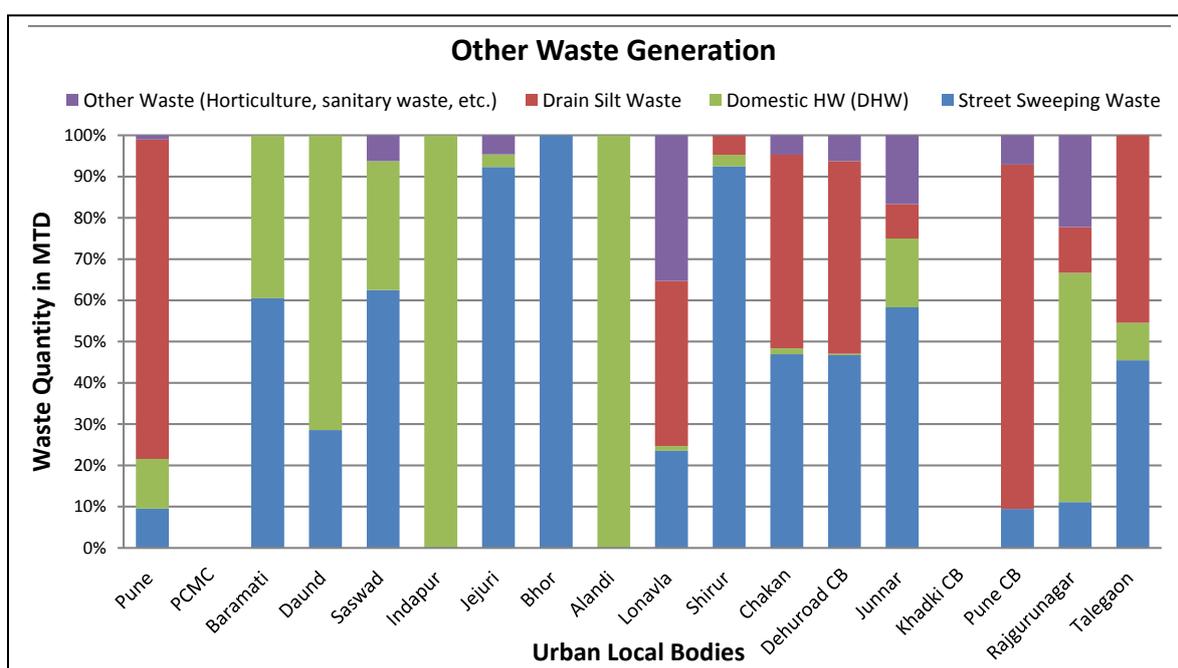


Figure 3 Other Waste Generation of Pune District

Total DHW quantity generated is 20.1MTD. Maximum quantity of DHW is generated by Pune Municipal Corporation with total quantity of 19MTD and Indapur Municipal Council stands lowest with 0.005MTD. Data is not available for PCMC, Bhore, Khadki and Pune Cantonment Board. Total Quantity of Horticulture, Sanitary and other waste is 1615.8MTD. Maximum quantity of Other Waste is generated by Pune Municipal Corporation with total quantity of 1600MTD and Shirur Municipal Council generates lowest quantity i.e. 0.001MTD. Data is not available for PCMC, Baramati, Daund, Indapur, Bhore, Alandi, Khadki and Talegaon Municipal Council. Pune district is having total 1035 bulk Waste Generator with the highest numbers in Pune Municipal Corporation and total number of onsite facility provided for treatment of wet waste is 1941.

3.1.1 Compliance in Segregated Waste Collection

Total Waste generation from Pune district is 3185.5MTD and almost all waste is being segregated. Out of 18 ULBs, 16 of them have provided 100% door to door collection facility. Only Pune Cantonment Board and Jejuri Municipal Council has provide 80% and 90% door to door collection facility respectively. 16 ULBs have implemented Mechanical Road

Sweeping and rest of other ULBs have not provided Mechanical Road Sweeping facility. Almost 96% of waste is being transport through segregated waste transport system

Out of 18 ULBs, only 4 ULBs namely Pune, Baramati, Lonavla & Shirur have installed digester with bio-Methanation production capacity of 10%, 25%, 100%, 100% respectively. Pune district generates approximately 1329MTD of wet waste and Out of which 81.7% is treated through composting. Out of 18 ULBs, 14 ULBs is using Multi Re Use Facility to separate and prepare recyclable material whereas 4 ULBs have not installed URF facility. Out of 18 ULBs, 8 ULBs have provision of Sanitary Landfill. 14 ULBs have started reclamation of old dump site using through bio mining process. Only 5 ULBs have linkage with waste to energy boiler / cement plant. 12 ULBs have linkage with recycler whereas 6 ULBs have not started the process yet. All ULBs have issued authorization to the waste pickers. 7 ULBs have linkage with TSDF / CBMWTF whereas no information is available for Indapur, Daund and PCMC.

3.1.2 Adequacy of Infrastructure

Availability of infrastructure to handle the waste generated from the Pune district is presented in **Figure 4**.

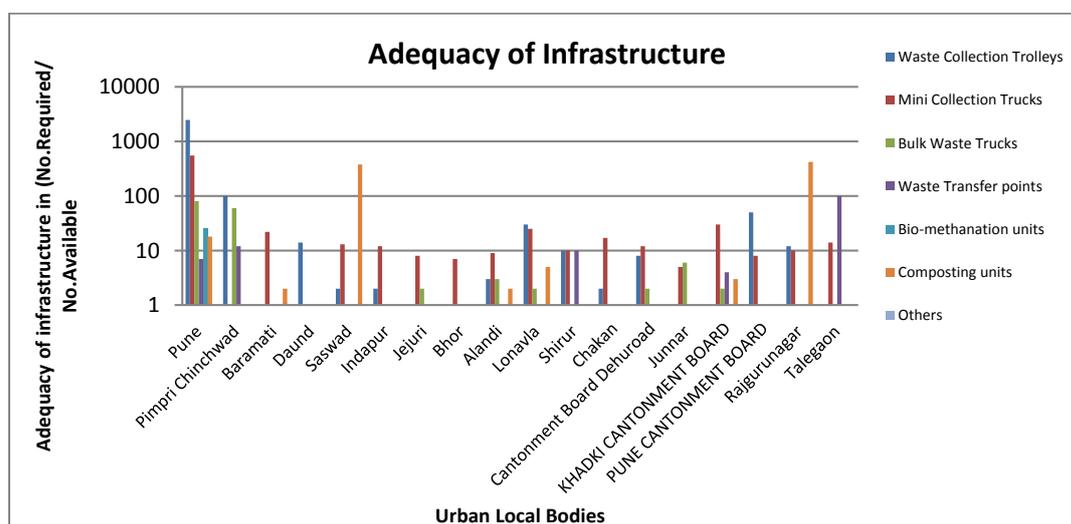


Figure 4 Adequacy of SW Infrastructure

It is observed that There are total 138 waste Transfer points in Pune district with waste trolley of 2718, Mini collection trucks 752 numbers and Bulk transport trucks 161. Total number of Bio - Methanation units are 30 and Pune Municipal Corporation is having highest number of Bio - Methanation units i.e. 25. Composting units available to treat wet waste are 836 [Need to review data as Rajgurunagar is having 420 units]. As per record, Out of 18 ULBs, only 2 ULBs i.e. Dehu and Khadki has not implemented the Solid Waste Management Rules.

3.2 C&D Waste Management Plan

The Construction and Demolition Waste [C&D Waste] generated by Pune district is about 234.8MTD. C&D Waste generated by each ULBs is presented in **Figure 5**. Again being with most populated corporation, Pune Municipal Corporation contribute maximum share of C&D waste to the tune of 200MTD. Least C&D waste is generated by Bhor Municipal Council with the quantity of 0.003MTD whereas it is observed that Khadki Municipal Council not generating any C&D waste which is not practically possible and need to review the data. Non availability of data will not help in preparing ingenious and executable plan for waste

management of the district hence local bodies must ensure proper sampling and factual measurement of the various types of waste being generated.

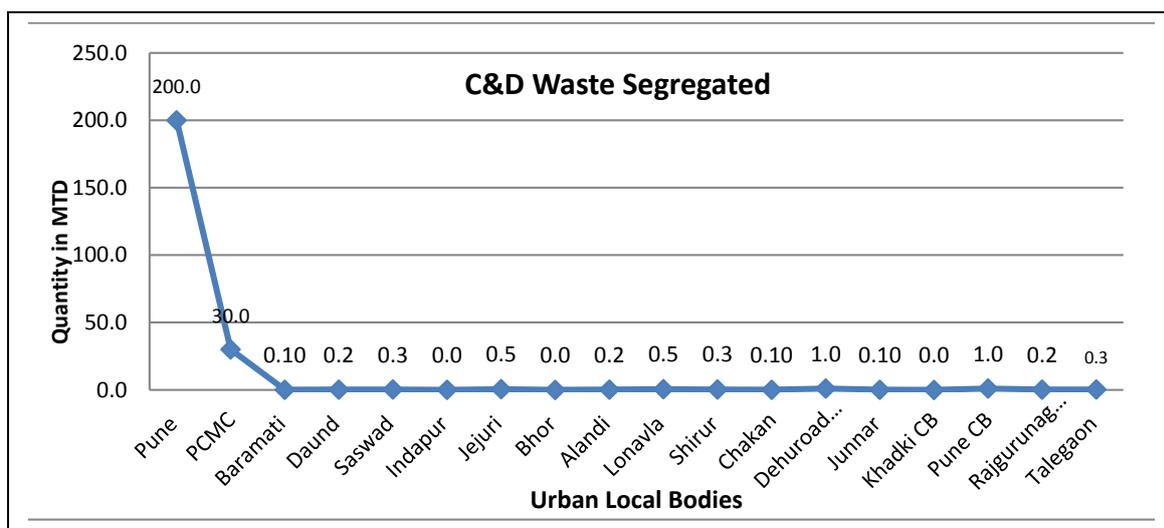


Figure 5 C&D Waste Generation of Pune District

3.3 Plastic Waste Management

Total Plastic waste generated by Pune district is 95.71MTD. With 90MTD quantity, PCMC is the highest plastic waste generator and Jejuri generates 0.008MTD of plastic waste. In almost all ULBs, door to door collection and segregation system is implemented 98% & 94% respectively with 199 Plastic Waste Collection Centre by ULBs and 10 Collection Centres by PROs under EPR Scheme . There are 4047 Plastic Waste Pickers with the authorization for waste collection. District has 4 Plastic Manufacturer and 19 Plastic Waste Recyclers. For Treatment and recycling of generated plastic waste, there are 4 number of Pyrolysis Oil Plant. 163.5MT/Month is being treated in the Pyrolysis Oil Plant and 3.5MT/Month is use in Road making. PW Management Rules, 2016 is implemented in all the ULBs. Plastic to Fuel Plant is installed of 4MTD by Brand owner in the Pune Municipal Corporation.

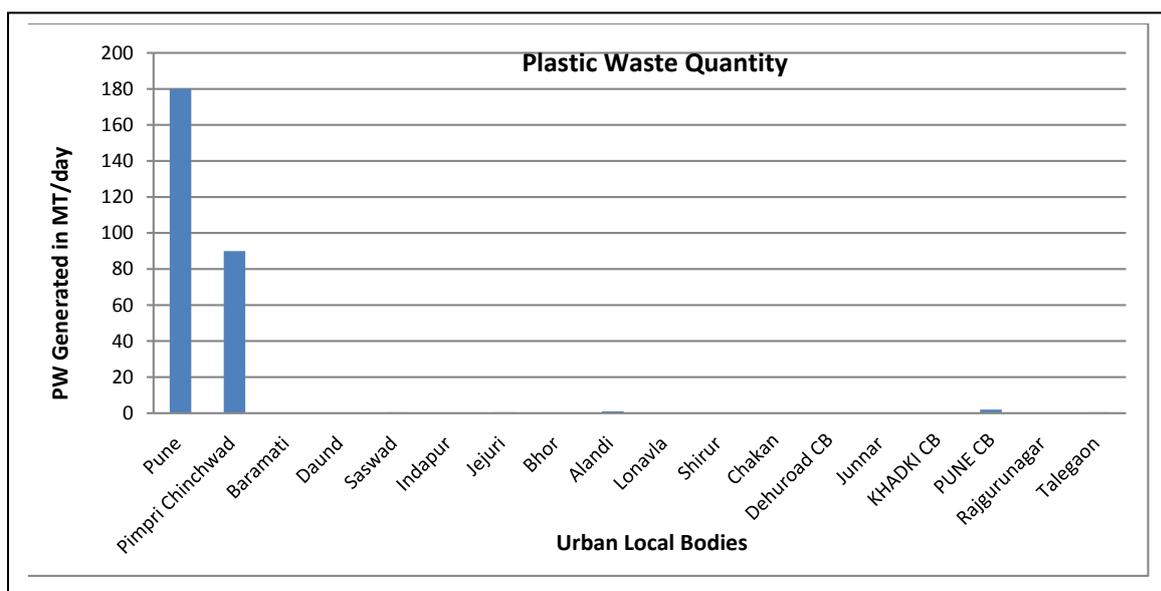


Figure 6 Details of Plastic Solid Waste Generation

3.4 Biomedical Waste Management

5607 Health Care Facilities including hospitals, Clinic, Veterinary Hospitals, Blood Banks etc. Out of which only 2279 HCF have taken authorization. Total BMW generation from all above mentioned sources is to the tune of 7719kg/day.

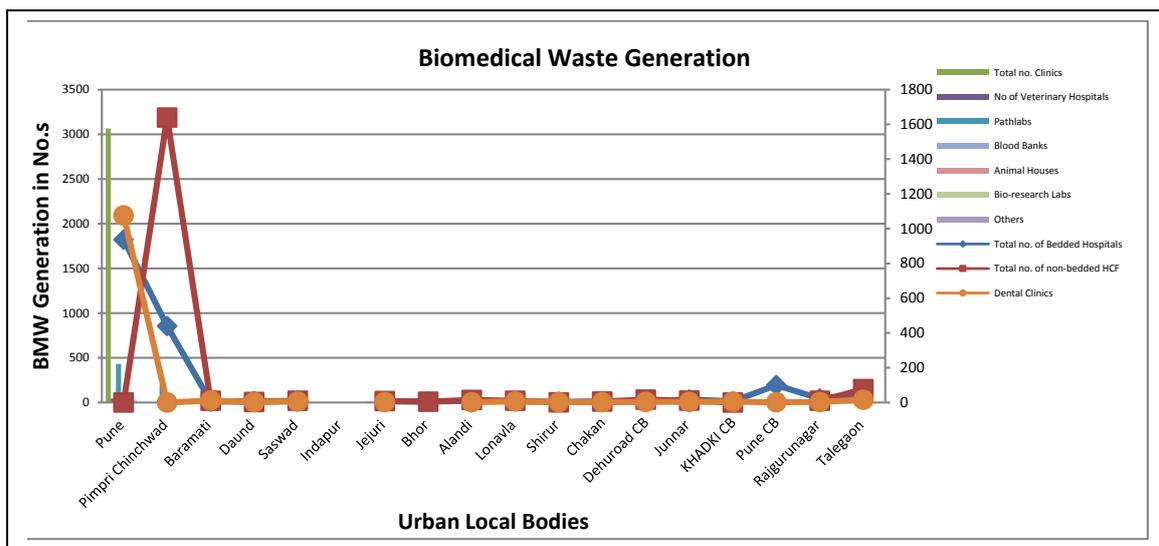


Figure 7 Details of BMW Generation

There are 2 Common Facility available for treatment and disposal of BMW and average BW taken by these facilities are 8,419kg/day. There is requirement of at least one CBWTF in each ULB. Inventory of BMW generating units are mentioned in the Figure 7.

3.5 Hazardous Waste Management

1311 Number of industry is established. Total HW generation 66,3371.77 MT/Annually, out of which 79,573.92MT is sent for incineration, 87,808.28 MT is sent for land filling and 495989.57MT/A is sent for recovery / utilization of HW material. One Common Treatment Storage Disposal Facility is present at Ranjangaon, Pune and all industries have taken authorization for HW generation and are members of CHWTDSF.

3.6 E Waste Management

191 Collection Centres are established by ULBs and 6 are established by Producer under EPR scheme. There are 21 number of authorized E-Waste recyclers / Dismantler. Pune Municipal Corporation has conducted 200 Awareness Campaigns whereas Producers and PROs have conducted 40 Awareness Campaigns.

3.7 Action Plan

As per the above mentioned observation, it seems that almost all ULBs are handling solid waste generated as per the Municipal Solid waste Management Rules, however there are certain issues that needs to be addressed for 100% implementation of the rules as mentioned in Table 3.

Table 3 Action Plan for Solid Waste Management

Sectors	Gaps	Action Points	Priority
Domestic Solid Waste			
Quantification	<ul style="list-style-type: none"> ▪ Methodology for solid waste quantification should be ascertained ▪ Quantification based on Income group, culture affluence and technology to be considered 	<ul style="list-style-type: none"> ▪ Mechanism for graded weighing system either through intermediate transfer station or at the common receiving station to be created. Usually one weigh bridge at any treatment / disposal location required ▪ Quadrate sampling methodology to be adopted in order to reduce quantity as well as quality 	Immediate
Collection System & Transport System	<ul style="list-style-type: none"> ▪ Some of the places, efficiency of the collection system is not up to the mark ▪ There is gap of 2% Coverage in door to door collection 	<ul style="list-style-type: none"> ▪ Ideally most proven method of SWM is 3 Tier System with door to door, community and transfer station approach ▪ 100% efficiency to be achieved ▪ Intermediate ▪ Additional 2% coverage of collection & transportation to augmented 	Short to Mid Term
Infrastructure	<ul style="list-style-type: none"> ▪ Mostly composting is the main treatment methodology with about 80% coverage ▪ MRF facility is also available but limited to few ▪ Sanitary landfill are limited to 2-3 ULBs 	<ul style="list-style-type: none"> ▪ Intermediate / Transfer station based decentralized waste treatment facility to be evaluated ▪ Additional 20% alternative treatment such as bio-Methanation can be explored 	High
Plastic Waste	<ul style="list-style-type: none"> ▪ Lack of SOP for not only quantification but also life cycle analysis [LCA] ▪ Limited understanding / interpretation of EPR / PRO 	<ul style="list-style-type: none"> ▪ Strengthening surveillance of life cycle assessment for type and quantity of Plastic Waste ▪ Effective EPR Policy ▪ Initiation of 100% compliance to PW Rules at the earliest 	High & Immediate
C&D Waste	<ul style="list-style-type: none"> ▪ 2 - 3 of the ULB need to establish C&D Waste management system 	<ul style="list-style-type: none"> ▪ Minimum 1 such facility at each of the ULB to be established ▪ System for utilization of recovered material and processed C&D waste to be effectively implemented and monitored 	High
Biomedical Waste	<ul style="list-style-type: none"> ▪ Rooting and effective collection within 48hrs from the time of generation to be effectively handled ▪ Treatment facility lacks implementation of 2016 Notification in line with CPCB 	<ul style="list-style-type: none"> ▪ Regular Inventorization through automatic / digital platform to be developed ▪ Up-gradation of existing facility to meet 2016 CPCB norms ▪ Additional at least 1-2 facilities to cover the of umbrella zone along with increasing burden on the existing coverage area to be 	Very High & Immediate

Sectors	Gaps	Action Points	Priority
	audited report <ul style="list-style-type: none"> ▪ Limited Inventorization ▪ 	planned <ul style="list-style-type: none"> ▪ Collection mechanism to be strengthen with additional vehicles to cover vast area and scattered HCF [miniscule quantity] 	
Hazardous Waste	<ul style="list-style-type: none"> ▪ Domestic HW being mixed with solid waste posing threat ▪ No separate handling of domestic HW ▪ Not effective segregation of DHW at source 	<ul style="list-style-type: none"> ▪ Either decentralized 4 - 5 step segregation practices to be initiated or at least advisory for intermittent storage and collection of domestic HW to be initiated ▪ Inventory to be initiated and maintained 	Very High & Immediate
E Waste	<ul style="list-style-type: none"> ▪ Lack of inventory ▪ Limited understanding of E waste rule and management ▪ Neither segregation nor separate transfer / handling facility ▪ 	<ul style="list-style-type: none"> ▪ Detailed inventory for domestic e waste under 26 different categories ▪ Mass awareness campaign ▪ Every ULB to have at least one E waste management centre and minimum one collection / drop centre in a radius of 25-30km ▪ Atleast one e waste processing unit in a district 	Very High & Immediate
Noise	<ul style="list-style-type: none"> ▪ Most of the source related noise areas show exposure beyond compliance ▪ Excessive exposure during noise generating potential events/ festivals ▪ 	<ul style="list-style-type: none"> ▪ Noise mapping to be carried out for zonation purposes ▪ At source control using physical or natural attenuation methods to be adopted ▪ In the path noise control methodologies using noise absorbers creating zone of inhibition / silence zone to be done ▪ End of the pipe measures such as PEs acoustic enclosures etc. to be adopted ▪ Event based noise control policy to be effectively implemented 	High

4.0 Water Quality Management Plan

There are 9 Rivers in Pune district with 1703km in length. 25 numbers of drain / nallas are meeting in to the rivers. Lake / Ponds area is about 5 Ha. There are 4582 number of Borewell within the district.

The district generates about 1124.8 MLD of sewage with an existing capacity of 702MLD of STP with existing sewage network of 2846.38km length leaving a deficit of 62.4%. However it is also many a time the deficit as a representative of treatment capacity / capability. Even though MPCB has been eying to formulate policy w.r.t. reuse treated sewage as a regulation, lack of reuse conveyance system and more often than not due to the limited options of reutilization of treated sewage worsened with consistent output quality of treated sewage only leads to complicated disposal options.

On the other hand industrial effluent are much more regulated wherein 296 MLD from 850 numbers of industry. ULBs are made to treat almost the entire effluent to the best possible norms as stipulated by their permits, monitored effectively and regularly with the aid of final disposal / treatment in the 1 number of CETP. 575 industries are meeting water discharge standards and 45 industries are not meeting discharge Standards. 5 complaints received against industrial pollution in last 3 months

Detailed Issue based management action plan is provided in **Table 4**.

Table 4 Action Plan for Water Quality Management

Sectors	Gaps	Action Points	Priority
Water Resources	<ul style="list-style-type: none"> ▪ Limited information available on mapping of surface water resources in terms of quantity ▪ Limited Inventorization of quantity, usage, availability exploitation etc. ▪ Limited Rejuvenation / remediation of water bodies ▪ Solid waste dumping i the river bodies 	<ul style="list-style-type: none"> ▪ Thorough Mapping of resources to be taken up ▪ Extensive assessment of quality to be done ▪ Criticality indicators to be established for each water body/resource ▪ Extend water quality monitoring network to include representativeness ▪ Based on the criticality initiate Rejuvenation / remediation ▪ Online Monitoring system for surface water bodies to be established ▪ Protection methods to be developed for creative stoppage of dumping of solid waste in the surface water bodies 	High
Domestic	<ul style="list-style-type: none"> ▪ Correlation between generation and treatment often misleading ▪ Only 60% treatment is available ▪ Water budgeting exercise often missing ▪ Computation of water footprint missing ▪ Surveillance /Inventorization in cradle to grave approach absolutely never applied ▪ Limited collection system and treatment facility especially in remote area ▪ Often polluting water resources ▪ No established reuse options / reuse network 	<ul style="list-style-type: none"> ▪ Digital Platform to accommodate water budgeting / reuse potential ▪ Approximately 425MLD of STP needed ▪ In situ treatment for 1703kms of River stretches to be developed ▪ Strengthen the sewage collection network to cover 100% Population ▪ Policy for reuse / recycle of treated wastewater 	Very high & Immediate
Industrial	<ul style="list-style-type: none"> ▪ Limited information of industries discharging 	<ul style="list-style-type: none"> ▪ CETP performance to be more effective in line with 	High

	wastewater in to the river <ul style="list-style-type: none"> ▪ Performance of CETP is questionable ▪ Almost 66 number of industries Non compliance of in terms of meeting discharge standards ▪ 45 numbers of industries are not meeting discharge standards 	various orders of regulatory bodies / courts <ul style="list-style-type: none"> ▪ Digital compliance methodology to be developed ▪ Disposal system to be under constant surveillance 	
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5.0 Air Quality Management

As it is Pune district being one of the most vibrant and outgrowing areas in Maharashtra, Air quality assessment and sectoral management needs are ought to be essentially planned and executed. Both CPCB & MPCB through their NAMP & SAMP programme has set up 4 manual & 1 CAAQM stations across the district.

It seems that PM₁₀ in Ambient Air is one of the prime reason of the concern and historically Pune has been in the centre of controversy with regards its air quality management. An exceedance factor 1 to 1.8 reveals as per the monitored data that needs immediate attention as is the case in most of the areas of India. In view of the same the primafacea of every ULB shall be to establish at least one such Ambient Air Monitoring Station and coordinate / collaborate with other monitoring organisation to provide for advisory to general public towards health associations and risk of exposure. Inventory and policy formulation action plan is stated in **Table 5**.

Table 5 Action Plan for Air Quality Management

Sectors	Gaps	Action Points	Priority
Air	<ul style="list-style-type: none"> ▪ Most of the places PM₁₀ seems to exceed by a factor of around 1 - 1.8 ▪ Limited CAAQMS to establish / corroborate inferences ▪ Sectoral action plans not effectively established ▪ Pune comes under non attainment cities 	<ul style="list-style-type: none"> ▪ Emission inventory and source apportionment supported with dispersion and health based iterative process for science based AQM strategy to be established ▪ Each ULB to have atleast one urban and one rural CAAQMS or three manual stations at least to include criteria pollutants with minimum one location to include parameters of 2009 CPCB notification and meteorological data including cloud cover ▪ Fugitive emission control system for hot spot emission control to be installed ▪ Green barriers / Photo catalyst options to be evaluated ▪ Capacity building to be enhanced ▪ Need to submit and review the action plan with its status for non attainment cities 	High & Immediate

6.0 Mining Activity Management plan

There is no mining activity in the Pune district jurisdiction.

7.0 Noise Action Plan

Other than event base monitoring and special projects related / orders monitoring, MPCB carries out annual noise monitoring at 8 locations. Noise quality reveals mainly source specific non compliance such as traffic related in most of the kerb side analysis. Though zoning categories and regulations therein are particularly specified, in limitation of noise regulations has always been challenge to the regulatory authority. Monitoring results spells potential management plan that could be taken up on priority by each of the ULBs. There are complaints received on noise pollution in last 1 year. District authorities have installed Sign boards in towns and cities in silent zones.

8.0 Conclusion

There seems to be vast data gaps and a detailed exercise to collate and validate data gathered through this process needs to be urgently taken up in addition to the adopting a holistic & inclusive consultative process of gathering information, collating & converging it in order to be able to device strategies of future. Also, it is equally important that projection for at least next 20 years be done in order to evaluate management plans for futuristic view to meet the objective of such vast exercise. Digital data availability needs to be one of the prime tasks of government & methods of its validation be created with scope for improvement in near future. The practise needs to be a continual one to be updated regularly in order to monitor progress and effectiveness of this process & shall be linked with financial allocations being designed to be promoted by government of the day. With regards to action plans, the priorities shall be aligned based on sustainability objectives.



ಜಿಲ್ಲಾಧಿಕಾರಿಗಳ ಕಾರ್ಯಾಲಯ, ಚಾಮರಾಜನಗರ ಜಿಲ್ಲೆ, ಚಾಮರಾಜನಗರ

Office of the Deputy Commissioner, Chamarajanagar District
Chamarajanagar, Phone No 08226-223160, 08226-223170, Fax: 08226-
223180, E-mail deo.cnagar@gmailcom

No. Dist. admn/DEP/Ch-Nagar/2020-21

Date: 23/06/2021

To,

The Member Secretary
Central Pollution Control Board
Parivesh Bhawan,
East Arjun Nagar,
Delhi – 110 032

Sir,

Sub: Preparation/implementation of District Environment Plan as per order dated 29/01/2021 passed by Hon'ble Green Tribunal in the matter of O.A. 360/2018-reg.

Ref: CPCB letter No. B-31011/BMW (42.55)/2021/WMD-1 dated: 17/05/2021.

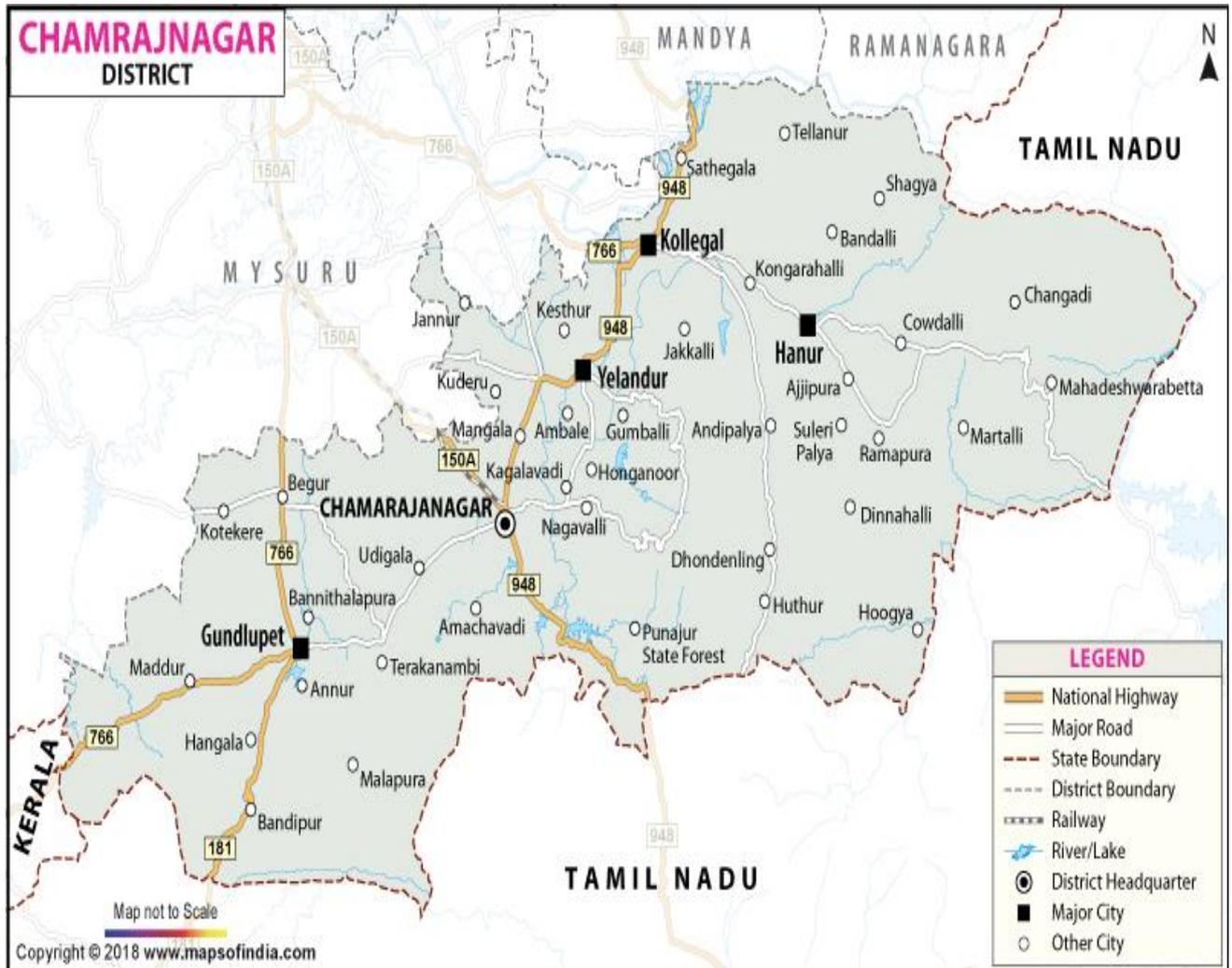
With reference to above the revised District Environmental Plan pertaining to Chamarajanagar District as per the new template is prepared based on the information/Data submitted by concerned departments is enclosed for further needful.

Deputy Commissioner

Chamarajanagar Dist., Chamarajanagar
Deputy Commissioner
Chamarajanagar Dist
Chamarajanagar

DISTRICT ENVIRONMENTAL PLAN FOR CHAMARAJANAGAR DISTRICT

KARNATAKA STATE



Office of the Deputy Commissioner,
Chamarajanagar District,
Chamarajanagar.

Phone No. 08226-223160, 08226-223170, Fax: 08226-223180

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District Profile

Chamarajanagar is the southernmost District in the state of Karnataka. Chamarajanagar was named after Chamaraja Wodeyar, the Wodeyar king of Mysore who was born here. The Vijaya Parsvanath Basadi, a holy Jain shrine was constructed by Punisadanda nayaka, the commander of the Hoysala king Gangaraja in the year 1117 AD. Chamarajanagar has been carved out from the Mysore District in the year 1997. Hanur taluk was formed during the year 2018. At present District comprises of 5 taluks namely Chamarajanagar, Kollegal, Yelandur, Gundlupet & Hanur taluk. It is the third least populous District in Karnataka, after Kodagu and Bengaluru Rural. Chamarajanagar District borders the state of Tamil Nadu and Kerala. Most part of the District lies in the leeward region of the Nilgiris and consists of mainly semi- arid rain-dependent flatlands along with forested hills.

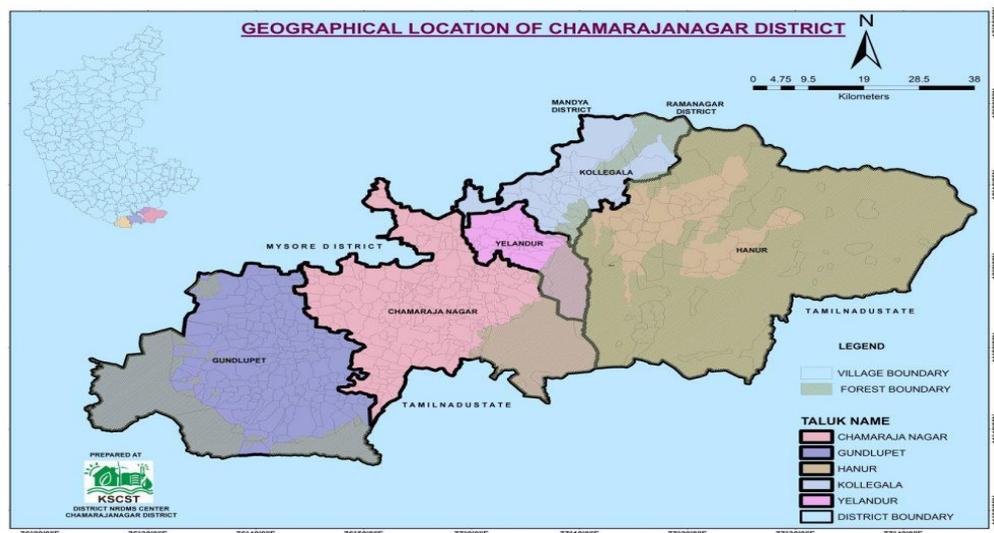
The Chamarajanagar District is situated in the southern part of the Deccan Peninsula and Southern most of Karnataka State. Physiographically, the region is classified as partly maidan and partly semi-malnad. The District has an area of 5648.00 sq.kms. It is bounded by Mysore, Mandya and Ramanagar on north on south by Kannanore District of Kerala State, Udhaka Mandalam (Nilgiri) District on the east by Salem and Coimbatore Districts of Tamilnadu State. The latitude lies between 11°40' to 12°48' and longitude between 74°52' to 76°07'. The elevation/Latitude is 736 mts above sea level.

The District has a geographical area of 569901 hectares with a forest cover of 275610 hectares with rich forest products like sandal wood and wild animals. The District has a forest cover of half of total area. Temperature being 32 ° C (Max.) and 10 ° C (Min.), Average Rainfall is 951 mm and Major River being Cauvery and Suvarnavati.

The District may be classified as partly Maidan and general tableland with plain, undulating and mountainous. The southern and eastern Ghats in the District converge into group of hills. The landmass of the area forms an undulating tableland and lofty mountain ranges covered with vast forests. Master slope runs from south to north towards Cauvery River. The eastern and southern portions of Kollegal and Hanuru taluk forms continuous lofty hills such as M.M. hills with an elevation of 976m amsl having 77 hill ranges such as Anemale, Kadumale, Jenumale, etc., Doddasampigae is another hill range runs north to south for 6 kms in Kollegal 9 taluk. Biligiriranganabetta in Yelandur taluk, Gopalswamy hills in Gundlupet also forms the hill ranges in the District. Dense forest covered in the southern and south-western taluks, viz, Kollegal, Yelandur, C.R.Nagar and Gundlupet.

There are four notified eco sensitive zones in the District viz., Cauvery wildlife sanctuary, Bandipur national park, Biligiri Ranganathaswamy Tiger (BRT) Reserve and Male Mahadeshwara sanctuary.

a. District Administrative Set-up



The District comprises of five taluks namely Chamarajanagar, Gundlupet, Kollegal and Yelandur taluk is the smallest with total geographical area of 266.34 sq.kms. The District is having one revenue subdivision and the District headquarters at Chamarajanagar.

The Deputy Commissioner is head of the District administration. The Collectorate consists of various branches headed by Tahasildars, Shirstedars or Managers who are responsible for supervision, guidance and overall management of work in their branch. Every branch consists of First Division Assistants and Second Division Assistants among whom all work of the branch is divided. There are various officials both at the District level and at the taluk levels to assist the Deputy Commissioner. They include the Assistant Commissioner's (Sub-Divisional Magistrate), Tahsildars, Shirstedars, Revenue Inspectors and Village Accountants.

b. Local institutions

The Zilla Panchayat, Chamarajanagar, came into existence on March 1997, for decentralized planning and programme implementation at the grass root level. It was then called as Zilla Parishad, subsequently changed to Zilla Panchayat during 1995. As per the Karnataka Panchayat Raj Act, District has Zilla Panchayats, 5 Taluk Panchayats, 130 Grama Panchayats at District, with 509 villages with total population of 1020791 as per census 2011 in the District.

c. Natural Resources

■ Water bodies

River Cauvery flows through Kollegal taluk in the north-west. Gaganachukki and Bharachukki waterfalls lie to the north-west of the District. River parlar flows to the south-east of the District. River Suvarnavathi which flows in Chamarajanagar and Yelandur taluks in the west joins River Cauvery. The Gundlu hole river flows from the

eastern side of BR hills through the gorges and valleys formed by BR Hills and MM Hills. Guliyuvanooru halla and Mayalakkiyuru halla are two small halla that joins River Cauvery. Maydhagunooru halla joins River Palar

- **Availability of water resources**

The District falls in Cauvery river basin. There are no major rivers flowing in the District, however Cauvery the perennial river flows along the border of Kollegal taluk of Chamarajanagar District with its tributaries like Suvarnavathy and Chikkahole. Suvarnavathy rises near Gajalahalli south eastern portion of Chamarajanagar and flows in the depression along the center of Chamarajanagar taluk with a north-south disposition in a northerly direction through Chamarajanagar and Yalandur taluks and joins the river Cauvery at Hampapura in Kollegal taluk. It has a catchment area of 1787 sq.km. with total course of about 88kms. in the District. The stream flows in rainy season only, runoff up to Umbale and influent to the rest of its course. Chikkahole is the tributary of Suvarnavathy, rises at Hasanurghat range to the south of Chamarajanagar flows in northerly direction. A dam is constructed across this tributary about 12kms. away from Chamarajanagar. Suvarnavathy also dammed at Atgulipura in Chamarajanagar taluk. Besides this Gundal, Thattaihalla, Uduthore halla and Palar are the tributaries of Cauvery river drains parts of Kollegal taluk. The area is characterized by sub-dendritic to sub-parallel drainage pattern. The drainage density of the area varies from 0.25 to 3.58 km/km². The density decreases towards Suvarnavathy river.

- **Forest coverage**

Chamarajanagar circle comprises one Tiger Reserve, namely, Biligiri Rangaswamy Temple Tiger Reserve, and two Wildlife divisions, namely, Cauvery Wildlife division and Male Mahadeshwara Hills (MM Hills) Wildlife division. There is one social forestry division, namely, Chamarajanagar SF division. BRT Tiger Reserve and MM Hills WLS are wholly situated in Chamarajanagar District. Cauvery WLS is situated partly in Chamarajanagar District, and partly in Mandya and Ramanagara Districts. Most of the forest areas of the circle are wildlife areas, harbouring predominantly dry deciduous forest with scrub forest in the fringes. There are patches of moist deciduous, semi-evergreen, evergreen and shola forests in the higher reaches of BRT and MM Hills.

The District has a forest cover of 275610 hectares with rich forest products like sandal wood and wild animals. The District has a forest cover of half of total area.

There are four notified eco sensitive zones in the District viz., Cauvery wildlife sanctuary, Bandipur national park, Biligiri Ranganathaswamy Tiger (BRT) Reserve and Male Mahadeshwara sanctuary.

d. Geography & Demography

Sl. No.	Particulars	State	District
1	Geographical Area (Sq.Km)	191791	5648
2	Population (2011 census)	Total population	61095297
		Rural population	37469335
		Urban population	23625962
3	Decadal population growth (2001-2011)	Persons (%)	15.6
4	Density of population	Persons per sq.Km	319
5	Literacy rate	Total Persons (%)	75.36
		Males (%)	82.47
		Females (%)	68.08
6	Sex ratio (No. of females per 1000 males)	Total	973
		Rural	979
		Urban	963

e. Land-use patter

Sl. No.	Particulars	Statistics
1	Geographical Area (Sq.Km)	5648
2	Area Under Forest (ha)	275610
3	Net Area Sown (ha)	153988
4	Grossed Cropped Area (ha)	193657
5	Area sown more than once	39669
6	Gross irrigated area (ha)	59785
7	Net irrigated area (ha)	44757
8	Percent of total cropped area to net area sown (%)	125.76
9	Percentage of Net area Irrigated to net area sown (%)	29.07

f. Climate

The climate of Chamarajanagar District is quite moderate throughout the year with a fairly hot summer and cold winter. March to May are the summer months. The mean maximum temperature is 34°C and the mean minimum temperature is 16.4°C. Relative humidity ranges from 69 to 85% in the morning and from 21% to 70% in the evening. The wind speed ranges from 8.4 to 14.1 kmph. The potential evapo-transpiration in the District ranges from 106 mm to 165 mm/year. The average annual rainfall of the District (2001-

2010, DES, Govt of Karnataka) is 737mm (Table. 1). The highest rainfall is received in Gundlupet taluk (802 mm) followed by Yalandur (737 mm), Kollegal (712mm) and Chamarajanagar (696mm) taluks. Except Gundlupet taluk, in others the amount of rainfall is more or less similar. About 37% of the annual rainfall is received during the SW monsoon (June – September), 36% during post-monsoon or NE monsoon (October – December) and the remaining 27% during the pre-monsoon (January- May) period. The analysis of rainfall for the above period indicates that though the SW monsoon is more predominant, substantial rainfall is received during the post-monsoon or NE monsoon period. The average annual rainy days are 54 (District at a Glance 2008- 09). Thus, it can be seen that a fairly uniform distribution rainfall during different seasons and good number of rainy days will help the rain fed agriculture in the District.

g. Tourist Places

The main tourist attractions in the District are Biligiriranga Hills, Male Mahadeshwara Hills, Hoganekkal falls and Shivasamudram falls. Bandipur national park and Gopalswamy Hills in Gundlupet attracts many visitors.

2. Indicate Gaps of Analysis and Action Plans for complying with Waste Management

Rules

(i). Solid Waste Management

(a). Current status related to Solid Waste Management

	Urban Local bodies	No. of Wards	No. of House holds	Population	Solid Waste Generated per day
1	Municipal corporations (Nagar Nigam or Mahanagar Palika)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
2	Municipalities(Nagar Palikas)	City Municipal Council Chamarajanagar– 31	17652	69875	34.05 TPD
		City Municipal Council Kollegal-31	16383	57149	21 TPD
3	Nagar panchayats (Town area Councils)	Town Municipal Council, Gundlupet-23	6525	28105	10.83 TPD
		Town Panchayath Hanur-13	2716	11066	6.0 TPD
		Town Panchayath Yelandur–11	2055	8779	3.50 TPD

	Local Bodies	No of Village panchayats / Blocks	No of House holds	Population	Solid Waste Generated per day
1.	Block/Taluk/ Mandal Tehsils				
2.	Village/Gram Panchayats	130	-	845817	169.16 MT

Note:

- The actual quantity of Solid waste generated in Village/ Grama Panchayats is not available, as such theoretical calculation assuming 200 gms/ head/day.
- Directions will be given to Grama panchayat to quantify the actual solid waste generated in their jurisdiction.

b. Identification of gaps and action plan

SL.No.	Action points For villages/blocks/to wn municipalities /City corporations	Identification of gap	Action Plan	Responsible agencies	Timeline for completion of action plan																																			
1.	Segregation																																							
(i)	Segregation of waste at source	<p>Whether segregation at source practiced by households and other waste generators:</p> <table border="1"> <thead> <tr> <th>SL. No</th> <th>ULB's</th> <th>No. of wards</th> <th>No. of wards with 100% Source segregation</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CM Council Chamarajanagar</td> <td>31</td> <td>19</td> <td>12</td> </tr> <tr> <td>2</td> <td>CM Council Kollegal</td> <td>31</td> <td>15</td> <td>16</td> </tr> <tr> <td>3</td> <td>TMC Gundlupet</td> <td>23</td> <td>11</td> <td>11</td> </tr> <tr> <td>4</td> <td>TP Hanur</td> <td>13</td> <td>03</td> <td>10</td> </tr> <tr> <td>5</td> <td>TP Yelandur</td> <td>11</td> <td>06</td> <td>05</td> </tr> <tr> <td></td> <td></td> <td>109</td> <td>55</td> <td>54</td> </tr> </tbody> </table>	SL. No	ULB's	No. of wards	No. of wards with 100% Source segregation	Gap Analysis	1	CM Council Chamarajanagar	31	19	12	2	CM Council Kollegal	31	15	16	3	TMC Gundlupet	23	11	11	4	TP Hanur	13	03	10	5	TP Yelandur	11	06	05			109	55	54	<p>Action plan to achieve segregation at source. Awareness programs, incentives, etc. may be considered</p> <ol style="list-style-type: none"> 1. ULB's shall ensure series of awareness programme to promote (i) 100% source segregation (ii) insitu system for effective composting programme will be conducted in local languages every day through announcement regarding segregation of wastes at source. 2. Penalty / Fines shall be imposed to public if the source segregation is not practiced. 3. Monthly once Awards to be given to good house 	ULB's	31-12- 2021
SL. No	ULB's	No. of wards	No. of wards with 100% Source segregation	Gap Analysis																																				
1	CM Council Chamarajanagar	31	19	12																																				
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4	TP Hanur	13	03	10																																				
5	TP Yelandur	11	06	05																																				
		109	55	54																																				

			<p>for best practice in solid waste management in order to promote and encourage the public.</p> <ol style="list-style-type: none"> 4. Non-collection of un-segregated wastes from households. 5. Promoting in-situ wet waste composting in the rural areas within their premises. 6. Promoting decentralized system of municipal solid waste management in each wards. 7. Segregation at generation source of solid waste in proper color coded bins. 8. Preventing solid waste entering into water bodies – installation of bar mesh in Nallahs & Drains. 		
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2	Sweeping						
(i)	Manual Sweeping	(i). % or length of road not covered for regulars weeping			Action plan for reducing gap including method cleaning, frequency of sweeping etc., 1. Complete utilization of manpower Shall be made to achieve 100% sweeping. 2. The gap in man power will be covered within timeline of 6 months as per existing norms. 3. Identification of sweeping workers and allocation of shifts for road stretches to be cleaned and to make 100% utilization of both tools and man power to achieve gap in cleaning. If required ULB's shall outsource the manpower. 4. ULB's shall ensure that all workers Shall be provided with sufficient PPE kits. 5. TP Yelandur is required to prepare DPR within 6 months and approval from competent authority within timeline. 6. Regular cleaning of drains and disposal of sludge	ULB's	31-12-2021
SL. No	ULB's	Total length of the road	length of road covered for regular sweeping	Gap Analysis			
1	CM Council Chamarajanagar	207 Km	70.38 Km	136.62 Km			
2	CM Council Kollegal	108 Km	74 Km	34 Km			
3	TMC Gundlupet	51 Km	51 Km	0			
4	TP Hanur	32.1 Km	32.1 Km	0			
5	TP Yelandur	15.28 km	12 Km	3.28 Km			
	Total	413.38 KM	239.48 KM	173.9 KM			
(ii). Gaps in man power							
SL.No	ULB's	Man power Required as per DPR	Available Man power	Gap Analysis			
1	CM Council Chamarajana gar	154	131	23			
2	CM Council Kollegal	126	99	27			
3	TMC Gundlupet	54	54	Nil			
4	TP Hanur	23	12	11			
5	TP Yelandur	DPR is not yet prepared	16	DPR is not yet			

				prepared
	Total	357	312	61

(iii). Gap in availability of sweeping tools/equipment

SL. No	ULB's	Required availability of sweeping tools/equipment	Present Available of sweeping tools/equipment
1	CM Council Chamarajanagar	Brooms, hand cart, waste storage bins	Sufficient no's are available
2	CM Council Kollegal	100%	100%
3	TMC Gundlupet	Long handle brooms, push cart	Sufficient no's are available
4	TP Hanur	Long handle brooms, push cart	Sufficient no's are available
5	TP Yelandur	16	16

(iv). Availability of suitable PPEs.

SL. No	ULB's	Required Availability of suitable PPEs.	Presently Availability of suitable PPEs	Gap Analysis
1	CM Council Chamarajanagar	Gloves, Gumboot, mask, apron, uniform, Helmet etc.,	Sufficient no's available	As and when, as per the requirement of these items immediate procurement

					is being done.							
		2	CM Council Kollegal	100%	100%	-						
		3	TMC Gundlupet	Gumboot, Gloves, Mask & Apron	Procured as per requirement	-						
		4	TP Hanur	Sufficient no's are available	Sufficient no's are available	-						
		5	TP Yelandur	16	16	-						
(ii)	Mechanical Road Sweeping & Collection	Gaps if any in achieving targeted area or length of road identified for Mechanical Road Sweeping.				Projected growth/ intended action plan with timelines.	ULB's	31-3-2022				
		<table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>Mechanical road sweeping is not carried out in the district only manual sweeping is practiced.</td> <td>No Mechanical sweeping facility in the district</td> </tr> </tbody> </table>		Current Status	Gap Analysis	Mechanical road sweeping is not carried out in the district only manual sweeping is practiced.	No Mechanical sweeping facility in the district			DPR shall be prepared to identify outsource agency to carry out the mechanical road sweeping and waste collection. The same will be implemented as per the DPR and time bound.		
Current Status	Gap Analysis											
Mechanical road sweeping is not carried out in the district only manual sweeping is practiced.	No Mechanical sweeping facility in the district											
3	Waste Collection											
(i)	100% collection of solidwaste	Whether 100%collectionachieved?				Action plan to improve existing collection						
						Not Applicable	ULB's	Not Applicable				

SL. No	ULB's	No. of wards	No. of wards with 100% collection of solid waste	Gap Analysis
1	CM Council Chamarajanagar	31	31	Nil
2	CM Council Kollegal	31	31	Nil
3	TMC Gundlupet	23	23	Nil
4	TP Hanur	13	13	Nil
5	TP Yelandur	11	11	Nil
	Total	109	109	Nil

(ii) Arrangement for door to door collection

Arrangement for door to door provided:% of blocks/wards covered

SL.No	ULB's	No. of wards	No. of wards having arrangement for door to door collection	% achieved	Gap Analysis
1	CM Council Chamarajanagar	31	31	100%	Nil
2	CM Council Kollegal	31	31	100%	Nil
3	TMC Gundlupet	23	23	100%	Nil
4	TP Hanur	13	13	100%	Nil
5	TP Yelandur	11	11	100%	Nil

If there is gap, action plan for door to door collection across The District.

Not Applicable

ULB's

Not Applicable

		Total				109	109	100%	Nil				
(iii)	Waste Collection trolleys with separate compartments	Check availability and adequacy and if it needs Up gradation.					Action plan for procurement if required.					ULB's	31-3-2022
		SL. No	ULB's	Nos. Required	Nos. available	Gap Analysis	DPR shall be prepared for centralized tendering to purchase equipments necessary for solid waste management in the District. The same will be implemented as per the DPR and time bound.						
		1	CM Council, Chamarajanagar	29	15	14							
		2	CM Council Kollegal	5	3	2							
		3	TMC Gundlupet	16	5	11							
		4	TP Hanur	16	5	11							
		5	TP Yelandur	18	10	8							
	Total	84	38	46									
(iv)	Mini Collection Trucks with separate compartments	Check if adequate or needs Up gradation or not required					[Action plan for procurement if required]					ULB's	31-3-2022
		SL. No	ULB's	required	available	Gap Analysis	DPR shall be prepared for centralized tendering to purchase equipments necessary for solid waste management in the District. The same will be implemented as per the DPR and time bound..						
		1	CM Council Chamarajanagar	21	21	0							
		2	CM Council Kollegal	12	06	06							
		3	TMC Gundlupet	10	10	0							
		4	TP Hanur	3	3	0							
		5	TP Yelandur	4	2	2							
	Total	50	42	8									
(v)	Waste Deposition centres (for domestic hazardous)	Number of deposition centres required and no's available Or Any alternate arrangement.					1. ULB's will identify and establish the waste deposition centers in its jurisdiction in each taluk for collection of					ULB's	31-3-2022

	wastes)	<table border="1"> <thead> <tr> <th>SL. No</th> <th>ULB's</th> <th>Nos. Required</th> <th>Nos. available</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CM Council Chamarajanagar</td> <td>1</td> <td>1</td> <td>Collected in Dry waste collection centres</td> </tr> <tr> <td>2</td> <td>CM Council Kollegal</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>3</td> <td>TMC Gundlupet</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>4</td> <td>TP Hanur</td> <td>1</td> <td>0</td> <td>1</td> </tr> <tr> <td>5</td> <td>TP Yelandur</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td></td> <td>Total</td> <td>5</td> <td>4</td> <td>5</td> </tr> </tbody> </table>					SL. No	ULB's	Nos. Required	Nos. available	Gap Analysis	1	CM Council Chamarajanagar	1	1	Collected in Dry waste collection centres	2	CM Council Kollegal	1	1	1	3	TMC Gundlupet	1	1	1	4	TP Hanur	1	0	1	5	TP Yelandur	1	1	1		Total	5	4	5	<p>domestic hazardous waste.</p> <p>2. ULB shall make an MOU with TSDF for scientific disposal of domestic hazardous Wastes.</p> <p>3. Records on collection and disposal of domestic hazardous Wastes shall be maintained and shall be submit to KSPCB regularly..</p>		
		SL. No	ULB's	Nos. Required	Nos. available	Gap Analysis																																						
		1	CM Council Chamarajanagar	1	1	Collected in Dry waste collection centres																																						
		2	CM Council Kollegal	1	1	1																																						
		3	TMC Gundlupet	1	1	1																																						
		4	TP Hanur	1	0	1																																						
		5	TP Yelandur	1	1	1																																						
			Total	5	4	5																																						
<p>Current Status:</p> <p>1. All ULBs at present is not having any specific Waste Deposition centres (for domestic hazardous wastes) but they are engaged in segregation of dry waste in Decentralized Dry waste collection centres in their jurisdiction.</p> <p>2. ULB's have not made any agreement with TSDF for final disposal of domestic hazardous waste.</p>																																												
4.	Waste Transport																																											

(i)	Review existing infrastructure for waste Transport.	<p>[Check(i) whether existing fleet is adequate (ii)check whether segregated waste transport possible etc.]</p> <table border="1"> <thead> <tr> <th>SL.No</th> <th>ULB's</th> <th>Required</th> <th>available</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CM Council Chamarajanagar</td> <td>21</td> <td>21</td> <td>0</td> </tr> <tr> <td>2</td> <td>CM Council Kollegal</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>3</td> <td>TMC Gundlupet</td> <td>10</td> <td>10</td> <td>0</td> </tr> <tr> <td>4</td> <td>TP Hanur</td> <td>3</td> <td>3</td> <td>0</td> </tr> <tr> <td>5</td> <td>TP Yelandur</td> <td>2</td> <td>2</td> <td>0</td> </tr> <tr> <td colspan="2">Total</td> <td>39</td> <td>38</td> <td>1</td> </tr> </tbody> </table>	SL.No	ULB's	Required	available	Gap Analysis	1	CM Council Chamarajanagar	21	21	0	2	CM Council Kollegal	3	2	1	3	TMC Gundlupet	10	10	0	4	TP Hanur	3	3	0	5	TP Yelandur	2	2	0	Total		39	38	1	<p>Action plan for short-comings identified.</p> <p>DPR shall be prepared for centralized tendering to purchase equipments necessary for solid waste management in the District. The same will be implemented as per the DPR and time bound.</p>	ULB's	31-3-2022							
SL.No	ULB's	Required	available	Gap Analysis																																											
1	CM Council Chamarajanagar	21	21	0																																											
2	CM Council Kollegal	3	2	1																																											
3	TMC Gundlupet	10	10	0																																											
4	TP Hanur	3	3	0																																											
5	TP Yelandur	2	2	0																																											
Total		39	38	1																																											
2(ii)	Bulk Waste Trucks	<p>[check adequacy]</p> <table border="1"> <thead> <tr> <th>SL.No</th> <th>ULB's</th> <th>Required</th> <th>available</th> <th>Gap Analysis</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CM Council Chamarajanagar</td> <td>1</td> <td>1</td> <td>0</td> <td></td> </tr> <tr> <td>2</td> <td>CM Council Kollegal</td> <td>1</td> <td>0</td> <td>1</td> <td>Tender under process</td> </tr> <tr> <td>3</td> <td>TMC Gundlupet</td> <td>1</td> <td>1</td> <td>0</td> <td></td> </tr> <tr> <td>4</td> <td>TP Hanur</td> <td>1</td> <td>0</td> <td>1</td> <td></td> </tr> <tr> <td>5</td> <td>TP Yelandur</td> <td>1</td> <td>0</td> <td>1</td> <td></td> </tr> <tr> <td colspan="2">Total</td> <td>5</td> <td>2</td> <td>3</td> <td></td> </tr> </tbody> </table>	SL.No	ULB's	Required	available	Gap Analysis	Remarks	1	CM Council Chamarajanagar	1	1	0		2	CM Council Kollegal	1	0	1	Tender under process	3	TMC Gundlupet	1	1	0		4	TP Hanur	1	0	1		5	TP Yelandur	1	0	1		Total		5	2	3		<p>[action plan for procurement if required]</p> <p>DPR shall be prepared for centralized tendering to purchase equipments necessary for solid waste management in the District. The same will be implemented as per the DPR and time bound.</p>	ULB's	31-3-2022
SL.No	ULB's	Required	available	Gap Analysis	Remarks																																										
1	CM Council Chamarajanagar	1	1	0																																											
2	CM Council Kollegal	1	0	1	Tender under process																																										
3	TMC Gundlupet	1	1	0																																											
4	TP Hanur	1	0	1																																											
5	TP Yelandur	1	0	1																																											
Total		5	2	3																																											
(iii)	Waste Transfer points	<p>[check whether available/adequacy]</p> <p>There are no Waste Transfer points established by ULB's in the District as they are directly transporting the collected solid waste from the towns to the Solid waste management facility.</p>	Not Applicable	Not Applicable	Not Applicable																																										

5	Waste Treatment and Disposal								
(i)	Wet-waste Management: On-site composting by bulk waste generators(Authority may decide on requirement as per Rules)	Whether number of bulk waste generators identified for installation					Action for getting on site composting plants commissioned. 1. Bulk waste generators in the district shall be identified . 2. ULB's shall ensure that all the bulk waste generators in their jurisdiction shall install onsite organic waste composter within their premises to manage their wet waste by converting to compost. 3. The Ulbs shall ensured that the compost generated shall be utilized within their premises for gardening purpose. 4. Notices shall be issued by ULBs to Bulk waste generators informing to adopt the onsite composting system and utilize the same for gardening purpose. Ensure that no wet waste is dumped outside the premises.	ULB's	31-3-2022
		SL. No	ULB's	No.of Bulk waste generators	Status of onsite composting done	Gap Analysis			
		1	CM Council Chamarajanagar	16	0	16			
		2	CM Council Kollegal	14	0	14			
		3	TMC Gundlupet	4	0	4			
		4	TP Hanur	4	0	4			
		5	TP Yelandur	1	0	1			
Total		39	0	39					
At present the ULBs are collecting the wet waste generated from bulk generators in the district.									

						5. The ULB's shall not collect the wet waste from bulk waste generators after the notice period.				
(ii)	Wet-waste Management: Facility(ies) for central Biomethanation / Composting of wets waste.	Whether facility exists/functional/ needs upgradation?					If not action plan for developing / upgradation of bio-methanation or composting facility. 1. The existing facilities shall be upgradation for the effective management of wet waste. 2. The successful models shall be explored and the suitable model shall be implemented in the District. 3. The necessary machines/equipments (screening machines, etc.,) shall be purchased and utilized for effective management of solid waste. 4. The Ulbs shall establish leachate treatment plants in solid waste management facilities and ensure the operation and maintenance of leachate treatment plant. .	ULB's	31-3-2022	
		SL. No	ULB's	Facility Existence	Functional	Needs upgradation				Gap
		1	CM Council Chamaraja nagar	2	2	2				Needs upgradation of composting facility
		2	CM Council Kollegal	1	1	1				Needs upgradation of composting facility
		3	TMC Gundlupet	2	2	2				Needs upgradation of composting facility
		4	TP Hanur	2	0	2				Composting is not yet carried out and needs upgradation of the facility.
		5	TP Yelandur	0	0	0				There is no MSW site and processing facility. The waste is processed in CMC Kollegal
	Total	7	5	7						

(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	Whether MRF facility exists? / is there any arrangement to sending the dry-waste to any common MRF or					Action plan for use of dry segregated waste in MRF operation sent to Waste to energy plant or % dry-waste converted as RDF or Need to set-up own Waste to Energy plant?	ULB's	31-3-2022		
		SL.No	ULB's	Facility Existence	Functional	Needs upgradation				Gap	
		1	CM Council Chamarajanagar	2	1	2				At present ULB's is having 2 Nos. of Dry Waste collection centre and materials are segregated partially and remaining is dumped in landfill site.	<ol style="list-style-type: none"> 1. Authorized recyclers shall be identified for recycling/re-processing of segregated dry waste generated in the District. 2. MOU shall be executed with KSPCB authorized recyclers/ cement industries for co processing. 3. It shall be ensured that the segregated dry waste shall be channelized to respective recyclers/ utilisers or for cement plants for co processing. 4.
		2	CM Council Kollegal	2	2	2				At present ULB's is having 2 Nos. of Dry Waste collection centre and materials are segregated partially and remaining is dumped in landfill site.	
3	TMC Gundlupet	1	1	1	At present ULB's is having 1 Nos. of Dry Waste collection centre and						

						materials are segregated partially and remaining is dumped in landfill site			
	4	TP Hanur	2	2	2	At present ULB's is having 1 Nos. of Dry Waste collection centre and materials are segregated partially and remaining is dumped in landfill site			
	5	TP Yelandur	2	2	2	t present ULB's is having 1 Nos. of Dry Waste collection centre and materials are segregated partially and remaining is sent to CMC Kollegala Landfill site for further processing			
		Total	9	8	9				

(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Does the agency still disposing waste in dumpsites? Whether sanitary landfill available? / Plan for constructing sanitary landfill or arrangement with ULBs.				Action plan (i) to construct sanitary land fill If required (ii)Action plan to minimize landfilling	ULB's	31-3-2023		
		SL. No	ULB's	No. of existing Dumpsite	Required Nos. of SLF				Available No. of SLF	Gap Analysis
		1	CM Council Chamaraja nagar	1 within the sanitary landfill site	1				1	Non-functional
		2	CM Council Kollegal	1 within the sanitary landfill site	1				1	Non-functional
		3	TMC Gundlupet	1	1				0	Need to establish SLF
		4	TP Hanur	1 within the sanitary landfill site	1				1	Non-functional
		5	TP Yelandur	1	1				0	No. SLF available in Yelandur
	Total	5	5	3						

(v)	Remediation of historic/ legacy dumpsite	Whether existing old dumpsite if any required remediation as per rules?				Action plan for remediation of legacy / historic dumpsite.	ULB's	31-3-2023	
		SL. No	ULB's	No. of existing old dump site	Total Quantity of legacy waste dumped at dump site in Tonnes				Gap Analysis
		1	CM Council Chamarajanagar	1	20332				DPR for legacy waste management prepared but not yet started
		2	CM Council Kollegal	1	20000				DPR for legacy waste management not prepared and not yet started
		3	TMC Gundlupet	1	14725				DPR for legacy waste management not prepared and not yet started
		4	TP Hanur	1	2000				--
		5	TP Yelandur	0	0				--
	Total	3	57,057						

(vi)	Involvement of NGOs	Whether involvement of NGOs envisaged.				NGOs can be involved for management of solid waste Campaign 1. Identification of NGO's shall be made in the District. The tie-up shall be made with NGO's to create more and more mass awareness among the publics in order to implement the SWM Rules, 2016 in the District.	ULB's	31-3-2022	
		SL.No	ULB's	Required	Available				Gap Analysis
		1	CM Council Chamarajanagar	1	1				
		2	CM Council Kollegal	1	0				Need NGO
		3	TMC Gundlupet	1	0				Need NGO
		4	TP Hanur	1	0				Need NGO
		5	TP Yelandur	1	0				Need NGO
	Total	5	1						
(vii)	EPR of Producers: Linkage with Producers /Brand Owners	As per rules, producers and brand-owners should facilitate in collection of packaging waste There are no producers and brand owners in RO, Chamarajanagar jurisdiction				Action plan for linkage of all producers/brand owners or their PROs for collection of plastic waste. Not Applicable.	Not Applicable.	Not Applicable.	
(viii)	Authorization of Waste Pickers	Yes/No No at present the District as not issued authorization for Waste pickers from ULB's.				List of authorized waste pickers should be available. 1. Identification of waste pickers in the district shall be made and register with the respective Ulbs. 2. Issuance of ID cards for registered waste pickers	ULB's	31-3-2022	

(ix)	Preparation of own by-laws to comply with SWM Rules 2016	Yes/No Yes. DMA has prepared State Level Bye law and the same is revised in 09-10-2019 and same is implemented in the district.	If not prepared action plan for preparation of by-laws which may be applicable in cantonment Board jurisdiction. Not Applicable	ULB's	Not Applicable
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(ii). Plastic Waste Management

(a) Current status related to Plastic Waste Management

Urban Local bodies		Estimated quantity of Plastic Waste Generated per day	
1	Municipal corporations(Nagar Nigam or Mahanagar Palika)	Nil	
2	Municipalities(Nagar Palikas)	CMC Chamarajanagar	2.3 TPD
		CMC Kollegal	1.5 TPD
3	Nagar panchayats(Town area Councils)	TMC Gundlupet	1.4 TPD
		TP Hanur	0.67 TPD
		TP Yelandur	0.35 TPD
		Total	6.22 TPD

Local Bodies		Plastic Waste Generated per day
1	Block/Taluk/ MandalTehsils	Not Applicable.
2	Village/GramPanchayats	Details not available

Note: Inventorisation in Block/Taluk/ Mandal Tehsils/ Village/Grama Panchayats estimation of plastic waste generated per day needs to be carried out by the concerned Local panchayats.

b. Identification of gaps and action plan

S.No.	Action points For village panchayats/blocks/municipalities/corporations	Identification						Action plan	Agencies Responsible	Target time for Compliance																																										
		SL. No	ULB's	No. of wards	100 % door to door collection	Achieved	Gap Analysis																																													
1.	Door to Door collection of dry waste including	<table border="1"> <thead> <tr> <th>SL. No</th> <th>ULB's</th> <th>No. of wards</th> <th>100 % door to door collection</th> <th>Achieved</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CM Council Chamarajanagar</td> <td>31</td> <td>31</td> <td>100%</td> <td>Nil</td> </tr> <tr> <td>2</td> <td>CM Council Kollegal</td> <td>31</td> <td>31</td> <td>100%</td> <td>Nil</td> </tr> <tr> <td>3</td> <td>TMC Gundlupet</td> <td>23</td> <td>23</td> <td>100%</td> <td>Nil</td> </tr> <tr> <td>4</td> <td>TP Hanur</td> <td>13</td> <td>13</td> <td>100%</td> <td>Nil</td> </tr> <tr> <td>5</td> <td>TP Yelandur</td> <td>11</td> <td>11</td> <td>100%</td> <td>Nil</td> </tr> <tr> <td colspan="2">Total</td> <td>109</td> <td>109</td> <td></td> <td></td> </tr> </tbody> </table>						SL. No	ULB's	No. of wards	100 % door to door collection	Achieved	Gap Analysis	1	CM Council Chamarajanagar	31	31	100%	Nil	2	CM Council Kollegal	31	31	100%	Nil	3	TMC Gundlupet	23	23	100%	Nil	4	TP Hanur	13	13	100%	Nil	5	TP Yelandur	11	11	100%	Nil	Total		109	109			Not Applicable	LB's	Not Applicable as already achieved.
SL. No	ULB's	No. of wards	100 % door to door collection	Achieved	Gap Analysis																																															
1	CM Council Chamarajanagar	31	31	100%	Nil																																															
2	CM Council Kollegal	31	31	100%	Nil																																															
3	TMC Gundlupet	23	23	100%	Nil																																															
4	TP Hanur	13	13	100%	Nil																																															
5	TP Yelandur	11	11	100%	Nil																																															
Total		109	109																																																	
2.	Facilitate organization of collection of PW at Wastetransfer point for Material Recovery Facility	<table border="1"> <thead> <tr> <th>Present Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.</td> <td>Identification and establishment of plastic waste collection centers at each village panchayat/block/municipality/Nagarpanchayat.</td> </tr> </tbody> </table>						Present Status	Gap Analysis	At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.	Identification and establishment of plastic waste collection centers at each village panchayat/block/municipality/Nagarpanchayat.	1. Identification of prominent places where more public gatherings are observed. 2. Sufficient number of dustbins shall be provided at the identified prominent places.	ULB's	31-12-2021																																						
Present Status	Gap Analysis																																																			
At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.	Identification and establishment of plastic waste collection centers at each village panchayat/block/municipality/Nagarpanchayat.																																																			

				<p>3. Establishment of collection centres for collection of waste from identified prominent places.</p> <p>3. The waste from collected centre shall be handed over to authorized recyclers for further processing and recycling.</p> <p>4. Records shall be maintained in digital as well as in logbook on daily basis. The same needs to be submit to KSPCB regularly.</p>										
3.	PW collectionCentres	<table border="1"> <thead> <tr> <th>Present Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.</td> <td>Identification and establishment of plastic waste collection centers at each villagepanchayat/block/municipal ity/ Nagar panchayat</td> </tr> <tr> <td>Linkage with KSPCB authorised Plastic waste recyclers is not yet executed by ULB's.</td> <td>Linkage with PW recyclers must be executed by respective ULB's.</td> </tr> <tr> <td>There are no producers and brand</td> <td>Inventorisation of plastic waste</td> </tr> </tbody> </table>	Present Status	Gap Analysis	At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.	Identification and establishment of plastic waste collection centers at each villagepanchayat/block/municipal ity/ Nagar panchayat	Linkage with KSPCB authorised Plastic waste recyclers is not yet executed by ULB's.	Linkage with PW recyclers must be executed by respective ULB's.	There are no producers and brand	Inventorisation of plastic waste		<p>1. Establishment of adequate number of Plastic waste collection centre in the identified places in District.</p> <p>2. ULB's shall execute MOU with Plastic recyclers in the adjacent</p>	ULB's + concerned village panchayath.	31-12-2021
Present Status	Gap Analysis													
At present all ULB's are segregating the plastic waste at Decentralised Dry Waste Collection centres involving pourakarmikas and informal sectors and NGO's.	Identification and establishment of plastic waste collection centers at each villagepanchayat/block/municipal ity/ Nagar panchayat													
Linkage with KSPCB authorised Plastic waste recyclers is not yet executed by ULB's.	Linkage with PW recyclers must be executed by respective ULB's.													
There are no producers and brand	Inventorisation of plastic waste													

		owners in the jurisdiction of RO ChamaraJanagar	estimation at Each village panchayat/block/municipality/ Nagar panchayat	<p>district to hand over the plastic waste collected in collection centres</p> <p>3. ULB's shall explore to utilise plastic waste in road construction consulting the PWD department or in Coordination with State Urban Department.</p> <p>4. ULB's and village panchayaths must quantity and collect the plastic waste generated in their jurisdiction.</p>		
4.	Awareness and education programs implementation	<p>Review existing gaps in creating awareness among public for minimizing and recycling PW.</p> <p>ULB's are carrying out the awareness programmes in their jurisdiction about plastic waste management and to not to use the plastic banned items in the District by street plays, announcements, in schools and among other departments.</p> <p>KSPCB is carrying our regular awareness programmes in schools and colleges, to ULBs and in Temples of the District to not to use Banned Plastic items specified in GOK dated 11-3-2016 in the state.</p>		<p>Education through mass media, schools, Producer / brand owner campaigns and other channels.</p> <p>1. ULB's shall organize series of mass awareness and education programmes in their jurisdiction through mass</p>	ULB's + concer ned Gram Pancha yath + KSPCB	31-3-2021

			<p>media like TV programmes, through radio, by local announcement means once in 6 months.</p> <p>2. ULB's shall maintain records of the awareness programmes and submit the same to KSPCB once in 6 months.</p> <p>3. ULB's shall explore to establish a plastic recycling units in their respective jurisdiction for recycling of plastic waste.</p> <p>4. KSPCB shall monitor the effective implementation of Plastic Waste Management Rules in the District and also to carry out awareness programmes in</p>		
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			<p>the District.</p> <p>5. Ban on Carry bags and other single use plastics as notified by State Government.</p> <p>6. Ensuring no open burning and littering.</p> <p>7. Preventing plastic waste entering into water bodies – installation of bar mesh in Nallahs& Drains.</p> <p>8. Recycling facilities must be developed at district levels by ULB's.</p>		
5.	Access to Plastic Waste Disposal Facilities	<p>Check if District has access to PW recycling /utilization or disposal facilities.</p> <ul style="list-style-type: none"> • At present there are no Plastic waste recyclers/ utilisation or disposal facilities in the District. • The plastic waste collected is stored in the decentralized dry waste collection centres in each ULB's. • The ULB's as not made MOU with authorised Plastic waste recyclers to hand over the collected Plastic waste. 	<p>Check if PW recycling facilities available at reasonable distance; Channel for sending PW collected to cement plants for processing;</p>	ULB's	31-3-2021

			<p>Availability of waste plastic oil producing facilities; Linkage with PWD for usage of PW in road making. Action plan at District should involve Urban and Rural Local bodies.</p> <ol style="list-style-type: none"> 1. ULB's shall identify the availability of Plastic waste recyclers in the adjacent Districts. 2. The MOU shall be executed with plastic waste recyclers to handover the plastic wastes that gets generated in District. 3. ULB's shall explore to utilize the plastic wastes in road making in the District by linkage with 		
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			<p>PWD.</p> <p>4. ULB's shall identify nearby cement industries for disposal of segregated plastic waste for coprocessing.</p> <p>5. ULB's shall submit the records of Plastic waste management carried out in the District to KSPCB for every 6 months.</p>		
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(iii). C & D Waste Management Rules

(a) Current status related to C & D Waste

Details of Data Requirement	Present Status
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Total C & D waste generation in MT per day (As per data from Municipal Corporations/Municipalities):	As per the information furnished by the ULB's	
	ULB's	Quantity of C&D waste generated in TPD
	City Municipal Council Chamarajanagar	5.59
	City Municipal Council Kollegal	1.50
	Town Municipal Council Gundlupet	0.84
	Town Panchayath Hanur	0.5
	Town Panchayath Yelandur	0.3
Total	8.73	
Does the District has access to C&D waste recycling facility?	No.	

b. Identification of gaps and action plan:

SL. No.	Action points for blocks / town municipalities/ City corporations	Identification of Gaps			Action Plan	Responsible agency	Timeline for completion of action plan						
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	<table border="1"> <thead> <tr> <th>Existing Practice</th> <th>Required</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>ULB's are currently collecting the C& D waste and dumping into Low lying areas in the District</td> <td>Separate collection points of C & D</td> <td>Separate collection points of C & D must be established in each ULB's</td> </tr> </tbody> </table>	Existing Practice	Required	Gap Analysis	ULB's are currently collecting the C& D waste and dumping into Low lying areas in the District	Separate collection points of C & D	Separate collection points of C & D must be established in each ULB's			<ol style="list-style-type: none"> 1. Identification of bulk generators shall be carried out in the district. 2. Designated C & D waste collection points shall be established in each Taluk. 3. Designated deposition points for C & D waste shall be established in the District head quarters. 4. Approval of Waste Management 	ULB's + District administration	31-3-2022
Existing Practice	Required	Gap Analysis											
ULB's are currently collecting the C& D waste and dumping into Low lying areas in the District	Separate collection points of C & D	Separate collection points of C & D must be established in each ULB's											

		<p>ULB's earmarked the area within the existing Solid Waste Management site for storage and deposition of C & D waste.</p>	<p>A common C & D waste deposition points</p>	<p>A common C & D waste deposition points needs to be identified in each ULB's.</p>	<p>Plan submitted by Waste Generators before Construction starts records shall be maintained by ULBs.</p> <p>5. Proper collection, transportation, processing and disposal of C&D Waste shall be ensured in the district.</p> <p>6. Adequate Air pollution control measures shall be taken as per the CPCB guidelines.</p>							
2.	<p>Whether local authority have fixed user fee on C&D waste and introduced permission system for bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?</p>	<table border="1"> <thead> <tr> <th>Existing Practice</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>ULB's have no Local by-laws to pay user fee</td> <td>Local by-laws to pay user fee needs to be framed and implemented in the District</td> </tr> <tr> <td>ULB's have no permission system for bulk waste generators</td> <td>Permission system for bulk waste generators need to be framed and implemented in the District</td> </tr> </tbody> </table>	Existing Practice	Gap Analysis	ULB's have no Local by-laws to pay user fee	Local by-laws to pay user fee needs to be framed and implemented in the District	ULB's have no permission system for bulk waste generators	Permission system for bulk waste generators need to be framed and implemented in the District		<p>1. Fix rates to be paid by Waste Generators for Collection, Storage & Transportation of Waste shall be incorporated in the building approval plan.</p> <p>2. Public notices shall be issued that construction and demolition waste should only be disposed at pre-identified/notified sites and must be displayed in newspaper notification and same must be informed in the approval of plan to hand over the C & D waste.</p>	ULB's	31-3-2022
Existing Practice	Gap Analysis											
ULB's have no Local by-laws to pay user fee	Local by-laws to pay user fee needs to be framed and implemented in the District											
ULB's have no permission system for bulk waste generators	Permission system for bulk waste generators need to be framed and implemented in the District											

3.	C & D recycling Facility	There is no C & D Recycling facility in the District	<ol style="list-style-type: none"> 1. Land identification for setting up of common C &D waste recycling facility. 2. Installation of required infrastructure facility. 3. Adequate green belt development in the common C &D waste recycling plant 4. As per the guidelines of CPCB compliance needs to be done. 	ULB's +District administration + Town Planning Department	31-3-2022
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements,colony and rural roads	There is no policy for usage or promotion on usage of C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.	<ol style="list-style-type: none"> 1. District administration shall frame a Policy for management of C&D waste. 2. Provisions for using materials made by C&D Waste in Construction Activity like paving blocks, lower layers of road pavements, colony and rural roads etc by executing an agreement with PWD and industries engaged in manufacturing of cement blocks 	ULB's + District administration + PWD	31-3-2022
5.	ICE on C&D waste management	There is no sustained system of creating awareness created among local communities	<ol style="list-style-type: none"> 1. Training program's shall be organized through KSPCB to Ulbs once in 6 months. 2. Intensive mass awareness to publics by local means viz., making hand outs/ Newspaper notifications/ through media advertisement and announcements through loudspeakers. 	ULB's + KSPCB	31-3-2022

(iv). Bio – Medical Waste Management

(a). Current status related to Bio- Medical Waste

Inventory of BMW in the District	Quantity
Total no. of Bedded Healthcare Facilities	[Nos]: 93
Total no. of non-bedded HCF	[Nos]: 257
No. of HCFs authorized by SPCBs/PCCs	[Nos]: 223
No. of Common Bio medical Waste Treatment and Disposal Facilities(CBWTFs)	[Nos]: None
Capacity of CBWTFs	[inKg/day]: Not Applicable
No. of Deep burials for BMW if any	[Nos]: 162
Quantity of biomedical waste generated per day	[inKg/day]: 146.34
Quantity of biomedical waste treated per day	[inKg/day]: 146.34

b. Identification of gaps and action plans

SL. No.	Action points	Gaps	Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory and Identification of Health care Facilities	<p>Check whether all HCFs including, clinics, hospitals, Veterinary hospitals, Ayush hospitals, animal houses, etc generating biomedical waste area identified and authorized by SPCBs/PCCs:</p> <p>As per the Bio medical Waste Management Annual Report 2019-2020, the district is having following HCE's:</p> <ul style="list-style-type: none"> i. Bedded hospitals and nursing homes (bedded) : 93 ii. Clinics, dispensaries : 158 iii. Veterinary institutions : 80 iv. Animal houses : Nil 	<p>1. Maintenance of List of Registered HCFs in the district</p>	<p>Health Department + KSPCB</p>	<p>31-3-2022</p>

		<ul style="list-style-type: none"> v. Pathological laboratories : 25 vi. Blood banks : Nil vii. Clinical establishment : Nil viii. Research institutions : Nil ix. AYUSH : 15 <ul style="list-style-type: none"> • Nearly 350 Nos. of Health care establishments are identified in the District. Out off which 223 Nos. of HCE as authorized HCE and 127 HCE as not applied for renewal of the same for which notices is issued. • There is no gap as all HCE is identified in the District and in future the HCE that gets established in the District also gets authorized from KSPCB. 											
2.	Adequacy of facilities to treat biomedical waste	<p>Check if there is any gap between Quantity of Biomedical Waste generated per day and quantity of Biomedical waste treated and disposed in the District? In case of no access to CBWTFs, adequacy of existing disposal of BMW.</p> <table border="1"> <thead> <tr> <th>Existing No of HCE in the District as per Annual report 2019</th> <th>Total BMW waste generated in kg/day in the District as per Annual report 2019</th> <th>Total BMW waste disposed in the District as per Annual report 2019</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>350</td> <td>146 TPD</td> <td>146 kg/day</td> <td>The Total waste disposed to CBMWTF is 67.657Kg/d and deep buried in rural remote areas is 78.68kg/day.</td> </tr> </tbody> </table>	Existing No of HCE in the District as per Annual report 2019	Total BMW waste generated in kg/day in the District as per Annual report 2019	Total BMW waste disposed in the District as per Annual report 2019	Remarks	350	146 TPD	146 kg/day	The Total waste disposed to CBMWTF is 67.657Kg/d and deep buried in rural remote areas is 78.68kg/day.	<p>Action plan for setting-up CBWTF or providing access to CBWTF with 75 Km from places waste generation. Including identification of site for setting up such facility. Action plan for management of BMW through captive facilities in case of no access to CBWTF:</p> <p>1. HCE's shall be mandated to execute MOU with</p>	District Health Officer	Not Applicable
Existing No of HCE in the District as per Annual report 2019	Total BMW waste generated in kg/day in the District as per Annual report 2019	Total BMW waste disposed in the District as per Annual report 2019	Remarks										
350	146 TPD	146 kg/day	The Total waste disposed to CBMWTF is 67.657Kg/d and deep buried in rural remote areas is 78.68kg/day.										

		<table border="1"> <tr> <td></td> <td></td> <td> <p>Thus the generated waste is disposed in the present existing system and is adequate.</p> </td> </tr> </table> <p>*Covid 19 waste generated in the District is handed over to CBMWTF and same is uploaded in app and treated as per CPCB guidelines.</p>			<p>Thus the generated waste is disposed in the present existing system and is adequate.</p>	<p>CBMWTF</p> <ol style="list-style-type: none"> In Remote areas of the district deep burial is practiced. Districts having adequate facility to handle waste. 		
		<p>Thus the generated waste is disposed in the present existing system and is adequate.</p>						
3.	Tracking of BMW	<p>Check whether bar code system is implemented by all HCFs and CBWTFs.</p> <ul style="list-style-type: none"> BMW generated in the District is disposed to the two CBMWTF which is located in the Mysuru District within 75 kms distance and BMW generated in remote area is deep buried. At present 14 Nos. of HCE's as bar coding done by M/s. GIP's Biotech and remaining HCE's covered by M/s. Shree Consultant is under the Process of implementation of bar coding system in the District. 	<p>Plan for implementation of bar code system by all HCFs and CBWTFs in the District.</p> <ol style="list-style-type: none"> Implementation of 100% bar coding system shall be ensured. KSPCB shall effectively monitor the implementation of bar coding within timeline. 	<p>District Health Officer + CBMWTF + HCE's + KSPCB</p>	31-12-2021			

4.	Awareness and education of health care staff	<p>More awareness programmes and training to HCE staff and ULB's staff taken by KSPCB once in 3 months.</p> <p>Awareness programmes is being conducted regularly to HCE's & already in 2020-21 total 6 programmes has been conducted.</p>	<p>Action plan for awareness program sand training to healthcare staff and ULB officials. Action plan for ensuring adequate.</p> <p>1. More awareness programmes and training to HCE staff and ulbs staff shall be taken by Health department and CBMWTF and KSPCB once in 6 months .</p>	District Health Officer + CBMWTF + KSPCB + HCF +ULB	31-12-2021
5.	Adequacy of funds	Funds is allocated to Government healthcare facilities for bio-medical waste management by State Govt.?	Yes Funds to Government health care facilities for bio-medical waste management by State Govt is sufficient.	District Health Officer	Not Applicable.
6.	Compliance to Rules by HCFs and CBWTFs	<p>Most of the HCF are complying as per the BMW rules 2016.</p> <p>District level Monitoring Committee as been constitute to monitor the compliance by Hospitals/HCFs.</p>	<p>Draw action plan to monitor compliance Of HCFs and CBWTFs through SPCBs/PCCs.</p> <p>Although the HCF is complying with</p>	District Health Officer + District level monitoring committee	31-12-2021

			BMW Rules 2016, DHO and KSPCB shall ensure 100% compliance as per rules by regular inspections .			
7.	District Monitoring Committee	Level	Yes, District Level Monitoring Committee has been constitute under the chairmanship of District Commissioner and regular meetings are being organized.	Not Applicable	Not Applicable	Not Applicable
8.	Waste water Treatment		<p>Check if HCFS are required to install ETPs for waste water generated.</p> <ul style="list-style-type: none"> • LETP's are installed in all HCF's which are having more than 30 beds. • The HCE having 30 beds and above are covered under Water(Prevention and Control of Pollution)Act 1974 and condition is stipulated in consent order to treat the Liquid infectious effluent in ETP as a terminal treatment unit. • In HCE with less than 30 beds, source disinfectant Sodium Hypochlorite is used before discharge into UGD and ST &SP. 	<p>1 It shall be ensured that no untreated wastewater is discharged into the drains/water bodies by round the clock vigilance of District Health Officer.</p> <p>2. DHO shall ensure that all HCE shall treat the Liquid infectious wastewater as per BMW Management Rules 2016.</p>	District Health Officer + HCEs+ KSPCB	Not Applicable

V. Hazardous Waste Management

(a). Current status related to Hazardous Waste Management

Details of Data Requirement	Present Status
No of Industries generating HW	[Nos.]: 07 Nos. as on 31-3-2021
Quantity of HW in the District	[MT/Annum]: 37.18 MT/Annum

(i) .Quantity of Incinerable HW	[MT/Annum]: 3.4 MT/Annum
(ii).Quantity of land-fillable HW	[MT/Annum]: 0 MT/Annum
(iii.)Quantity of Recyclable/ utilizable HW	[MT/Annum]: 33.78 MT/Annum
No of captive/common TSDF	[Nos of integrated TSDF]: Nil. [Nos of SLF]: Nil. [No of Standalone incinerators]: Nil.
Contaminated Sites or probable Contaminated sites	[Nos]: Nil.

b. Identification of gaps and action plans:

S. No.	Action points	Identification of Gaps	Action Plan	Responsible agency	Time line for completion of action plan
1.	Regulation of industries and facilities generating Hazardous Waste	Current Status: In the District there are 7 HW generating industries and all are authorized by KSPCB.	RO KSPCB is monitoring the HW industries and ensuring safe disposal of HW as per Rules in the District.	SPCB	Not Applicable
2.	Establishment of collection centres	<ul style="list-style-type: none"> As on date there are no specific Hazardous waste collection centers in the District. Presently, the Hazardous waste collected from households is segregated in Dry waste collection centers established by Ulb's 	As per the Rules and Annual inventory of HW guidelines of CPCB, the shall establish the collection centres in their respective jurisdiction	ULB's	31-12-2022

3.	Training of workers involved in handling/recycling/disposal of HW	There are no such industries engaged in the recycling/pre-processing/disposal of Hazardous waste in the District.	Not Applicable	Not Applicable	Not Applicable
4.	Availability/Linkage with common TSDF or disposal facility	<ul style="list-style-type: none"> • There is no landfillable HW generators in the District. • Whereas the recyclable and incinerable hazardous wastes generated by the generators is currently disposing the same by executing an MOU with authorized incinerators and recyclers in the state. 	Already all HW are tied up with authorized incinerators and recyclers and KSPCB is monitoring regularly.	KSPCB	Not Applicable
5.	Contaminated Sites	There are no any such sites where soils/sediments/ground water contaminated due to dumping of industrial wastes in the district	Not Applicable	Not Applicable	Not Applicable

(vi). E- Waste Management

(a) Current status related to E-Waste Management

Details of Data Requirement	PresentStatus
Inventory of E-Waste in MT/year	MT/Year : Nil
Collection centers established by ULBs in the District	[Nos]: Nil.
Collection centers established by Producers or their PROs	[Nos]: Nil.

No authorized E-Waste recyclers / Dismantler

[Nos]: Nil. There are no authorized E-waste recyclers or Dismantlers in the jurisdiction of RO- Chamarajanagar.

b. Identification of gaps and action plans

SL. No.	Action points	Gaps in implementation		Action Plan	Responsible agency	Timeline for completion of action plan
1	Inventory / Generation of E-Waste / Bulk-waste generators	Check whether SPCB/PCC has completed inventory of E-Waste in the District. Inventory of bulk waste generators		Completion of inventory Inventorisation of E-waste/bulk waste generators shall be carried out by ULB's and KSPCB	ULB + KSPCB	31-3-2022
		Current Status	Gap Analysis			
		<ul style="list-style-type: none"> As per ULBs the E waste generate in the District as per ULB's is Nil. 	keeping in future expansion of the District the inventorisation of e-waste generators can be carried out as an continuous process			

2	E-Waste collection points	<p>Availability of E-Waste collection points / call centres / kiosks in villages -Blocks//towns/ cities</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td> <p>There are no E-waste collection centres in the district either established by ULBs or Producers, as there are no producers in the district.</p> <p>Presently, the E- waste collected from households is segregated in Dry waste collection centers. Since there is no Producer in the Jurisdiction of RO-Chamarajanagar to establish collection centre as per the Extended Producers Responsibility.</p> </td> <td> <p>ULBs needs to establish the E-waste collection centres in their jurisdiction.</p> </td> </tr> </tbody> </table>	Current Status	Gap Analysis	<p>There are no E-waste collection centres in the district either established by ULBs or Producers, as there are no producers in the district.</p> <p>Presently, the E- waste collected from households is segregated in Dry waste collection centers. Since there is no Producer in the Jurisdiction of RO-Chamarajanagar to establish collection centre as per the Extended Producers Responsibility.</p>	<p>ULBs needs to establish the E-waste collection centres in their jurisdiction.</p>	<p>Identification /registering E-Waste collection centres in association with Producers - their PROs or Recyclers</p> <p>1. Establishment of e-waste collection centres in the District shall be ensured.</p> <p>2. ULB's shall give paper notification or announcements regarding the establishment of collection centres in the district to create awareness among public.</p>	ULB's	31-12-2021
Current Status	Gap Analysis								
<p>There are no E-waste collection centres in the district either established by ULBs or Producers, as there are no producers in the district.</p> <p>Presently, the E- waste collected from households is segregated in Dry waste collection centers. Since there is no Producer in the Jurisdiction of RO-Chamarajanagar to establish collection centre as per the Extended Producers Responsibility.</p>	<p>ULBs needs to establish the E-waste collection centres in their jurisdiction.</p>								
3	Linkage among Stakeholders to channelize E-Waste	<p>Check whether District administration has information on collection centres established by Producers/ PROs? Administration should also identify authorised E-Waste recyclers in the district or in State to channelize E-waste collected in District.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td> <p>ULB's have not made any Linkage with e-waste dismantlers or Recyclers for channelization of e-waste collected in the district.</p> <p>At present the District administration has no information on collection centres established by Producers/PRO's as there is no producers in the District.</p> </td> <td> <p>No linkage with e-waste dismantlers or Recyclers is carried out by ULB's</p> </td> </tr> </tbody> </table>	Current Status	Gap Analysis	<p>ULB's have not made any Linkage with e-waste dismantlers or Recyclers for channelization of e-waste collected in the district.</p> <p>At present the District administration has no information on collection centres established by Producers/PRO's as there is no producers in the District.</p>	<p>No linkage with e-waste dismantlers or Recyclers is carried out by ULB's</p>	<p>Action plan to establish linkages between ULBs /Collection Centres of Producers and PROs /SPCBs /Bulk waste generators /Recyclers / SPCBs / District Administration/Public</p> <p>1. Identification of authorized E-wasterecyclers/Dismantlers in the state to channelize the E-waste collected in the District by executing MOU with recyclers/dismantlers.</p>	ULB's	31-12-2021
Current Status	Gap Analysis								
<p>ULB's have not made any Linkage with e-waste dismantlers or Recyclers for channelization of e-waste collected in the district.</p> <p>At present the District administration has no information on collection centres established by Producers/PRO's as there is no producers in the District.</p>	<p>No linkage with e-waste dismantlers or Recyclers is carried out by ULB's</p>								

4	Regulation of Illegal E-Waste recycling /dismantling	<p>Prevalence of informal trading, dismantling, and recycling of E-waste is in District</p> <p>There are no records w.r.t Illegal E-Waste recycling /dismantling activity carried out in the District.</p>	<p>Action plan in coordination with SPCBs/PCCs and District Administration to check this activity.</p> <p>1. ULB's is required to hand over the e-waste collected in their jurisdiction to the KSPCB authorized e-waste recycler or dismantlers by executing an MOU with the recycler/ dismantlers in the nearby District.</p> <p>2. Inventorisation of trading activity/ recycling/dismantling in the district shall be carried out by ULB's</p>	ULB's	31-12-2021
5	Integration of informal sector	<p>Whether mechanism exists for bringing informal sector into main stream in collection and recycling of E-Waste</p> <ul style="list-style-type: none"> • There are no any such mechanism existing for bringing informal sector into main stream in collection and recycling of E-Waste. • There are no Producers/PRO's in the RO-Chamarajanagar jurisdiction. 	<p>Evolve mechanism by involving producers /PROs.</p> <p>1. Inventorisation of informal sectors engaged in collection and recycling activity of e-waste in the district.</p>	ULB's + KSPCB	31-12-2021

6	Awareness and Education	<p>Are there any programs at district level for awareness about E-waste management?</p> <p>Awareness cum meeting activities is carried out by KSPCB to ULB's w.r.t effective implementation of E-waste management Rules in the District.</p> <p>As on date there are no Producers/PRO's in the RO- Chamarajanagar jurisdiction to organize the awareness campaigns in the district.</p>	<p>Plan special workshops and awareness campaigns through Producers/PROs</p> <p>Serious of workshops and awareness programmes shall be organized through KSPCB /ULBs</p>	KSPCB	31-12-2021
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Air Quality Management

(a). Current status relate to Air Quality Management

Details of Data Requirement	Present Status
<p>Number of Automatic Air Quality monitoring stations in the District.</p> <ul style="list-style-type: none"> - Operated by SPCB / State Govt / Central govt./PSU agency: - Operated by Industry: 	<ul style="list-style-type: none"> - At present Chamarajanagar District is having 01 No. of Continuous Ambient Air Quality Monitoring Station (CAAQM) installed at CA site no. 1, KHB Colony, near Ambedkar Stadium, Chamarajanagar and same is in operated by the KSPCB at District headquarters. - There are no other CAAQMS installed in Chamarajanagar District by either other agencies or by any industries.
<p>Number of manual monitoring States operated by SPCBs</p>	<p>There is an existing 01 No. Manual Air Quality monitoring station located at the terrace of existing Office Building, RO, Chamarajanagar. Weekly twice 24 hours. Parameters analysed are NO_x, SO₂, PM 2.5, PM 10 & NH₃.</p>
<p>Name of towns/cities which are failing to comply with national ambient air quality stations</p>	<p>[Names]: Nil. All towns and cities are complying with the AAQ standards.</p>
<p>No of air pollution industries</p>	<p>[Nos]: 58 Nos.</p>

Prominent air polluting sources [Large Industry] / [Small Industry] / [Unpaved Roads] / [Burning of Waste Stubble] / [Brick Kiln]/ [Industrial Estate]/[Others](Multiple selection)	[Hotspots of air pollution]: The prominent air polluting sources in the Chamarajanagar District is mainly due to the contribution of quarrying with blasting operations, stone crusher and m-sand manufacturing units, granite cutting and polishing activity, unpaved roads.
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b. Identification of gaps and action plan:

S. No.	Action points	Indicative Action Plan	Responsible agency	Time line for completion of action plan
1.	Identification of prominent air polluting sources?	<p>Carry out inventory of air pollutionsourcesinDistrictincludinghotspotsorareasofconcernpertainingtoair pollutioninassociation with SPCBs/PCCsmay</p> <p>Current Status:</p> <ul style="list-style-type: none"> • The prominent air polluting sources in the Chamarajanagar District is mainly due to the contribution of quarrying with blasting operations, stone crusher and m-sand manufacturing units, granite cutting and polishing activity, unpaved roads. • District task force is already constituted to monitor and review the compliance made. • Once in 6 months District task force committee will monitor the AAQ in and around the mining areas to assess the compliance to AAQ standards. • Unpaved roads must be converted to paved roads in the District by PWD. 	District task force, Department of Mines and Geology, KSPCB and PWD department	31-3-2022
2.	Ambient Air quality data?	<p>Plan to get access to available air quality monitoring stations in the District operated by both Public and private agencies.</p> <ul style="list-style-type: none"> • KSPCB is having both manual and CAAQM stations in the District which 	KSPCB	Not Applicable

		<p>is installed and operated by Board.</p> <ul style="list-style-type: none"> This is the only AAQM Stations data generated in the District which is well within satisfactory limit. The online AAQM station data is easily accessible in the KSPCB website and also in Sameer app developed by CPCB. 		
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	<p>District authority in association with local office of SPCB/PCC should also ensure that at least one manual Air Quality monitoring station is available in each city. [District admin may set-up its own network of CAAQMS or manual stations].</p> <ul style="list-style-type: none"> KSPCB has installed one CAAQM Station in the district Head quarters at Chamarajanagar. The Data is easily accessible in the KSPCB website and also in Sameer app developed by CPCB. 	KSPCB	Already installed and is in operation. Hence Not applicable.
4.	District Level Action Plan for Air Pollution	<p>[Measures may include multi sectoral approach for air pollution control such as promotion of public transport, use of green fuels, E- mobility, LPG based cooking, carpeting open areas/kerbs, etc., Action plans envisaged in NCAP project initiated by MoEF& CC may be referred]:</p> <ul style="list-style-type: none"> KSPCB is having both manual and CAAQM stations in the District. This is the only AAQM data generated in the District which is well with satisfactory limit. However action plan will be prepared for controlling air pollution from prominent air pollution sources in the District. Adequate plantation along the road sides, industrial area, green belt development in mining areas surrounding. Unpaved roads must be converted to paved roads in the District by PWD. Phasing out of 15 years old vehicles in the District by RTO. 	District administration, Department of Urban Development + Social forestry+ Regional Transport Officer+ PWD.	31-3-2022

5.	Hot spots of air pollution in District	<p>Hotspot with respect to air pollution (such as stubble burning, illegal waste burning, authorize operations, cluster activities, forest fires etc.) should be identified and localized action plan for mitigation of the same should be prepared.</p> <p>1. Forest fire mitigation action plan prepared by Forest department. 2. The Dust emissions from blasting operating in quarrying activity and stone crushing and m-sand unit dust suppression measures shall be implemented. 3. Adequate green belt development area shall be developed by the (i) stone crushing and m-sand unit (ii) in SWM facilities. 4. Prohibition of open burning of waste burning and stubble burning in the district.</p>	Forest Department + ULB's + Agriculture department + Mines and Geology Department + KSPCB.	Not Applicable
6.	Awareness on Air Quality	<p>Plan for dissemination of information on local air quality in towns and cities located in District. May consider developing Mobile App / Online portal for dissemination of air quality as well as to take complaints on local air pollution.</p> <ul style="list-style-type: none"> • AAQ measured through CAAQM stations and same is displayed to the public. • AAQM Station data is available to public in KSPCB website and same is displayed in SAMEER App of CPCB as same is accessible through mobile. 	KSPCB	31-3-2022

Water Quality Management

Water Quality Monitoring

(a). Current status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	River Cauvery flows in Kollegal Taluk of Chamarajanagar District with its tributaries Palar and Suvarnavathi river with approximately 88 km stretch.
Length of Coastline(if any)	Not Applicable as the District as no coastal areas

Nalas/Drains/Creeks meeting Rivers	9 Nos of drains joining Cauvery river between from Mullur to Sattegala bridge.	
Lakes/Ponds	[Nos]and[AreainHectares]:1074 nos . (survey is under progress)	
Total Quantity of sewage from towns and cities in District	[MLD]:18.87 MLD	
	ULB's	Total Quantity of Sewage generated in MLD
	CMC Chamarajanagar	7.54
	CMC Kollegal	6.17
	TMC Gundlupet	3.03
	TP Hanur	1.19
	TP Yelanduru	0.94
	Total	18.87
Quantity of industrial waste water	[MLD]: 1.88 MLD as per the F-Reg as on 31-3-2021 is generated from the operation of 23 Nos. of industries and the same is treated in the existing ETP's operated within the premises of the unit and the treated effluent is disposal as per the terms and conditions of the Consent order either completely recycled or utilized for on land for irrigation within the premises.	
Percentage of untreated sewage	[%]:not quantified There are 05 Local bodies in the District. Out off which CMC Chamarajanagar, CMC Kollegal as provide STP of 9 MLD and TMC Gundlupet as provide 2 Nos of STP of capacity 2.1 MLD and 1.5 MLD and in these taluks individual houses are provided with septic tank and soak pit as the 100% underground Drainage system is not completed and same in progress. Whereas in other two local bodies i.e TP Hanur and Yelandur as no STP and individual households are connected to septic tank and soak pit. Hence untreated sewage is not quantified	
Details of bore wells and number of permissions given for extraction of groundwater	As per the information furnished by groundwater authority, for the year 2017-2021 – the permission given for drilling new bore wells in the District – 239 Nos. and NOC issued for extracting groundwater is 5 Nos.	
Ground water polluted areas if any	Nil	
Polluted river stretches if any	Yes, As per the NGT Order O.A. No. 673/2018, Ranganattitu to Sattegala bridge is classified as Priority –IV. The river Cauvery flows through Mullur to Sattegala bridge measuring about 18 km aerial distance from Mullur to Sattegala bridge in Kollegal.	

b. Identification of gaps and action plan for water quality monitoring:

SL.No	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan									
1	Inventory of water bodies	<p>An environmental monitoring cell shall maintain data of all water bodies (rivers / canals /natural drains / creeks /estuaries / groundwater /ponds / lakes / etc.) in district including its water quality</p> <table border="1"> <thead> <tr> <th>Present Status</th> <th>Gaps</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>At present there is no Environmental Monitoring cell existing in the District to maintain data of all water bodies (rivers / canals /natural drains / creeks /estuaries / groundwater /ponds / lakes / etc.) in District including its water quality.</td> <td>No Environmental Monitoring Cell</td> <td>Environmental Monitoring cell shall be constituted involving all the stake holders by District administration. Inventorisation of the drains, canals, rivers, creeks, groundwater/pond/lakes need to be carried out by the concerned stake holders both at Rural and Urban area.</td> </tr> <tr> <td>KSPCB is monitoring the Cauvery river water at 6 sampling points from Mullur to Barachukki every month under</td> <td>Increase the Number of sampling points along river stretch</td> <td>KSPCB shall increase in the number of sampling points along river stretch by identification of wastewater joining river.</td> </tr> </tbody> </table>	Present Status	Gaps	Action plan	At present there is no Environmental Monitoring cell existing in the District to maintain data of all water bodies (rivers / canals /natural drains / creeks /estuaries / groundwater /ponds / lakes / etc.) in District including its water quality.	No Environmental Monitoring Cell	Environmental Monitoring cell shall be constituted involving all the stake holders by District administration. Inventorisation of the drains, canals, rivers, creeks, groundwater/pond/lakes need to be carried out by the concerned stake holders both at Rural and Urban area.	KSPCB is monitoring the Cauvery river water at 6 sampling points from Mullur to Barachukki every month under	Increase the Number of sampling points along river stretch	KSPCB shall increase in the number of sampling points along river stretch by identification of wastewater joining river.	Minor irrigation Department + Groundwater authority + Cauvery Niravari Nigamal imited + Zilla Panchayat + KSPCB	31-3-2022
Present Status	Gaps	Action plan											
At present there is no Environmental Monitoring cell existing in the District to maintain data of all water bodies (rivers / canals /natural drains / creeks /estuaries / groundwater /ponds / lakes / etc.) in District including its water quality.	No Environmental Monitoring Cell	Environmental Monitoring cell shall be constituted involving all the stake holders by District administration. Inventorisation of the drains, canals, rivers, creeks, groundwater/pond/lakes need to be carried out by the concerned stake holders both at Rural and Urban area.											
KSPCB is monitoring the Cauvery river water at 6 sampling points from Mullur to Barachukki every month under	Increase the Number of sampling points along river stretch	KSPCB shall increase in the number of sampling points along river stretch by identification of wastewater joining river.											

		Nation Water Quality Monitoring Programmes.				
		Groundwater department is monitoring the Groundwater quality from its observation wells in the District.	Monitoring frequency yearly twice.	Groundwater authorities shall fix the frequency of monitoring of borewells as per the CPCB guidelines and furnish the reports to District administration.		
		There is no details available in the District w.r.t Lake water quality	Lakes monitoring is not carried out. Monitoring frequency is not fixed.	The owners (ULB's/Grama/Taluk panchayath) of the lakes shall carry out the monitoring of lake water quality as per the frequency mentioned in CPCB guidelines and furnish the report to District administration once in 3 months.		
		ULBs is not identified the wastewater joining points into water bodies and drain sampling is not carried out.	Wastewater carrying drain identification.	ULB's shall ensure that the drains carrying wastewater shall not join the water bodies and measures need to be implemented, within 31-3-2022.		
2	Quality of water bodies in the District	<p>Check availability of data on water bodies. Create a district level monitoring cell for periodic monitoring of water bodies for specific parameters in association with SPCBs. It is also necessary to disseminate information pertaining to water quality in the form of hoardings on river banks, official websites, etc.</p> <p>At present the District as no District level monitoring cell for periodic monitoring of water bodies for specific parameters in association with SPCBs.</p>			<p>Minor irrigation Department + Groundwater authority + Cauvery Niravari Nigama Limited + Zilla Panchyat + KSPCB + District administration</p>	31-3-2022

Present status	Gaps	Action Plans
<p>Karnataka State Pollution Control Board as installed the Continuous Real time water quality monitoring stations at Sattegala bridge across River Cauvery. The water quality parameters are continuously recorded and available in KSPCB website www.KSPCB.karnataka.gov.in and monthly monitoring of river water quality is carried out by KSPCB and the details are communicated to CPCB.</p> <p>KSPCB is monitoring the Cauvery river water at 6 sampling points from Mullur to Barachukki every month under Nation Water Quality Monitoring Programmes.</p>	<p>Increase the Number of sampling points along river stretch</p>	<p>KSPCB is monitoring adequate number of sampling points along river stretch by reveal the water quality of the river.</p>
<p>There is no details available in the District w.r.t Lake water quality</p>	<p>Lakes monitoring is not carried out. Monitoring frequency is not fixed.</p>	<p>The owners of the lakes shall carry out the monitoring of lake water quality as per the frequency mentioned in CPCB guidelines and furnish the report to District</p>

				administration once in 3 months.		
		ULBs is not identified the wastewater joining points into water bodies and drain sampling is not carried out.	Drain wastewater sampling.	ULB's shall ensure Drain wastewater sampling for implementation of suitable treatment units at drain end points. Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them		
		Groundwater department is monitoring the Groundwater quality from its observation wells in the District.	Monitoring frequency Once in two years.	Groundwater authorities shall fix the frequency of monitoring of bore wells as per the CPCB guidelines and furnish the reports to District administration		
3	Hot spots of water contamination	<p>Check trends of water quality and identify hot spot of surface water and ground water. Establish a system or separate cell to monitor water quality. Implement action points for restoration of water quality in association with SPCBs and department to environment.</p> <p>KSPCB is monitoring the water quality of River stretch from Mullur to Sattegala bridge identified as polluted river stretch and action plan is prepared and implementation of same is in progress.</p>			Rural Water supply and sanitation Board + Groundwater authority+ Cauvery Niravari Nigama Limited +KSPCB	31-3-2022

		As per the information provided by Ground water authority there are no Hot spots of ground water contamination in the District. As per the prevailing norms the ground water quality is carried out by concerned stake holders.											
4	Protection of river/lake water front	<p>Action plan should be prepared for control river side open defecation, dumping of Solid waste on river banks, for idol immersion etc.</p> <ul style="list-style-type: none"> The District has already implemented ODF free scheme. There is no dumping of solid waste along the river banks. Temporary/artificial ponds/mobile immersion tanks arrangement are being made during Ganesha festival in the District. 	Minor irrigation department. LB's + Cauvery Niravari Nigama Limited + Zilla Panchayath	31-3-2022									
5.	Inventory of sources of water pollution	<p>Check whether inventory of all sewage and waste water discharge points into water bodies in the District. Action plan to complete inventory.</p> <table border="1"> <thead> <tr> <th>Present status</th> <th>Gaps</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>KSPCB has carried out inventorisation of drains carrying wastewater into river in Polluted river stretch from Mullur to Sattegala Bridge of Chamarajanagar District.</td> <td>The identification of drains in the entire stretch of the river flowing in the District needs to be carried out.</td> <td> 1. KSPCB shall ensure that Executive officers of each taluk and ULB's shall identify the drains and plug off the same to avoid the pollution of water bodies. 2. Inventory of domestic sewage drains, Storm water drains discharging wastewater to water boides shall be carried out through Ulbs/Grama panchayath/Taluk panchayath </td> </tr> <tr> <td>Groundwater and Lakes/ponds pollution sources is not inventorised</td> <td>Inventorisation of Groundwater and Lakes/ponds pollution sources.</td> <td>Groundwater authority and Lakes authorities shall ensure that the inventorisation is carried out continuously in the District and to maintain</td> </tr> </tbody> </table>	Present status	Gaps	Action plan	KSPCB has carried out inventorisation of drains carrying wastewater into river in Polluted river stretch from Mullur to Sattegala Bridge of Chamarajanagar District.	The identification of drains in the entire stretch of the river flowing in the District needs to be carried out.	1. KSPCB shall ensure that Executive officers of each taluk and ULB's shall identify the drains and plug off the same to avoid the pollution of water bodies. 2. Inventory of domestic sewage drains, Storm water drains discharging wastewater to water boides shall be carried out through Ulbs/Grama panchayath/Taluk panchayath	Groundwater and Lakes/ponds pollution sources is not inventorised	Inventorisation of Groundwater and Lakes/ponds pollution sources.	Groundwater authority and Lakes authorities shall ensure that the inventorisation is carried out continuously in the District and to maintain	Minor irrigation department. LB's + Cauvery Niravari Nigama Limited + CEO Zilla Panchayath + KSPCB	31-3-2022
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		the records.					
6.	Oil spill disaster management (for coastal Districts)	<p>Whether District oil spill crisis management group and District Oil Spill Disaster Contingency Plan has been created? If not create District Oil spill crisis Management Group and District Oil Spill Disaster Contingency Plan for the District.</p> <p>Chamarajanagar is not an coastal Districts. Not Applicable</p>	Not Applicable	Not Applicable			
7.	Protection of flood plains	<p>Check whether there is regulation for protection of flood plain encroachment? Action plan should be prepared for protection flood plain and prevention of encroachment.</p> <p>Already District disaster management plan has been prepared and same is available.</p>	District administration	31-3-2022			
8.	Rejuvenation of groundwater	<p>Check availability of ground water and if required prepare action plan to rejuvenate ground water in selected areas. Action plan should be prepared for Rain water harvesting.</p> <p>Development of recharge structure programmeis carried out in the District by</p>	Groundwater authority	31-3-2022			

		groundwater authority. Development of recharge structure programme is carried out in the District.											
9	Complaints redressal system	<p>Check whether there is any complaint redressing system based on Mobile App/Online, is available? If not, a complaint redressing system based on Mobile App/Online should be available at District level.</p> <table border="1"> <thead> <tr> <th>Current status</th> <th>GAP</th> <th>Action Plan</th> </tr> </thead> <tbody> <tr> <td>KSPCB has developed a mobile app for receipt of complaints from all over the state.</td> <td>Development of helpdesk and mobile app in the District</td> <td>District administration shall ensure the development of mobile App for redressal of complaint by public .</td> </tr> <tr> <td>Phone in programme is carried out in the District for readdress of public complaints once in a month</td> <td></td> <td>For rural areas the helpline numbers needs to be notified.</td> </tr> </tbody> </table>	Current status	GAP	Action Plan	KSPCB has developed a mobile app for receipt of complaints from all over the state.	Development of helpdesk and mobile app in the District	District administration shall ensure the development of mobile App for redressal of complaint by public .	Phone in programme is carried out in the District for readdress of public complaints once in a month		For rural areas the helpline numbers needs to be notified.	District Administration	31-3-2022
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Domestic Sewage

a. Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns and above	[Nos]: 2 Nos: City Municipal Council Chamarajanagar City Municipal Council Kollegala

No of Class-I towns and above	[Nos]: Nil																			
No of Towns STPs installed	[Nos]:3 Nos. <table border="1"> <thead> <tr> <th>ULB's</th> <th>Existing STP Capacity</th> </tr> </thead> <tbody> <tr> <td>City Municipal Council Chamarajanagar</td> <td>9MLD</td> </tr> <tr> <td>City Municipal Council Kollegala</td> <td>9 MLD</td> </tr> <tr> <td>Town Municipal Council, Gundlupet</td> <td>There are two STP's each capacity 2.1 MLD and 1.5 MLD.</td> </tr> </tbody> </table>			ULB's	Existing STP Capacity	City Municipal Council Chamarajanagar	9MLD	City Municipal Council Kollegala	9 MLD	Town Municipal Council, Gundlupet	There are two STP's each capacity 2.1 MLD and 1.5 MLD.									
ULB's	Existing STP Capacity																			
City Municipal Council Chamarajanagar	9MLD																			
City Municipal Council Kollegala	9 MLD																			
Town Municipal Council, Gundlupet	There are two STP's each capacity 2.1 MLD and 1.5 MLD.																			
No of Towns needing STPs	[Nos]: 2 Nos <table border="1"> <thead> <tr> <th>ULB's</th> <th>Requires STP</th> </tr> </thead> <tbody> <tr> <td>Taluk Panchayath, Hanur</td> <td>No UGD and STP in the Taluk</td> </tr> <tr> <td>Taluk Panchayath, Yelandur</td> <td>No UGD and STP in the Taluk</td> </tr> </tbody> </table>			ULB's	Requires STP	Taluk Panchayath, Hanur	No UGD and STP in the Taluk	Taluk Panchayath, Yelandur	No UGD and STP in the Taluk											
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Taluk Panchayath, Hanur	No UGD and STP in the Taluk																			
Taluk Panchayath, Yelandur	No UGD and STP in the Taluk																			
No of ULBs having partial under ground Sewerage network	[Nos]: 3 Nos. <table border="1"> <thead> <tr> <th>ULB's</th> <th>Existing STP Capacity</th> <th>% Existing UGD area covered</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>CMC Chamarajanagar</td> <td>9MLD</td> <td>70%</td> <td>30%</td> </tr> <tr> <td>CMC Kollegala</td> <td>9 MLD</td> <td>75%</td> <td>25%</td> </tr> <tr> <td rowspan="2">TMC Gundlupet</td> <td>2.1 MLD</td> <td rowspan="2">75%</td> <td rowspan="2">25%</td> </tr> <tr> <td>1.5 MLD</td> </tr> </tbody> </table>			ULB's	Existing STP Capacity	% Existing UGD area covered	Gap Analysis	CMC Chamarajanagar	9MLD	70%	30%	CMC Kollegala	9 MLD	75%	25%	TMC Gundlupet	2.1 MLD	75%	25%	1.5 MLD
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TMC Gundlupet	2.1 MLD	75%	25%																	
	1.5 MLD																			

No of towns not having sewerage network	<p>[Nos]: 2 Nos.</p> <table border="1"> <thead> <tr> <th>ULB's</th> <th>Requires STP</th> </tr> </thead> <tbody> <tr> <td>Taluk Panchayath, Hanur</td> <td>No UGD and STP in the Taluk</td> </tr> <tr> <td>Taluk Panchayath, Yelandur</td> <td>No UGD and STP in the Taluk</td> </tr> </tbody> </table>	ULB's	Requires STP	Taluk Panchayath, Hanur	No UGD and STP in the Taluk	Taluk Panchayath, Yelandur	No UGD and STP in the Taluk									
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Total Quantity of Sewage generated in District From Class II cities and above	<p>[MLD]: 13.71 MLD</p> <table border="1"> <thead> <tr> <th>ULB's</th> <th>Existing STP Capacity</th> <th>Total Quantity of sewage generated in MLD</th> </tr> </thead> <tbody> <tr> <td>CMC Chamarajanagar</td> <td>9MLD</td> <td>7.54</td> </tr> <tr> <td>CMC Kollegala</td> <td>9 MLD</td> <td>6.17</td> </tr> </tbody> </table>	ULB's	Existing STP Capacity	Total Quantity of sewage generated in MLD	CMC Chamarajanagar	9MLD	7.54	CMC Kollegala	9 MLD	6.17						
ULB's	Existing STP Capacity	Total Quantity of sewage generated in MLD														
CMC Chamarajanagar	9MLD	7.54														
CMC Kollegala	9 MLD	6.17														
Quantity of treated sewage flowing into Rivers(directly or indirectly)	<p>[MLD]: Not Estimated. As the treated sewage from STP of 9MLD from CMC Kollegal taluk is presently discharging to canal and which in turn joins Cauvery river.</p>															
Quantity of untreated or partially treated sewage(directly or indirectly)	<p>[MLD]: Not Estimated. The untreated sewage effluent through missing links from Kollegal CMC limit, is indirectly discharged to river.</p>															
Quantity of sewage flowing into lakes	<p>[MLD]: Not Estimated. The quantity of sewage flowing into lakes is not yet estimated.</p>															
Total available Treatment Capacity	<p>[MLD]: 21.6 MLD.</p> <table border="1"> <thead> <tr> <th>ULB's</th> <th>Existing STP Capacity</th> </tr> </thead> <tbody> <tr> <td>CMC Chamarajanagar</td> <td>9MLD</td> </tr> <tr> <td>CMC Kollegal</td> <td>9 MLD</td> </tr> <tr> <td rowspan="2">TMC Gundlupet</td> <td>2.1 MLD</td> </tr> <tr> <td>1.5 MLD</td> </tr> <tr> <td>TP Hanur</td> <td>Nil (No STP only Septic tank and Soak Pit)</td> </tr> <tr> <td>TP Yelanduru</td> <td>Nil (No STP only Septic tank and Soak Pit)</td> </tr> <tr> <td>Total</td> <td>21.6 MLD</td> </tr> </tbody> </table>	ULB's	Existing STP Capacity	CMC Chamarajanagar	9MLD	CMC Kollegal	9 MLD	TMC Gundlupet	2.1 MLD	1.5 MLD	TP Hanur	Nil (No STP only Septic tank and Soak Pit)	TP Yelanduru	Nil (No STP only Septic tank and Soak Pit)	Total	21.6 MLD
ULB's	Existing STP Capacity															
CMC Chamarajanagar	9MLD															
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TMC Gundlupet	2.1 MLD															
	1.5 MLD															
TP Hanur	Nil (No STP only Septic tank and Soak Pit)															
TP Yelanduru	Nil (No STP only Septic tank and Soak Pit)															
Total	21.6 MLD															

b. Identification of gaps and action plan for treatment of domestic sewage:

SL. No	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan															
1	Sewage Treatment Plants (STPs)	<p>Check whether existing capacity of STPs is adequate for treatment of sewage? If no, action plan for additional treatment capacity required should be prepared in association with ULBs /department of UD,</p> <table border="1"> <thead> <tr> <th>ULB's</th> <th>Quantity of wastewater generated in MLD</th> <th>Existing STP Capacity in MLD</th> <th>Present Sewage in Flow rate in MLD</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>ty Municipal Council Chamarajanagar</td> <td>7.54</td> <td>9 MLD</td> <td>5.0 MLD</td> <td>Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is adequate for existing sewage generation.</td> </tr> <tr> <td>City Municipal Council, Kollegal</td> <td>6.1</td> <td>9MLD</td> <td>4.5 MLD</td> <td>Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is</td> </tr> </tbody> </table>	ULB's	Quantity of wastewater generated in MLD	Existing STP Capacity in MLD	Present Sewage in Flow rate in MLD	Gap Analysis	ty Municipal Council Chamarajanagar	7.54	9 MLD	5.0 MLD	Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is adequate for existing sewage generation.	City Municipal Council, Kollegal	6.1	9MLD	4.5 MLD	Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is	LB's + KUWS&DB + Karnataka Urban Infrastructure Development and Finance Corporation + Grama Panchyath+ Taluk Panchyath.	31-3-2023
ULB's	Quantity of wastewater generated in MLD	Existing STP Capacity in MLD	Present Sewage in Flow rate in MLD	Gap Analysis															
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City Municipal Council, Kollegal	6.1	9MLD	4.5 MLD	Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is															

				adequate.
Town Municipal Council, Gundlupet	3.03	2.1 MLD and 1.5 MLD	1.0 MLD	Due to incomplete UGD network connected to STP there is a missing links bypassing the STP. Thus these missing links must be intercepted and diverted to existing STP for treatment and Disposal. The existing STP is adequate.
Town Panchayath , Hanur	1.19	Houses are provided with Individual Septic tank and Soak pit.	Houses are provided with Individual Septic tank and Soak pit.	Need to provide UGD system connected to STP
Town Panchayth, Yelandur	0.94	Houses are provided with Individual Septic tank and Soak pit.	Houses are provided with Individual Septic tank and Soak pit.	Need to provide UGD system connected to STP
Total	18.8	21.6	10.5	

Action Plan:

1. The existing STP is adequate to treat the generated sewage
2. Due to incomplete UGD connection, missing link exists. The completion of UGD work and connection shall be made.
3. Preparation of DPR for channelization including diversion of sewage generated from household / township / villages to sewer lines and interception of all drains (excluding drains carrying industrial wastewater) for ensuring proper treatment through upcoming STPs viz., TP Hanur and TP Yelandur.
4. Septage Management in the areas where sewerage network does not exist
5. Installation of Web Cams & OCEEMS in STPs
6. Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them
7. Untapped drains to be provided with modular treatment facilities/ In-Situ bio-remediation.
8. Formulation of Action Plan for long term use of treated water discharged from STPs

2	Underground sewerage network	<p>Check seweragenetworkandprepareActionplanforlayingofseweragenetworkintownandcities.TheprojectmaybeexecutedthroughULBsandDepartment of UD. available</p> <table border="1"> <thead> <tr> <th>ULB's</th> <th>Status of Sewerage Network</th> <th>% Sewerage network provided</th> <th>% Sewerage network yet to be completed</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td>City Municipal Council Chamarajanagar</td> <td>Provided with UGD System</td> <td>70%</td> <td>30%</td> <td>30% of the UGD work needs to be completed</td> </tr> <tr> <td>City Municipal Council, Kollegal</td> <td>Provided with UGD System</td> <td>75%</td> <td>25%</td> <td>25% of the UGD work needs to be completed</td> </tr> <tr> <td>Town Municipal Council, Gundlupet</td> <td>Provided with UGD System</td> <td>75%</td> <td>25%</td> <td>25% of the UGD work needs to be completed</td> </tr> <tr> <td>Town Panchayath, Hanur</td> <td>There is no UGD System implemented</td> <td>Not Applicable</td> <td>Not Applicable</td> <td>Need to provide UGD system</td> </tr> <tr> <td>Town Panchayth, Yelandur</td> <td>There is no UGD System implemented</td> <td>Not Applicable</td> <td>Not Applicable</td> <td>Need to provide UGD system</td> </tr> </tbody> </table> <p>Action Plan: 1. Laying of Sewerage Network & Connection of households to the sewer line in order to utilize the installed capacity of existing STPs</p>	ULB's	Status of Sewerage Network	% Sewerage network provided	% Sewerage network yet to be completed	Gap Analysis	City Municipal Council Chamarajanagar	Provided with UGD System	70%	30%	30% of the UGD work needs to be completed	City Municipal Council, Kollegal	Provided with UGD System	75%	25%	25% of the UGD work needs to be completed	Town Municipal Council, Gundlupet	Provided with UGD System	75%	25%	25% of the UGD work needs to be completed	Town Panchayath, Hanur	There is no UGD System implemented	Not Applicable	Not Applicable	Need to provide UGD system	Town Panchayth, Yelandur	There is no UGD System implemented	Not Applicable	Not Applicable	Need to provide UGD system	LB's + KUWS&DB+ Urban Development	31-3-2022
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- | | | | | |
|--|--|--|--|--|
| | | <ol style="list-style-type: none">2. Treatment of waste water in Rural areas flowing into the river by Bio-remediation/Phyto-remediation/Oxidation Pond etc3. Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model4. Establishment of Sewage Treatment Plants of adequate capacity | | |
|--|--|--|--|--|

Industrial waste water management

a. Current Status related to Industrial Waste water Management

Number of Red, Orange, Green and White industries in the District	As per the F-Reg maintained in the Regional office –Chamarajanagar, KSPCB as on 31-03-2021 the list of number of operating industries is as below: [Nos. of Red industries]: 4 (out off 4 Nos. of red industry , No of 17 category industries is 1No.) [Nos. of Orange industries]: 28 [Nos. of Green industries]:57 [Nos. of White industries]:2
No of Industries discharging waste water	[Nos]: 23 Nos
Total Quantity of industrial waste water generated	[MLD]:1.88 MLD
Quantity of treated industrial waste water discharged in to Nalas/ Rivers	[MLD]: Nil. None of the industries are permitted to discharge either treated industrial wastewater into water bodies like Nalas /Rivers by KSPCB
Common Effluent Treatment Facilities	[Nos]: Nil. There are no CETP's in the Chamarajanagar District.
No of Industries meeting Standards	[Nos]: 23 Nos
No of Industries not meeting discharge Standards	[Nos]: Nil As per the CPCB inspection policy the industries were inspected and sampling is carried out. If the samples are not confirming, the Show cause notice is served.

b. Identification of gaps and action plan for industrial waste water:

SL.No	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan
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1	Compliance to discharge norms by Industries	Identify gaps w.r.t industries not meeting the standards. Necessary action be initiated through SPCBs against the industries not meeting the standards.		KPCB	Already it is implemented by KSPCB as it is a continuous process and KSPCB will be acting as per the provisions of Water and Air Act for the compliance of discharge norms.
		<table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> Regional office Chamarajanagar, KSPCB is inspecting the industries as per the CPCB inspection policy. As per the CPCB frequency the sampling and monitoring of effluent and stack emissions are carried out by KSPCB Based on the Lab Analyst Analysis report the non-confirming industries is served with Show cause notices as per the provisions of the Water (Prevention and Control of Pollution) Act 1974 and Air(Prevention and Control of Pollution) Act 1981 to make compliance and implementation is in progress for compliance. If Non-compliance still continued Closure directions are issued as per the provisions of the Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981. </td> <td>Nil</td> </tr> </tbody> </table>	Current Status		
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2	Complaint redressal system	Check if there is any complaint redressing system based on Mobile App/Online, is available? If not, a complaint redressing system based on Mobile App/Online portal may be prepared at district level.	<table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action Plan</th> </tr> </thead> <tbody> <tr> <td>Presently, KSPCB has established online Integrated Command Centre at Head office to receive complaints from public throughout the state and same is accessible through both mobile app and through online. and some are directly received at Regional office.</td> <td>Nil</td> <td>Not Applicable</td> </tr> <tr> <td>All District level public complaints is addressed through Phone in Programme conducted by District administration</td> <td>Nil</td> <td>Not Applicable</td> </tr> </tbody> </table>			Current Status	Gap Analysis	Action Plan	Presently, KSPCB has established online Integrated Command Centre at Head office to receive complaints from public throughout the state and same is accessible through both mobile app and through online. and some are directly received at Regional office.	Nil	Not Applicable	All District level public complaints is addressed through Phone in Programme conducted by District administration	Nil	Not Applicable	KSPCB + District administration	District is already having a means of Complaint redressal system . Not Applicable
			Current Status	Gap Analysis	Action Plan											
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All District level public complaints is addressed through Phone in Programme conducted by District administration	Nil	Not Applicable														

Mining Management Plan

a. Current Status related to Mining Activity Management

Details of Data Requirement	Existing Mining operations
Type of Mining Activity	Sand mining- 1. Name of mines –Mullur Village There are no other mineral mines in the District. Other[specify]:black granite: quarrying lease -09 patta land-49;; Building stone: Quarry lease- 26, Patta land-7
No of licensed Mining operations in the District	[Nos]: 92 : Sand mining- 1. Black granite: Quarrying lease -09 , Patta land-49; Building stone: Quarry lease-26, Patta land-7
% Area covered under mining in the District	1.21 % (Sand mining- 0.048 Sq.Km; Black granite: Quarry lease-0.1507 Sq.Km; Patta Land- 0.701 Sq.Kms; Building stone: Quarry lease + Patta land-0.305 Sq.Km)
Area of Sand Mining	[SqKm]: 0.048 Sq.Km
Area of sand Mining	[Riverbed]: River bed mining is carried out in the District as per Rules (sand mining rules) [Estuary]: Not Applicable [Non - river deposit]:Not Applicable

b. Identification of gaps and action plan

SL.No	Action Points	Gaps and Action Plan	Responsible agency	Timeline for completion of action plan						
1.	Monitoring of Mining activity	<p>A district level task team may be identified to identify mining activity and to monitor status wither respect to environmental compliance</p> <p>District is engaged in only Sand mining activity across the River bed. Apart from this activity blasting is carried out in stone quarrying sites for extraction of black granite and building stone materials in the lease area. The permission is granted by licensing authority i.e. Mines and Geology Department.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>District level task force committee is already constituted in the District and same in force.</td> <td>Nil</td> <td>Nil</td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	District level task force committee is already constituted in the District and same in force.	Nil	Nil	Mines and Geology Department	Not Applicable as District has already having District Level Task force Team.
Current Status	Gap Analysis	Action plan								
District level task force committee is already constituted in the District and same in force.	Nil	Nil								
2.	Inventory of illegal mining if any mining	<p>Action planto identify illegalsand and other mining activity in the District through surveillance, patrolling and enforcement. District Level task Force may be constituted for control of illegal mining activity</p> <p>No such illegal mining activities identified in the District.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>District level task force committee is already constituted in the District and same in force.</td> <td>Nil</td> <td>Nil</td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	District level task force committee is already constituted in the District and same in force.	Nil	Nil	Mines and Geology Department	Not Applicable as District has already having District Level Task force Team.
Current Status	Gap Analysis	Action plan								
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3.	Environment compliance by Mining industry	<p>Action plan for periodic verification of compliance to environmental conditions stipulated by SPCBs/PCC, MoEF & CC department of mines etc. SPCBs/PCC may be Involved in this activity.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>Dept. of Mines and Geology is regularly monitoring the Environmental conditions compliance status as per the EC granted. District level task force committee is already constituted in the District and reviewing the compliance.</td> <td>Not Applicable</td> <td>Not Applicable</td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	Dept. of Mines and Geology is regularly monitoring the Environmental conditions compliance status as per the EC granted. District level task force committee is already constituted in the District and reviewing the compliance.	Not Applicable	Not Applicable	Mines and Geology Department	Not Applicable
Current Status	Gap Analysis	Action plan								
Dept. of Mines and Geology is regularly monitoring the Environmental conditions compliance status as per the EC granted. District level task force committee is already constituted in the District and reviewing the compliance.	Not Applicable	Not Applicable								

Noise Pollution Management plan

a. Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in District	<p>[Name of agency]: Regional Office - Chamarajanagar, Karnataka State Pollution Control Board.</p> <p>[No of analyzers available]: Presently KSPCB is having 2Nos. of Noise Monitoring devices.</p> <ol style="list-style-type: none"> 1. Quest Technologies-Sound pro SE/DL 2. S12 (SLM/Noise Dosimeter)

b. Identification of gaps and action plan:

SL. No.	Action points	Gaps and ActionPlan	Responsible Agency	Timeline for completion of action plan									
1.	Availability of Sound/Noise Level Meters.	<p>Need to check whether concerned agencies that are ULBs, SHOs, Traffic police and SPCB/PCC have noise level meters. District administration may ensure through an actionplanthatconcernedagenciesandenvironmentalcellunderdistrictadministration have adequate number of portable noise level meters.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>In the District concerned agencies that are ULBs, SHOs, Traffic police has no noise measuring devices at present.</td> <td>Other than KSPCB no other agencies is having Portable Noise meter.</td> <td>All ULBs, SHOs, Traffic police shall procure the Portable noise level meters.</td> </tr> <tr> <td>KSPCB is presently having -2 Nos of Noise level meters</td> <td></td> <td></td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	In the District concerned agencies that are ULBs, SHOs, Traffic police has no noise measuring devices at present.	Other than KSPCB no other agencies is having Portable Noise meter.	All ULBs, SHOs, Traffic police shall procure the Portable noise level meters.	KSPCB is presently having -2 Nos of Noise level meters			Concerned ULB's + SHO's + Deputy Superintendent of Police + Traffic Police + District administration + KSPCB	31-03-2022
Current Status	Gap Analysis	Action plan											
In the District concerned agencies that are ULBs, SHOs, Traffic police has no noise measuring devices at present.	Other than KSPCB no other agencies is having Portable Noise meter.	All ULBs, SHOs, Traffic police shall procure the Portable noise level meters.											
KSPCB is presently having -2 Nos of Noise level meters													

2.	Ambient Noise Level monitoring.	<p>ULBs shall ensure that ambient sound levels comply with notified standards for residential, sensitive zones. An action. Apart from portable analyzers, fixed ambient noise level monitoring stations may be installed in major cities and towns, such stations may be installed by ULBs and SPCB/PCC,</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>ULB's and KSPCB as not installed Fixed Ambient Noise level Monitoring Stations in the District.</td> <td>District has no Fixed Ambient Noise level Monitoring Stations.</td> <td>ULB's and KSPCB may install or retrofit the Fixed Ambient Noise level Monitoring Stations with the existing CAAQM.</td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	ULB's and KSPCB as not installed Fixed Ambient Noise level Monitoring Stations in the District.	District has no Fixed Ambient Noise level Monitoring Stations.	ULB's and KSPCB may install or retrofit the Fixed Ambient Noise level Monitoring Stations with the existing CAAQM.	District Administration KSPCB + ULB's	31-12-2023
Current Status	Gap Analysis	Action plan								
ULB's and KSPCB as not installed Fixed Ambient Noise level Monitoring Stations in the District.	District has no Fixed Ambient Noise level Monitoring Stations.	ULB's and KSPCB may install or retrofit the Fixed Ambient Noise level Monitoring Stations with the existing CAAQM.								
3.	Sign boards in Noise zones	<p>District administration may ensure that adequate number of sign boards installed at sensitive zones in towns / cities in towns and cities. An action plan may be prepared by district authority.</p> <table border="1"> <thead> <tr> <th>Current Status</th> <th>Gap Analysis</th> <th>Action plan</th> </tr> </thead> <tbody> <tr> <td>Police Department has installed adequate number of sign Boards in each silent zone of respective ULB's</td> <td>Nil</td> <td>Not Applicable.</td> </tr> </tbody> </table>	Current Status	Gap Analysis	Action plan	Police Department has installed adequate number of sign Boards in each silent zone of respective ULB's	Nil	Not Applicable.	Not Applicable	Not Applicable
Current Status	Gap Analysis	Action plan								
Police Department has installed adequate number of sign Boards in each silent zone of respective ULB's	Nil	Not Applicable.								
4.	Complaint redressing system	Action plan may envisage implementing a public complaint redressal system for noise pollution. Such application may be used by SHOs, Traffic police ULBs and SPCBs in the	Not Applicable	Not Applicable						

		District:		
		Current Status	Gap Analysis	Action plan
		<ol style="list-style-type: none"> 1. Complaint at present is received from public either directly to KSPCB or register in police station. 2. KSPCB has initiated an Integrated Command Control Centre in Head office Bangalore as an Complaint redressing system for whole state by online or mobile app. 3. In District administration complaints are also received through Phone in Programme. 	Not Applicable.	Not Applicable.


Deputy Commissioner
Chamarajanagar District,
 **Chamarajanagar**
Deputy Commissioner
 Chamarajanagar Dist
 Chamarajanagar

District Environment Management Plan, Panchkula, 2021



Haryana State Pollution
Control Board, Panchkula
Region



District Environment Management Plan, Panchkula, 2021

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3.	Plastic Waste Management
4.	Construction and Demolition Waste(C&D)
5.	Bio-medical Waste Management
6.	Hazardous Waste
7.	E-Waste Management
8.	Water Quality Management
9.	Domestic Sewage Management
10.	Industrial Waste Water Management
11.	Air Quality Management
12.	Mining Activity Management
13.	Noise Pollution Management
	Conclusion
	Annexure

Background (Brief about NGT order and its directions)

In the process of development, the issues confronting today are achieving desired development for economic or social reasons on one hand and safeguarding the environment and maintaining good quality of life on the other. While taking up developmental activities, the assimilative capacities of the environmental components i.e. air; water and land to various types of pollution are rarely considered. Also, lack of proper land use controls resulting in poor land use compatibility. The developmental activities being haphazard and un-controlled are leading to overuse, congestion, incompatible land use and poor living conditions. The problems of environmental pollution are becoming complex and are creating high risk environment.

- Conventionally, the environmental pollution problems are solved by introducing environmental management techniques such as control of pollution at source, providing of sewage treatment facilities etc. However, environmental risks are not being controlled completely by such solutions.
- The environmental aspects are to be induced into each of the developmental activities at the planning stage itself and are to be well co-ordinate and balanced.
- Presently, the environmental aspects are not usually considered while preparing master plans or regional plans and the process is skewed towards developmental needs. For all developmental activities, a crucial input is land and depending on the activity specific land use is decided. The environmentally related land use such as trade and industry, housing construction, mining etc. is likely to have some impact on the environment. These land uses need proper planning and integration as some of the activities have interdependencies such as industry with transport, housing etc.

Besides this Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow. Weather patterns are changing, sea levels are rising, weather events are becoming more extreme and green house gas

Emissions are now at their highest levels in history. Without action, the world's average surface temperature is likely to surpass 3 degrees centigrade this century. The poorest and most vulnerable people are being affected the most.

- Affordable, scalable solutions are now available to enable countries to leap frog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts. Climate change, however, is a global challenge that does not respect national borders. It is an issue that requires solutions that need to be coordinated at the international level to help developing countries move toward low-carbon economy.
- To strengthen the global response to the threat of climate change, countries adopted the Paris Agreement at the COP21 in Paris, which went into force in November of 2016. In the agreement, all countries agreed to work to limit global temperature rise to below 2 degrees centigrade. As of April 2018, 175 parties had ratified the Paris Agreement and 10 developing countries had submitted their first iteration of their national adaptation plans for responding to climate change. In this light the decentralized Climate Change Mitigation and Adaptation planning is required. Conservation of Bio-diversity and wetlands are an integral part of environment planning. The rational effort in biological diversity planning is basically it underpins ecosystem functioning and the provision of ecosystem service essential for human well-being.
- It provides for food security, human health, the provision of clean air and water; it contributes to local livelihoods, and economic development, and is essential for the achievement of the Millennium Development Goals, including poverty reduction.

Objectives

The Objectives of District Environment and Management Plan (DEMP) are given below:

1. To ensure conservation of environment and natural resources at district level.
2. Restore ecological balance.
3. To achieve the Sustainable Development Goals and district level targets within the prescribed time line.
4. To ensure sustainability at district level following the principle of resource efficiency.
5. To ensure decentralized micro level planning, execution and monitoring regarding environment conservation.
6. To incorporate all facets of environmental conservation in micro level planning.
7. To harness active participation of all stakeholders in planned environment conservation actions.
8. Assess, Mitigate and monitor adverse impacts of various pollution sources at district level.
9. Capacity building of stakeholders, departments, agencies, organizations and individuals at district level to understand and implement micro level environmental conservation actions.
10. To harness inter-departmental coordination for implementation of action plans.
11. To develop local knowledge centers and expertise for developing environmental conservation strategies at district level.
12. To develop and implement micro monitoring system at district level.

NGT Directions

- a. Hon'ble NGT in last one year has issued several directions in various matters which have been based on status brought out by the CPCB on their website and status reports filed before the Tribunal
- b. The directions issued by the Tribunal which are to be executed on pan-India basis
- c. Hon'ble National Green Tribunal (NGT) has ordered Pan-India Directions on various issues relating to environment management and these are to be executed by the Central and State Governments and concerned institutions. Further, the Directions are required to be executed at District Level covering all cities, towns and villages.

The role and responsibilities of enforcement are with District Collectors /Magistrates, Pollution Control Boards, Municipal Bodies, Public Health Engineering Departments and others.

The present state level execution and monitoring mechanism on various State and Central Government's Schemes are monitored by Chief Ministers/ Chief Secretaries with DMs/DCs.

- d. Various Directions of NGT to be covered in District Environment Management Plan(DEMP) are given in Annexure No.-I.

Issues Requiring Actions

As per the directions of the Hon'ble NGT, DMs/DCs through District Level Committees are required to act on the following issues:

- a) **Waste Management**
 - a. Municipal Solid Waste (MSW) including remediation of legacy waste dumpsites.
 - b. Plastic waste management
 - c. Bio-medical waste management
 - d. Construction and emollition waste
 - e. Hazardous Waste Management
 - f. E-waste Management
- b) Maintaining ambient **air quality in Jurisdiction of Panchkula District** where levels of PM₁₀ and PM_{2.5} are exceeding.

- c) **Industries to comply with Water (Prevention and Control of Pollution) Act, 1974** ensuring proper functioning of Waste Water treatment plants (ETPs/STPs). Environment Compensation (EC) on “Polluter Pays” Principle is required to be imposed to utilize for restoration of environment.
- d) Ensure cities, towns and villages provide **proper sewage management facilities** in a time-bound manner or else will be liable to pay EC in case of default and further required to ensure **utilization of treated sewage for non- potable purpose**.
- e) For conservation and protection of water sources, undertake **Rejuvenation of water bodies, conserving ground water** and promote **rain water harvesting**.
- f) Setting up of monitoring mechanism by HSPCB, Panchkula Region on;
 - I. **Hazardous Waste Management**/un-authorized disposal etc;
 - II. **E-waste Management** particularly prohibiting un-authorized dismantling/reprocessing of E-waste etc.
- g) Environmental Management at **Railway siding locations**.
- h) Environmental Management in **Dairies**.

The details on each issue may be referred in the respective orders of the Tribunal listed in **Annexure No.-I**.

Monitoring execution of DEMP Protocol/Mechanism of monitoring

Hon’ble Tribunal has directed District Magistrates (in Order dated 15.07.2019 in O.A No.713/2017) to monitor the progress of execution of the mentioned issues on monthly basis and provide feed-back to the Chief Secretary on monthly basis. It was also directed to setup Special Task Forces represented by Legal Services Authority and other Departments to be involved in monitoring.

District Profile:

Physiographic & Demography

According to the 2011 Census of India, the people of the city are mainly Punjabi Hindu, with substantial Sikh and Muslim minorities.

In 2011, Panchkula had 48,772 households in the city, with a population of 211,355, of which male and female were 111,731 and 99,624 respectively.

Government and politics

The city is a part of the Ambala Lok Sabha constituency represented by BJP's Rattan Lal Kataria, and Panchkula state assembly constituency, represented by BJP's Gian Chand Gupta since 2019.

City administration

Panchkula municipality is governed under the Haryana Municipal Act, 1973. According to the 2011 Census, Panchkula is governed by a municipal council, but it has since upgraded to the status of a municipal corporation. The population of the municipality, as per Census 2011, is 210,175

In July 2020, the Panchkula Municipal Corporation was bifurcated, with Kalka and Pinjore separating from the corporation and getting their own municipal council status. The city is divided into 20 wards for the purpose of administration, and is built over an area of 32.6 square km.

Geography:

Generally, the slope of the district is from north east to south west and in this direction, most of the rivers/streams rain-fed torrents flow down and spread much gravel and pebbles in their beds. Only the Sirsa river, in Kalka Tehsil flows towards the north-west. The soils in the district are mainly light loam.

The underground water in the district is generally fresh and suitable for domestic and irrigation purposes. The underground water level is generally high in the southern parts and low in north and north-east which is hilly tract. The district lies in the Himalayas boundary fault zones and earthquakes of moderate to high intensity have occurred in the past



The Climate

Panchkula district has a sub-tropical continental monsoon climate having, hot summers, cool winters, good monsoon rainfall. It has great variation in temperature (-1 °C to 43 °C). Sometimes winter frost occurs during December and January. The district also receives winter rains from the western disturbance. The rainfall is mostly received in the monsoon. Morni hills constitute the highest point of the district as well as of Haryana. The Ghaggar is the only perennial river, which is very shallow outside of the monsoons.

Economy:

Panchkula IT Park (also known as Haryana State Industrial and Infrastructural Development Corporation Technology Park) is the state of art infrastructure to facilitate information technology in the city. It spreads over 74 acres developed by HSIIDC situated in sector 22 on foothills of Shivalik Hills or outer Himalayas and on the banks of Ghaggar River. It is well connected to Delhi, Haryana, Punjab and Himachal Pradesh.

Tourism

There are various tourist attractions in and around Panchkula including:



Patiala temple, constructed 1840 AD by Maharaja of Patiala, within the Mansa Devi temple complex in Panchkula.

Mata Mansa Devi Mandir is one of the most prominent temples in North India and is dedicated to Goddess Mansa Devi, a form of Shakti.

Bhima Devi Temple Site Museum nicknamed Khajuraho of North India for its exotic sculptures, comprises the restored ruins of an ancient Hindu temple dating from between

8th and 11th century AD.

Nada Sahib is a Sikh Gurudwara in the Panchkula district of the Indian state of Haryana. Situated on the banks of the Ghaggar-Hakra River in the Sivalik Hills.

Morni, the hill resort at Morni Hills, an offshoot of the Shivalik Hills, are about 45 kilometers (28 mi) from the city. The hills were named for Queen Morni, who is said to have ruled this city.

Pinjore Gardens, also known as Yadavindra Gardens, are about 20 km (12 mi) from the city, and cover a total area of 100 hectares (250 acres). The work of creating the gardens began in the seventeenth century. Pinjore Gardens is the venue for an annual mango festival. The garden houses a mini zoo, historic places, Japanese garden, nursery and a number of picnic spots. According to Hindu theology, the Pandava brothers rested in Pinjore during their exile.

National Cactus and Succulent Botanical Garden and Research Centre a 7 acres (2.8 ha) cactus garden in the center of Panchkula, was established in 1987, and is known for its rare and endangered species of Indian succulent plants.

Kaushalya Dam is an earth-filled barrage dam on Kaushalya river in Pinjore. It is an important wetland that is home to many endangered migratory birds.



Kaushalya Dam

Bir Shikargah Wildlife Sanctuary, Khol Hi-Raitan Wildlife Sanctuary, Pheasant Breeding Centre, Morni, Jatayu Conservation Breeding Centre, Pinjore, Pheasant Breeding Centre, Berwala.

Sports

Panchkula has its own Sports Complex in Sector 3 includes Tau Devi Lal Cricket Stadium, Panchkula Golf Course, Olympic Athletic Track and other multi-purpose facilities for sports.

Tau Devi Lal Cricket Stadium has a cricket stadium, badminton hall, football ground, athletic Track and accommodation facilities for the sportsperson.

Panchkula Golf Course was set up in 2003 over a 135-acres of land. This 18 hole golf course is located in sector 3 in the foothills of Shivalik Hills on the banks of Ghaggar River, just off the Himalayan Expressway.

Introduction of Solid Waste

Due to rapid increase in the production and consumption processes, societies generate as well as reject solid materials regularly from various sectors – agricultural, commercial, domestic, industrial and institutional. In 2016, the Union Ministry of Environment, Forests and Climate Change came up with the new Solid Waste Management Rules (SWM). These rules are the sixth category of waste management rules and do not include plastic, e-waste, biomedical, hazardous and construction and demolition waste. Municipal Solid Wastes Management Rules, 2016 (MSW Rules) are applicable to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid waste.

Strategies to manage Solid Waste

Sr. No.	Action Points	Timelines	Department /Agencies
1.	Door to Door collection of municipal solid waste as per MSW Rules-2016 and Segregation at source of solid waste	Regular activity	Nagar Nigam /Development Authorities
2.	Collection, Segregation, Transport and Disposal of Solid Waste in City	Regular activity	Nagar Nigam/ Development Authorities/Industries
3.	Segregation at generation source of solid waste in proper color coded bins	Regular activity	Nagar Nigam/Development Authorities/HSIDC /Waste Generator
4.	Plantation of are a specific types of plants to mitigate pollution. Regular cleaning of drains and disposal of sludge In house disposal of MSW in industrial areas as per MSW Rules-2016	Regular activity	Department of Industries/HSIDC
5.	Development of new MSW facility Establishment of Bio-compo stand waste to energy plant	Immediate	ULBs

6.	Development of leach at recollection and treatment centre at Municipal Solid Waste treatment facility Development of Buffer Zones to control odour	Immediate	ULBs
7.	Preventing solid waste entering in to water bodies – Installation of barmesh in Nallahs & Drains	Immediate	ULBs
8.	GPS enabled vehicles for waste transportation & user Friendly mobile app(Preferably in cities with population above 5l ac)	Immediate	ULBs
9.	Litter bins & waste storage bins	Immediate	ULBs
10.	Redressal of complaints	Regular activity	ULBs
11.	Actions against defaulters of Solid Waste Management Rules- 2016	Immediate	ULBs
12.	Information, Education and Communication(IEC)activities for Source segregation	Regular activity	ULBs/ HSPCB
13.	Authorization of solid waste processing facilities from HSPCB	Immediate	ULBs/HSPCB

:Conclusion & Recommendations

The above planned action should be implemented in time bared manner.

- i. Actions-on model city/town/villages to be taken on priority.
- ii. Strengthen waste collection, storage and transportation system. Setup surveillances quads/Task Forecast Ward/ Circle level. Attend vulnerable sites/locations and clean them.
- iii. Special attention on slum sand settlements near Railway tracks to maintain hygienic conditions.
- iv. Install bio-mining activities for clearing legacy waste dump-sites.
- v. Prohibiting burning of garbage.

Solid Waste Management

a. Current status related to solid Waste management

Sr. No	Urban Local bodies	No of Wards	No of House holds	Population	Solid Waste Generated per day
1	Municipal corporation, Panchkula	20	79369	317467	90TPD

2	Municipal Council kalka- Pinjore	31	37280	149122	30TPD
3	Nagar panchayats (Town area Councils)	-----	-----	-----	-----

	Local Bodies	No of Village Panchayat Blocks	No of House holds	Population	Solid Waste Generated per day
1	Block/ Taluk/ Mandal Tehsils	4	30527	181452	21 TPD
2	Village/Gram Panchayats	135	30527	181452	21 TPD

b. Identification of gaps and Action plan:

Sr. No.	Action points For villages / blocks/town municipalities /City corporations	Identification of gap	Timeline for completion of Gap
1.	Segregation		
(i)	Segregation of waste at source	MC Panchkula 80% source segregation done	31/12/21
		MC Kalka 70 % source segregation done	31/12/21
		Rural Panchkula 50 % source segregation done	31/12/22
	Sweeping		
(i)	Manual Sweeping	Example:	

Sr. No.	Action points For villages / blocks/town municipalities /City corporations	Identification of gap	Timeline for completion of Gap
		Panchklula & Kalka	

		<ul style="list-style-type: none"> - 60% or length of road covered for regular sweeping - Gaps in manpower- Nil - Gap in availability of sweeping tools/equipment - Nil - Availability of suitable PPEs- 100% 	NA. No Gap.
(i)	Mechanical Road Sweeping & Collection	40% Mechanical Sweeping Done	NA.
	Waste Collection	Panchkula & Kalka	
	100% collection of solid waste	100% collection achieved	NA
(ii)	Arrangement for door to door collection	Door to Door Collection Done by unauthorized waste pickers : 100% of blocks/wards covered	NA
(iii)	Waste Collection trolleys with separate compartments	MC Panchkula 40 Nos. Waste Collection Trolleys	NA
		MC Kalka 05 Available 05 Required	31/12/21
(iv)	Mini Collection Trucks with separate compartments	MC Panchkula 15 Available 05 Required	31/12/21
		MC Kalka 05 Available 04 Required	31/12/21
(v)	Waste Deposition centers (for domestic	MC Panchkula 01available	NA
		MC Kalka 01available	NA

	hazardous wastes)	Nil	NA
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(vi)	Miscellaneous	Gobardhan project undertaken in Village Rehore Barwala wherein cattle dung from 256 households is collected (5000 kg/day CAPACITY) Raw Bio gas generation-400 cum/day Purified Biogas generation-160 KG/day Bio Fertilizer/ manure production-2.1 MT/DAY	31.12.21
	Waste Transport		
	Review existing infrastructure for waste Transport.	MC Panchkula Adequate	NA
		MC Kalka Adequate	NA
	Bulk Waste Trucks	MC Panchkula 02 Required 06 Available Procurement through GEM Portal .	31/12/21
		MC Kalka 02 Required 02 Available Procurement through GEM Portal .	31/12/21
	Waste Transfer points	MC Panchkula 01 point	NA
		MC Kalka 01 point	NA
	Waste Treatment and Disposal		
(i)	Wet-waste Management :On-site composting by bulk waste generators(Authority may decide on requirement as per Rules)	MC Panchkula 54 Nos Total Bulk Waste generators 18 Numbers BWG Have on site Processing units	NA
		MC Kalka 32 numbers Total Bulk Waste Generators 5 Numbers BWG Have on site Processing units	NA
(ii)	Wet-waste Management: Facility(ies) for centra Bio methanation / Composting of wets	MC Panchkula M/s Suntan Life, the agency for all areas, Bio methanation Plant, Village-Jatwar, Ambala, Composting Center at	NA

	waste.	Sector 12, Panchkula	
		MC Kalka M/s Suntan Life, the agency for all areas, Bio methanation Plant, Village-Jatwar, Ambala,	NA
(iii)	Dry-Waste Management: Material Recovery for dry-waste fraction	MC Panchkula Dry waste is Collected on daily basis by Informal Waste Picker System and the dry waste coming into solid waste stream is collected & transported to 1 No. MRF & further it is processed into polymer granules by extrusion by authorized agency M/s Suntan Life facility exist	NA
		MC Kalka Dry waste is Collected on daily basis by Informal Waste Picker System and the dry waste coming into solid waste stream is collected & transported to 1 No. MRF & further it is processed into polymer granules by extrusion by authorised agency M/s Suntan Life facility exist	NA
(iv)	Disposal of inert and non-recyclable wastes: Sanitary Landfill	Not Available	31/12/22
(v)	Remediation of historic / legacy dumpsite	Started	31/12/22
(vi)	Involvement of NGOs	Involvement of NGOs done for awareness activities	NA
(vii)	EPR of Producers: Linkage with Producers /Brand Owners	Initiated	31/12/22
(viii)	Authorization of Waste Pickers	Yes	NA
(ix)	Preparation of own by-laws to comply with SWM Rules, 2016	Yes	NA

Chapter 3

Plastic Waste Management

Introduction of Plastic Waste

Plastic products become an integral part of our daily life. That's why Plastic became a menace worldwide as plastic polymer is produced at a massive scale worldwide. On an average, production of plastic crosses 150 Million tones globally per year. It has wide application in packaging, films, wrapping materials, shopping and garbage bags, fluid containers, clothing, toys, household and industrial products and building materials.

According to a report of Central Pollution Control Board CPCB (2017-18) has estimated that India generates approximately 9.4 Million tons per annum plastic waste, (which amounts to 26,000 tons of waste per day), and out of this approximately 5.6 Million tons per annum plastic waste is recycled (i.e. 15,600 tons of waste per day) and 3.8 Million tons per annum plastic waste is left uncollected or littered (9,400 tons of waste per day). The Government of India notified Plastic Waste Management (PWM) Rules, 2016 on 18th March, 2016. These rules were further amended and named as 'Plastic Waste Management (Amendment) Rules, 2018. These rules shall apply to every Waste Generator, Local Body, Gram Panchayat, Manufacturer, Importer, Producer and Brand Owner.

Strategies to manage Plastic Waste

Sr No.	Action Points	Timelines	Department /Agencies
1.	Door to Door plastic Waste collection	Regular activity	Nagar Nigam
2.	Setting up of decentralized waste processing facilities by bulk Waste generators	Immediate	ULBs/ Mandi Board/Bus Stand/ Hotels/RWAs/Institutions etc,
3.	Plastic waste segregation at Source	Regular activity	Nagar Nigam/ULBs
4.	Development and Setting up of Infrastructure for Segregation,Collection,Storage,Transportation,Processing and Disposal of Plastic Waste	Regular activity	ULBs/Panchayati Raj

5.	Management by Waste Generator (Use of Plastic Carry Bags, Plastic Sheets, extended product life cycle, Cover Made of Plastic Sheets and Multi Layered Packaging)	Immediate	ULBs/Panchayati Raj
6.	Properly placing Litter bins & waste storage bins	Immediate	ULBs
7.	Utilization of Non-recyclable plastic waste(Road Construction,WastetoFuel,Waste toenergy,alternativeusesidentificationetc)	As per requirement	ULBs/Nagar Nigam
8.	Engaging Civil Societies working with Waste Picker	Immediate	ULBs/Nagar Nigam
9.	Channelization of Plastic Waste to Recyclers	Immediate	ULBs/Nagar Nigam
10.	Ban on Carry bags and other single use plastics as notified by State Government	Immediate	ULBs
11.	Prohibiting sale of plastic carry bags	Immediate	ULBs
12.	Ensuring no open burning and littering	Immediate	ULBs/Panchayati Raj
13.	Submission of Annual Report to CPCB Annually HSPCB	Annually	
14.	Preventing plastic waste entering into water bodies – Installation of barmesh in Nallahs &Drains	Immediate	ULBs
15.	Imposition of user fees	Immediate	ULBs
16.	Information, Education & Communication (IEC) for plastic waste management.	Regular activity	ULBs/HSPCB/Development Authority/ NGOs/Education Department

Conclusion Recommendations

- i.** Plastic Waste Management Rules, 2016 should be implemented on priority basis.
- ii.** Actions-on city/town/villages to be taken on priority.
- iii.** Recycling facilities must be developed at district levels.
- iv.** Strengthen waste collection, storage and transportation system. Setup surveillance squads/ Task Forces at Ward/ Circle level. Attend vulnerable sites/ locations and clean them.

(ii) Plastic waste Management

(a) Current status related to Plastic waste management

	Urban Local bodies	Estimated quantity of Plastic Waste Generated per day
1	Municipal corporation, Panchkula	9.5 TPD
2	Municipal Council, Kalka Pinjore	3 TPD
3	Nagar panchayats(Town area Councils)	-----
	Local Bodies	Plastic Waste Generated per day
1	Block/Taluk/ Mandal Tehsils	7 TPD
2	Village/Gram Panchayats	7 TPD

(b) Identification of gaps and Action plan:

Sr. No.	Action points For village panchayats/blocks/municipalities /corporations	Identification of gap	Time line for completion of gap
1.	Door to Door collection of dry waste including PW	MC Panchkula 100% D2D Collection done Informal waste pickers	NA
		MC Kalka 100% D2D Collection done by Informal waste pickers	NA
2.	Facilitate or gained collection of PW at Waste transfer point or Material Recovery Facility	MC Panchkula 01 No MRF center, MDC-4, Panchkula	NA
		MC Kalka Available	NA
3.	PW collection Centers	MC Panchkula 01 Nos., MDC-4, Panchkula	NA
		MC Kalka 01 No. Pinjore Himsikha	NA
4.	Awareness and education programs implementation	MC Panchkula Intense awareness on Recycling of waste & channalise the dry waste to recycler by source segregation	NA
		MC Kalka Intense awareness on Recycling of waste & channalise the dry waste to recycler by source segregation	NA

5. Access to Plastic Waste Disposal Facilities

MC Panchkula
Outsourced, through an agency which reprocess through exclusion technology

NA

MC Kalka
Outsourced, through an agency which reprocess through exclusion technology

NA

Chapter4

Construction & Demolition Waste

Introduction of Construction & Démolition Waste

Safe and cost-effective management of construction & demolition wastes is a significant environmental challenge for modern society. Due to rapid urbanization is changing the nature of construction &demolition wastes management from a low priority, localized issue to a pervasive social and environmental problem with risks to public health and environment. Inadequately managed waste disposal has the potential to affect the health and environment. Construction and demolition waste" means waste comprising of building Materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure". The construction and demolition waste generated is about 530 million tonnes annually. The Ministry of Environment, Forest and Climate Change notified the Construction & Demolition Waste Management Rules, 2016 on 29 March 2016. The rules are an initiative to effectively tackle the issues of pollution and waste management.

Strategies to manage Construction & Demolition Waste

Sr.No.	Action Points	Timelines	Department /Agencies
1.	Approval of Waste Management Plan submitted by Waste Generators before Construction starts.	Immediate	ULBs
2.	Proper collection, transportation, processing and Disposal of C& D Waste	Immediate	ULBs/Waste Generators
3.	Setting up of C&D Waste processing facility.	Immediate	Urban Development & Housing and Town Planning Department/ HSPCB

4.	Identification of sites for collection and processing facility	Immediate	ULBs
5.	In-situ processing of Waste by Generators.	Immediate	ULBs/Waste Generators
6.	Provisions for using materials made by C&D Waste in Construction Activity like paving blocks, lower layers of road pavements, colony and rural roads etc.	Immediate	Urban Development & Housing and Town Planning Department/ HSPCB
7.	Information, Education & Communication (IEC) for C&D waste management.	Regular Activity	ULBs/HSPCB/Development Authority/ NGOs/Education Department
8.	Fix rates to be paid by Waste Generators for Collection, Storage & Transportation of Waste.	Immediate	ULBs
9.	Authorization & Monitoring of C&D waste processing plant	Immediate	HSPCB
10.	Preparation & Submission of Annual Report to CPCB.	Annually	HSPCB
11.	Policy for management of C&D waste	Immediate	ULBs

Conclusion Recommendations

- i. Public notices may be issued that construction and demolition waste should only be disposed at pre-identified/notified sites.
- ii. Setup more construction and demolition waste processing facilities.

(iii) C&D Waste Management

a. Current status related to C&D Waste

Details of Data Requirement	Present Status
Total C&D waste generation in MT per day (As per data from Municipal Corporations/Municipalities)	25 MT

Does the District has access to C&D waste recycling facility?	No facility exists as the City generates less than 25MT/Day of C&D Waste is being used in the low laying areas of MC limits
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b. Identification of gaps and Action plan:

Sr. No.	Action points for blocks / town municipalities/ City corporations	Identification of Gaps	Timeline for completion of action plan
1.	Arrangement for separate collection of C&D waste to C&D waste deposition point.	MC Panchkula A separate tractor trolley has been deployed for collation of C&D waste	NA
		MC Kalka A separate tractor trolley has been deployed for collation of C&D waste	NA
2.	Whether local authority have fixed user fee on C&D waste and Introduced permission system or bulk waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month?	MC Panchkula Yes, Implemented	NA
		MC Kalka Bye-laws Drafted	31/12/21
3.	C&D recycling Facility	MC Panchkula Not available	31/12/21
		MC Kalka Not available	31/12/21
4.	Usage of recycled C&D waste in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads	MC Panchkula C&D Waste is being used in the low laying areas of MC limits	NA
		MC Kalka C&D Waste is being used in the low laying areas of MC limits	NA

5.	ICE on C&D waste management	Implemented	NA
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Bio-medical Waste Management

Introduction of Bio-medical Waste Management

Biomedical waste is defined as “any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biological”. The biomedical waste management and handling has been assuming increasing significance for the past few years. The responsibility of medical administrators as regards proper handling and disposal of this category of waste has now become a statutory requirement with the promulgation of Government of India.

Categories of Biomedical Waste

The rear eden defined categories (categorycodeNos.1to10) as follows:

- a) Human an atomical waste:(tissues, organs, body parts)
- b) Animal waste: (including animals used in research and waste originating from veterinary hospitals and animal houses).
- c) Microbiological and biotechnology waste: (including waste from lab cultures, stocks or specimens of micro organisms, live or attenuated vaccines, wastes from production of biological etc.)
- d) Waste sharps:(used/unused needles, syringes, lancets, scalpels, blades, glass etc.)
- e) Discarded medicines and cytotoxic drugs.
- f) Soiled wastes :(items contaminated with blood and body fluids, including cotton dressings, Linen, plaster casts, bedding etc.)
- g) Solid wastes: (wastes generated from disposable items other than waste sharps such as tubing, catheters, i.v. sets, etc.)
- h) Liquid waste:(waste generated from washing, cleaning, housekeeping and disinfection activities including these activities in labs).
- i) Incineration ash:(from incineration of any biomedical waste)
- j) Chemical waste: (chemicals used in production of biological and disinfection).

:Strategies to manage Bio-medical Waste(Attached)

Sr. No.	Action Points	Timelines	Department/Agencies
1	Segregation of Bio Medical Waste (BMW) at source of generation in specified Color Coded bags as per Biomedical Waste Management Rule, 2016.	Regular Activities	Health Department/ HCFs
2	GPS enabled vehicles for Bio medical wastes transportation	Immediate	Health Department/HSPCB/CBWTFs
3	Publication of List of Registered HCFs	Immediate	Health Department
4	Cancellation of Licenses of HCFs violating Authorization of HSPCB.	Immediate	Health Department
5	Actions against defaulters of Bio-Medical Waste Management Rules, 2016	Immediate	HSPCB/Health Department
6	<ul style="list-style-type: none"> • Implementation of Rules in HCFs & Occupiers. • Grant of License to HCFs • Constitute District Level Advisory Committee • Fund Allocation to Government HCFs • Publish List of Registered HCFs 	Immediate	Health Department
7	<ul style="list-style-type: none"> • Allocate Land for CBWTFs • Collection of Solid Waste other than BMW from HCFs 	Immediate	ULBs/Village Panchayat
8	Grant of License to Veterinary Establishments	Immediate	Animal Husbandry/Veterinary Dept.
9	<ul style="list-style-type: none"> • Authorization to HCFs and Occupiers • Action Against HCFs and CBWTFs • Inventorization of Occupiers, Data on BMW generation, treatment • Submission of Annual report to CPCB. 	Immediate	HSPCB
10	Mass awareness campaigns and extensive training programs.	Regular Activity	Health Department/HSPCB/CBWTFs

11	<ul style="list-style-type: none"> • BMW from HCFs Transported, Treated & disposed of in accordance with Rules. • Establish Bar coding & Global Positioning system for handling of BMW. • Training to all workers. Assist Occupier in Training. • Supply Non Chlorinated coloured Plastic Bags to Occupiers. 	Immediate	CBWTFs
12	<ul style="list-style-type: none"> • Ensure BMW handling as per Rule. • Safe, Ventilated & Secured In house storage of BMW. • No mixing of BMW with MSW. • Bar code system for Bio-medical waste collection Bags. 	Regular Activity	Occupiers/HCFs
13	Information, Education & Communication (IEC) for Biomedical waste management.	Regular Activity	ULBs/HSPCB/Development Authority/NGOs/Education Department

:Conclusion Recommendations

- i. Hospitals, Clinics and individual practitioners may be served with notices to prohibit disposal of bio-medical waste in the community dustbins. In case of non-compliance, EC may be imposed on them.
- ii. Cities, towns and villages may tie-up individually or collectively to transport bio-medical waste to the common treatment plants.

(iv) Biomedical Waste Management

a. Current Status related to bio medical waste

Inventory of BMW in the District	Quantity
Total no .of Bedded Health care Facilities	102
Total no. of non-bedded HCF	90
No. of HCFs authorized by SPCBs/PCCs	192
No of Common Biomedical Waste Treatment and Disposal Facilities(CBWTFs)	01
Capacity of CBWTFs	3600 kg/day

No. of Deep burials for BMW if any	01
Quantity of biomedical waste generated per day (including Covid-19 waste)	2100 kg/day
Quantity of biomedical waste treated per day (including Covid-19 waste)	2100 kg/day

b. Identification of gaps and Action plan:

S. No.	Action points	Gaps	Timeline for completion of gap
1.	Inventory and Identification of Health care Facilities	Inventory of all HCFs including, clinics, hospitals, Veterinary hospitals, Aayush hospitals, animal houses etc generating Biomedical waste area identified Authorization by Veterinary hospital and animal houses not obtained from SPCBs/PCCs	30/09/21
2.	Adequacy of facilities to treat biomedical waste	No GAP between Quantity of Biomedical waste generated per day and quantity of Biomedical Waste Treated and disposed in district	NA. No gap.
3.	Tracking of BMW	The bar Code system is 50% implemented	30.09.21
4.	Awareness and education of health care staff	Quarterly training has been organized for all stakeholders	NA. No gap.
5.	Adequacy of funds	Adequate Funds are allocated to Government healthcare facilities for bio-Medical waste Management by State Govt.	NA. No gap.
6.	Compliance to Rules by HCFs and CBWTFs	District Level Special Task Force mechanism to Monitor compliance by Hospitals/HCFs.	NA. No gap.
7.	DistrictLevel Monitoring Committee	District Level Monitoring Committee has been constitute and meetings are being organized	NA. No gap.
8.	Waste water Treatment by HCFs	Effluent treatment plants installed by all tertiary healthcare centers and by all hospitals where terminal treatment of effluent by Govt. Hospital not available.	NA. No gap.

Chapter 6

HAZARDOUS WASTE MANAGEMENT

Introduction of Hazardous Waste

Hazardous waste is those that may contain toxic substance generated from industrial, hospital, some type of house hold waste. The improper handling, collection, treatment and disposal of hazardous waste material may cause substantial harm to human health or environment. Hazardous wastes can take the form of solids, liquids, sludge or contained gases and they are generated primarily by chemical production, manufacturing, and other industrial activities.

They may cause damage during inadequate storage, transportation, treatment or disposal operations. Improper hazardous-waste storage or disposal frequently contaminates surface and ground water supplies. People living in homes built near old and abandoned waste disposal sites may be in a particularly vulnerable position. Hazardous wastes are classified on the basis of their biological, chemical, and physical properties. These properties generate materials that are toxic, reactive, ignitable, corrosive, infectious, or radioactive.

:Strategies for Hazardous Waste Management

Short Term

Sr.No	Action Points	Timelines	Department/Agencies
1	Capacity building of SPCB.	90 Days	
2	<ul style="list-style-type: none">• Enforcement Mechanism in SPCB:• Use of technology, Strengthening and effective Public Grievance redressal System.• Software development for tracking hazardous waste• Performance Audit for TSDFs	60 Days	Department of Environment/HSPCB

3	<ul style="list-style-type: none"> Constitution of in-house“ Hazardous Waste Incident Response Team” Compulsory Emergency Response Plan for industries Implement immediate response, assessment and remediation by the responsible party 	90 Days	District Administration/Director of Factories/Labor Department/Fire Department/HSPCB
4	Imposition of Environmental Compensation on default	Regular activity	HSPCB
5	Finalize as per Remediation Objectives report submitted by Responsible Party.	90 Days	Department of Environment/HSPCB
6	In-situ treatment or any other treatment of legacy waste where DPR is already prepared.	Up to 1 year or case to case basis	Department of Environment/HSPCB /CPCB
7	Identification of legacy waste and preparation of DPR for its treatment.	6 Month after release of fund and acquisition of land	Department of Environment/HSPCB/CPCB
8	Installation of TSDF facility if common TSDF is not available within 75 km radius	180 days after allocation of land	District Administration/ Department of Environment/HSPCB
9	Expansion of existing TSDF if required	180 days after allocation of land	District Administration /Department of Environment, /HSPCB

Long Term

Sr.No	Action Points	Timelines	Department/Agencies
1	Hazardous waste recovery, recycling & disposal facility in upcoming industrial estate/Area Submit annual report/Plan for sound disposal of waste to MOEFCC	360 Days	State Government/ District Administration/UPSIDC/ Development authorities/Department of Environment/HSPCB
2	Labour Department to register, impart safe waste handling training and monitor health of workers engaged in waste handling	360 Days	Labour Department/Director of Factories
3	Impetus for promotion of low cost innovative re-use, reduce techniques, methods.	360 Days	CPCB/HSPCB

4	Notification for buffer zone around TSDF facilities	360days	District Administration/Development Authorities
5	Land Allocation for Establishment of new TSDFs Fund AI location for TSDF. Or utilization of closed/abandoned mills, factories in the districts.	360 days	District Administration/Department of Environment/Department of Industries/ HSPCB
6	Remediation of contaminated sites	2-5 Years	Department of Environment/District Administration/ HSPCB/CPCB
7	Compliance of recommendations pertaining to the State as per NGT Orders in OA No.804/2017on12-04-2019	Regular Activity	State Government/ Department of Environment/HSPCBCB

Conclusion Recommendations

- i. All the hazardous waste generator, processor, user etc. should take proper permission/authorization from HSPCB.
- ii. All the hazardous waste should be stored as per CPCB guidelines.
- iii. All the Hazardous Waste should be channelized to dispose to board authorized agencies only.

(v) Hazardous Waste Management

a. Current Status related to Hazardous Waste Management

Details of Data Requirement	Present Status
No of Industries generating HW	122
Quantity of HW in the district	967.261 MT
(i) Quantity of Incinerable HW	102.4 MT
(ii)Quantity of land-fillable HW	306.391 MT
(iii)Quantity of Recyclable/ utilizable HW	558.47 MT
No of captive/common TSDF	Nil in District Panchkula. 01 no common TSDF GEPIL at Pali Faridabad for the state of Haryana
Contaminated Sites or probable Contaminated sites	01 number of probable contaminated site at Marranwala, Panchkula

b. Identification of gaps and action plan:

Sr. No.	Action points	Identification of Gaps	Time line for completion of gap
1.	Regulation of industries and facilities generating Hazardous Waste	All hazardous waste industries are identified and authorized by HSPCB	NA. No gap.
2.	Establishment of collection centers	No collection centers. HW collected directly from the industries by the Common TSDF.	NA. No Gap.
3.	Training of workers involved in handling/recycling/disposal of HW	Training workshop to held quarterly of all stake holders.	NA. No Gap
4.	Availability/Linkage with common TSDF or disposal facility	All the generators of HW have access to common TSDF in the State.	NA. No Gap.
5.	Contaminated Sites	Probable contaminated site at Marranwala Panchkula.	NA. No Gap

Introduction of E-Waste Management

Waste electrical and electronic equipment (WEEE) is becoming major threat to the whole world. Rapid growth of technology, up-gradation of technical innovations and a high rate up-gradation by exchanging old electronic items have led to one of the fastest growing waste in the world. Its toxic emissions mixed with virgin soil and air and causing harmful effects to the entire biota either directly or indirectly. Direct impacts include release of acids, toxic compounds including heavy metals, carcinogenic chemicals and in direct effects such as bio magnification of heavy metals. Many private firms are involved in collecting, dismantling, separation and exporting e-wastes for recyclers. However, strict regulations are currently being followed as on approval of such firms such as e-steward certification by Basel action network in US, they also involved in public awareness programs. E-Waste consists of end of electrical and electronic equipments and products such as: Refrigerator, Washing machines, Computers and Printers, Televisions, Mobiles, I-pods etc. The Ministry of Environment, Forest and Climate Change notified the E-Waste Management Rules, 2016 on 23 March 2016 in supersession of the e-waste (Management & Handling) Rules, 2011. The amendment in rules has been done with the objective of channelizing the E-waste generated in the country towards authorized dismantlers and recyclers in order to formalize the e-waste recycling sector. The collection targets under the provision of Extended Producer Responsibility (EPR) in the Rules have been revised and targets have been introduced for new producers who have started their sales operations recently.

Strategies for E-Waste Management

Sr. No.	Action Points	Timelines	Department/Agencies
1	Collection, Segregation and Channelization of e-waste pertaining to orphan products to recyclers/dismantlers	Immediate	ULBs
2	Segregation of E-waste at source from MSW	Regular Activity	ULBs/Nagar Nigam/ Waste Generator
3	Ensure no illegal-waste processing No dumping of e-waste, HW & other wastes on banks of river No illegal transportation of e-waste.	Immediate	District Administration /ULBs/HSPCB/RTO

4	Industrial skill development activities for workers in dismantling and recycling units.	Immediate	Labour Department
5	Monitoring & Compliance of Extended Producers Responsibility(EPR)-Authorization issue by CPCB	Immediate	HSPCB
6	Information, Education & Communication (IEC) for e- waste management.	Regular Activity	ULBs/HSPCB/Development Authority/ NGOs/Education Department
7	Authorization to Manufacturers, Dismantlers, Recyclers, Refurbishes and Action against defaulters.	Immediate	HSPCB
8	Integrated plan for implementation of EWM Rules, 2016.	Immediate	HSPCB
9	Earmarking or allocation of industrial space or shed, abandoned mills/factories for e-waste dismantling/recycling units in industrial clusters	Immediate	Department of Industries
10	Status of Annual report sent to CPCB	Annually	HSPCB
11	Recognition and Registration of workers of dismantling and recycling units.	Immediate	Labour Department
12	Implementation of EPR from producers	Immediate	Department of Industries/HSPCB

Conclusion Recommendations

- i. E-waste (Management) Rules, 2016 should be stringently complied.
- ii. All E-waste generator, processor, user etc. should take proper permission/authorization from HSPCB.
- iii. All the E-waste should be stored as per CPCB guidelines and Form 2 &3 must be maintained by generator.
- iv. All the E-Waste should be channeled to dispose to board authorized agencies only.

(vi) E-Waste Management

a. Current Status related to E-Waste Management

Details o Data Requirement	Present Status
Inventory of E-Waste in MT/year	500 MT/Year
Collection centers established by ULBs in the District	01 No. Community Centre, Sec-10, Panchkula

Collection centers established by Producers or their PROs	01 No. M/s Bharat Electronics Ltd, IA, Panchkula
No authorized E-Waste recyclers /Dismantler	01 number authorized dismantler in Panchkula District. 3600 TPA capacity

b. Identification of gaps and action plan:

Sr. No.	Action points	Gaps in implementation	Timeline for completion of gap
1	Inventory Generation of E-Waste / Bulk-waste generators	Inventory to done.	30/09/21
2	E-Waste collection points	01 No. Community Centre, Sec-10, Panchkula	NA. No gap.
3	Linkage among Stake holders to channelize E-Waste	Inventory of collection centres established by the producers to be carried out. 01 no authorized dismantler of E-waste in District Panchkula.	30/09/21
4	Regulation of Illegal E-Waste recycling /dismantling	No Prevalence of informal trading, dismantling, and recycling of E-waste is in District	NA. No gap.
5	Integration of informal sector	No informal sector involved in handling e waste in Panchkula district	NA. No gap.
6	Awareness and Education	Awareness programmes to be conducted on all major events/gatherings/government functions to be held in district Panchkula.	NA. No gap.

Water Quality Management

Introduction of Water Quality Management

Systematic management of water resources is necessary to ensure the required balance between development pressures and the safe guarding of the natural and built environment for future generations. The purpose of Water Quality Management Plan (WQMP) is to reduce discharge of pollutants into urban runoff from development projects by reducing or eliminating sources of pollutants, and managing site runoff volumes and flow rates through best Management Practices.

Strategies for Water Management

Ponds/water bodies may be identified at each city, town and village level and cleaned and not allowing sewage and solid waste disposal in such ponds. i. State Ground Water Board to ensure ground water quality testing particularly shallow hand pumps, and deep bore wells to check fitness for consumption. ii. Public notices may be issued for installation of bore wells without permission. Government and non-government buildings should install rain water harvesting systems in a time-bound manner.

Conclusion Recommendations

- i. SPCB/PCCs may under takes naps hot monitoring of ambient air quality in a phased manner covering all cities and towns for wider coverage. GRAP action should be initiated in case of deviations.
- ii. Surveillance squads/task forces may be setup at Ward and Circle level to prohibit burning of garbage and other waste.
- iii. Open parks, dilapi dated roads and other sources of dust pollution should be identified and actions be taken to prevent the suspension of dust from such sources.

Water Quality Management

Water Quality Monitoring

a. Current Status related to Water Quality Management

Details of Data Requirement	Present Status
Rivers	06 Nos
Length of Coastline(if any)	NIL
Nalas/Drains/Creeks meeting Rivers	37
Lakes/Ponds	163 Nos and 155.33 HECTARES
Total Quantity of sewage from towns and cities in District	165 MLD
Quantity of industrial waste water	03 MLD
Percentage of untreated sewage	45 %
Details of bore wells and number of permissions given for extraction of groundwater	400. Nil
Ground water polluted areas if any	NIL
Polluted river stretches if any	NIL

b. Identification of gaps and action plan for water quality monitoring:

Sr. No	Action points	Gaps and Action Plan	Timeline for completion of action plan
1.	Inventory of water bodies	District level STF formed and inventory of water bodies carried out.	NA. No gap.
2.	Quality of water bodies in the district	Monthly monitoring of drains and rivers being carried out to assess quality of water bodies in the district.	NA. No gap.
3.	Hotspots of water contamination	Probable contamination site identified at Marranwala Panchkula. Samples of ground water and surface water collected and sent for analysis	NA. No gap.

4.	Protection of river/lake water front	37 nos. of sources of pollution identified whereby untreated sewage is discharged in the river Ghaggar through drains. Action plan sought from the departments responsible.	31/12/21
5.	Inventory of sources of water pollution	37 nos. of sources of pollution identified whereby untreated sewage is discharged in the river Ghaggar through drains. Action plan sought from the departments responsible.	31/12/21
6.	Oil spill disaster management(for coastal districts)	Oil spill contingency plan prepared	NA. No gap.
7.	Protection of flood plains	No flood plains in Panchkula district	NA.
8.	Rejuvenation of ground water	Action plan for rain water harvesting implemented.	NA. No gap.

9. Complaints redressal system
- Complaints regarding water pollution are received on CM window portal and are promptly dealt with.
- NA. No gap.

Chapter 9

Domestic Sewage Management

Introduction of Domestic Sewage Management

Domestic sewage is generated by domestic activities including toilet, bathroom, clothes washing and kitchen cleaning activities. This sewage water contains high levels of micro-organisms, chemicals (nutrients) and other contaminants capable of causing human illness and adversely impacting on the local environment.

Strategies for Domestic Sewage Management

Short Term Action Point

Sr. No	Action Point	Timeline	Implementing Department /Agency
1	Estimation of total sewage generation from City/Towns where sewage treatment facility does not exist and preparation of DPR for Treatment of sewage	02 Months	HSVP/PHED & Concerned ULBs
2	Measurement of flow & load of all the drains contributing pollution Load in Rivers	03 Months	PHD & HSVP/Panchayat Department Concerned ULBs
3	Installation of Bar-meshes in the drains & regular cleaning & disposal of Solid Waste from them	03 Months	Concerned ULBs & Panchayat Department
4	Untapped drains to be provided with modular treatment facilities/ In-Situbio-remediation.	06 Months	HSVP/PHED/ Panchaya Department& Concerned ULBs
5	Completion and commissioning of under construction STPs	06 Months	HSVP/ PHED/ULBs
6	Formulation of Action Plan for long term use of treated water discharged from STPs	03 Months	PHD, Irrigation, ULBs , HSVP &Concerned ULBs in consultation with HSPCB/CPCB
7	Installation of Web Cams & OCEEMS in STPs	03 Month	PHD, HSVP, ULBs Operating Govt. Agencies
8	Formulation of Action Plan for income generation of STPs including installation of Solar Power Plants,	01 year	PHD, HSVP & ULBs

	Energy Plantation & sale of sludge and treated water, bio-composting etc.		
9	Obtaining Consent to Operate/Establish and Hazardous Authorization from HSPCB	03 Months	PHD, HSVP, ULBs and Operating Govt. Agencies
10	Preparation of DPR for channelization including diversion of sewage generated from household/township/villages to sewer lines and interception of all drains (excluding drains carrying industrial waste water)for ensuring proper treatment through Upcoming STPs.	Within 3 Months	PHD/HSVP/ULBs,
11	Septage Management in the areas where sewerage network does not exist	Within 6 Months	ULBs/PHD / Panchayat Department

Long Term Action Point

1	Laying of Sewerage Network & Connection of households to the Sewer line in order to utilize the installed capacity of existing STPs	24 Months from Sanction of DPR	PHED / Panchayat Department & Concerned ULBs
2	Establishment of Sewage Treatment Plants of adequate capacity	24 to 30 Months from sanction of DPR	PHED/ Panchayat Department & Concerned ULBs
3	Tapping & diversion of the drains having high sewage load to STPs to be constructed on I&D model	24 to 30 Months from sanction of DPR	PHED, HSVP Panchayat Department &Concerned ULBs
4	Infrastructure Development in Irrigation/Horticulture/Sprinkling/Industrial use etc. and ensuring use of treated water	24 to 30 Months from sanction of DPR	HSVP, PHED & Concerned ULBs

5	Installation of Solar Power Plant & Energy Plantations in the vacant Land of STPs	12 Months from sanction of DPR	HSVP, PHED/ Operating Govt. Agencies
6	Installation of supplementary/tertiary treatment system in existing STPs which are not able to achieve discharge norms in the present system	12 Months from sanction of DPR	HSVP, PHED & Concerned ULBs
7	Treatment of wastewater in Rural areas flowing into the river by Bio-remediation/Phyto-remediation/Oxidation Pond etc.	12 months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rastriya Swachta Mission-Gramin Swachh Bharat Mission Urban
8	Ensuring OD Final the villages situated along the river	12 Months	Gram Panchayat, Panchayati Raj, Rural Development Departments, Rastriya Swachta Mission-Gramin Swachh Bharat Mission Urban
9	Specific methods of > 2.5 had development plans to be developed and Implemented for purposes of carbon segmentation.	12 Months	HSPCB/HSIIDC

Conclusion Recommendations

- i. Every city, town and village should have time-bound plan to set up sewage/Septage management facility.
- ii. Intermediate remedial methods may be employed till sewage rains are intercepted and diverted to STP.
- iii. Treated sewage may be utilized for sprinkling on dust emitting sources for gardening and other non-potable purposes.

Domestic Sewage

a. Identification of gaps and action plan for treatment of domestic sewage

Details of Data Requirement	Present Status
No of Class-II towns and above	02
No of Class-I towns and above	01
No of Towns STPs installed	03
No of Towns needing STPs	NIL
No of ULBs having partial underground Sewerage network	02

No of towns not having sewerage network	02
Total Quantity of Sewage generated in District From Class-II cities and above	165 MLD
Quantity of treated sewage flowing into Rivers(directly or indirectly)	91.25 MLD
Quantity of untreated or partially treated sewage(directly or indirectly)	73.75 MLD
Quantity of sewage flowing into lakes	NIL
Total available Treatment Capacity	91.25 MLD

b. Identification of gaps and action plan for treatment of domestic sewage:

Sr. No.	Action points	Gaps and Action Plan	Timeline for completion of action plan
1.	Sewage Treatment Plants (STPs)	Existing STPs not sufficient. 08 nos STP for <u>rural</u> Panchkula under AMRUT scheme under construction. STPs planned for Barwala town and Raipur rani town.	31/03/2024
2.	Underground sewerage network	Existing sewerage network of 39000 mts in Kalka town. Additional 4700 mts sewerage network required. Estimate for laying sewerage network submitted to higher authorities of PHED.	31/03/23

Chapter10

Industrial Waste Water Management

Introduction of Industrial Waste Water Management

Industrial waste water is one of the important and major pollution sources of Water. A huge amount of industrial waste water was discharged into rivers, lake & sand coastal areas. This resulted in serious pollution problems in the water environment and causes negative effects to the eco-system and human's life. There are many types of industrial waste water based on different industries and contaminants. Each sector produces its own particular combination of pollutants.

Strategies for Industrial Waste Water Management

Sr. No.	Action Point	Timeline	Implementing Department /Agency
Short Term Action Point			
1	Re-inventorization of Water Polluting Industries in the catchment area of the drains and their status with respect to consent, installation of ETP, adequacy of ETP and final discharge point	03 Months	HSPCB, HSIIDC, ULBs & Department of Industries
2	Monitoring of water polluting industries and ensuring closure of industries which are operating without consent or non-compliant	Quarterly	HSPCB & CPCB
3	Installation of OCEEMS, Flow Meter & Web Cams in large and medium category of GPIs with connectivity to the server of CPCB and HSPCB	03 Months	HSPCB
4	Closure and legal action against the illegal water polluting industries operating in non-confirming/residential areas	Regular activity	District Level Inter Departmental Enforcement Committee having representatives of Administration, Police, HSPCB, ULBs, Department of Industries etc.

Long Term Action Point			
1	Adoption of cleaner technologies by water polluting industrial sectors having major impact on water quality of the river. For Eg. – Electroplating, Dyeing, Pulp & Paper industries, distilleries, sugar, tanneries etc.	24 Months	HSPCB, CPCB & Department of Industries
2	Imposing stringent norms in Distillery, Pulp & Paper, Slaughter House & Tannery sectors	24 Months	Department of Environment, Industries, Excise & HSPCB
3	Reducing abstraction of ground water by reuse/recycle of treated effluent by installation of additional treatment facilities & process improvement	12 Months	CGWA, CPCB, Department of Industries & HSPCB

Conclusion Recommendations

- i. Every industry should have proper waste water management facility.
- ii. CETP can be installed for Industrial Areas.
- iii. Treated sewage may be utilized for sprinkling on dust emitting sources for gardening and other non-potable purposes.

Industrial waste water management

a. Current Status related to Industrial Waste water Management

Number of Red, Orange, Green and White industries in the District	Total Industries = 598 Red category = 99 Orange category = 414 Green category = 62 White category = 23
No of Industries discharging wastewater	104
Total Quantity of industrial waste water generated	0.54 MLD
Quantity of treated industrial waste water discharged into Nalas/ Rivers	0.54 MLD
Common Effluent Treatment Facilities	01
No of Industries meeting Standards	98
No of Industries not meeting discharge Standards	06

b. Identification of gaps and action plan for industrial waste water:

S. No.	Action points	Gaps and Action Plan	Timeline For completion of GAP
1.	Compliance to discharge norms by Industries	<p>Inspections of HSPCB and District level STF being carried out on monthly basis.</p> <p>Total industries inspected (Since Aug 2019)- Closure Action- Prosecution Action-</p>	No Gap. NA.
2.	Complaint redressal system	Complaints being dealt through online CM window portal, complaints received through hard copy and through e-mail. Further complaints are also dealt through PM portal and Social media Grievances portal.	No gap. NA.

Chapter11

Introduction of Air Quality Management

Air quality affects our health, the livability of our cities and towns, and our environment. Air pollution, particularly from human activity, can cause health problems that affect the heart and lungs, and can cause cancer. Even short-term exposure to air pollution can cause health problems. Children, the elderly and people with existing heart and lung conditions are especially affected by air pollution.

Air quality management refers to all the activities a regulatory authority undertakes to help protect human health and the environment from the harmful effects of air pollution. There is a continuous review and assessment of goals and strategies based on their effectiveness. All parts of this process are informed by **scientific research** that provides air quality managers with essential understanding of how pollutants are emitted, transported and transformed in the air and their effects on human health and the environment.

Strategies for Air Quality Management(Attached)

Vehicle emission control

11.3.1.1 Long Term Action Plan: Reduce congestion			
Sr. No.	Action Points	Time frame for implementation	Action Required to be Taken by Responsible Departments
i	Plying of electric buses, e-rickshaws for public transport including establishment of Sufficient charging stations.	360 days	Transport Department
ii	Prepare plan for construction of expressways/bypasses to avoid congestion due to non-destined vehicles	360 days	N.H.A.I./PWD
iii	Construction of peripheral road around the cities to avoid congestion.	360 days	N.H.A.I./PWD

iv	Arrangement of Multi-level Parking Facilities	3 yrs	Nagar Nigam/Development Authorities-ULBs
v	Development/Strengthening of Bike zone/Cycle zone at metro/railways/bus stations from where travelers hire bi-cycle to reach the destination	2 yrs	Nagar Nigam/Development Authorities-ULBs
vi	Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-VI fuels are available	360 days	Vehicle Manufacturing Companies/ Ministry of Road Transport & Highways
vii	Use of Bio-Ethanol in the urban transport system/waste to energy	360 days	Transport Department

Short Term Action Plan

i	Launch extensive drive against polluting vehicles for ensuring strict	As regular activity	R.T.O/Traffic Police
ii	Launch public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicles, lane discipline, etc.	As regular activity	R.T.O/Traffic Police
iii	Prevent parking of vehicles in the non-designated areas	As regular activity	Traffic Police/Nagar Nigam
iv	Prepare & implement action plan to check fuel adulteration and random monitoring of fuel quality data	30 days	District Supply Officer/Oil companies
v	Prepare & implement plan for widening of roads and improvement of infrastructure for decongestion of road	01 yr	ULBs
vi	Steps for promoting battery operated vehicles including establishment of charging stations	120 days	Transport Department/Nagar Nigam & Development Authorities
vii	Install weigh in motion bridges at the borders of cities/towns and States to prevent over loading of vehicles	180 days	Transport Department

viii	Synchronize traffic movements/Introduce intelligent traffic systems for lane-driving	180 days	Traffic Police
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Sr. No.	Action Points	Time frame for implementation	Action Required to be Taken by Responsible Departments
Long Term Action Plan			
i)	Dead Bodies of Animals should be disposed through proper treatment facility like rendering plant etc.	360 days	ULBs
ii)	Installation of CAAQMS by polluting units/institutions etc. under "Polluters Pay Principles".	360 days	Haryana State Pollution Control Board
iii)	Source Apportionment, Emission Inventory & Carrying Capacity Assessment	360 days	Haryana State Pollution Control Board
iv)	Tree Plantation for mitigation of air pollution based on location of pollution sources and Wind rose data	360 days	ULB, Forest department/Development Authority/IMD/Regional Office & HSPCB
Short Term Action Plan			
i)	Air Quality Index to be calculated and disseminated to the people through website and other media (on maximum fortnightly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)	Regular Activity	Haryana State Pollution Control Board
ii)	Establish an Air Quality Management Division at SPCB/PCC Head Quarters to oversee air quality management activities in the State and interact with CPCB	Established	Haryana State Pollution Control Board
iii)	Set-up and publicize helpline in the city/town as well as SPCB/PCC HQ for complaints against reported non-compliance	Established	Haryana State Pollution Control Board
iv)	Engage with concerned authorities on continue basis for maximizing coverage of LPG/PNG for domestic and commercial cooking with target of 100% coverage (Under Pradhan Mantri Ujjwala + Yojanain urban areas)	30 days	District Supply Officer
v)	Monitoring of DG sets and action against violations. Fine should be imposed on defaulters.	30 days	District Administration,

vi)	Street vendors are to be controlled strictly in respect of removing their wastes and debris before leaving the site of operation	30 days	Nagar Nigam/Development Authorities-ULBs
vii)	Complete ban on littering of streets with municipal solid wastes (MSW). Segregation & source collection at source of MSW to be implemented.	30 days	Nagar Nigam/Development Authorities-ULBs
viii)	If Air Quality Index found severe or above grade, ensure availability of masks to public for protection.	Regular Activity	ULBs

Control of air pollution from constructions and demolition activities

Sr. No.	Action Points	Time frame for implementation	Action Required to be Taken by Responsible Departments
i)	Enforcement of Construction & Demolition Rules 2016. Fine should be imposed on defaulting units.	15 days , and thereafter, continues regular activity	Urban Development /Development Authorities
ii)	Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units;		Urban Development /Development Authorities
iii)	Ensure carriage of construction material in closed/covered vessels		Development authorities/ Regional Transport Department
iv)	Environmental aspects should be included during preparation of master plan for development of city.	Proposed Master Plan for Panchkula District.	Urban Development /Development Authorities
v)	Builders should leave 33 % area for green belt in residential colonies.	Within areas on able time frame	Urban Development /Development Authorities /housing companies

Action Points for Control of Industrial Emissions

Sr. No.	Action Points	Time frame for implementation	Action Required to be Taken by Responsible Departments
i)	Conversion of natural draft brick kilns to induced draft Using zig zag technique in a phased manner(only for NCR)	Regular activity	Haryana State Pollution Control Board
ii)	Installation of appropriate air pollution control devices in Factory units/industries.	Regular activity	Haryana State Pollution Control Board
iii)	Development of mobile facility/van for continuous Ambient air quality monitoring for different localities.	360 days	Haryana State Pollution Control Board

Control of emissions from biomass/crop residue/garbage/municipal solid waste burning/forest fires

Sr. No.	Action Points	Time frame for implementation	Action Required to be Taken by Responsible Departments
i)	Launch extensive drive against open burning of bio- mass, crop residue, garbage, leaves, etc.	Regular Activity	Nagar Nigam
ii)	Regular check and control of burning of municipal solid wastes and use of fire extinguisher for control of fire in municipal solid waste and biomass.		Nagar Nigam
iii)	Proper collection of horticulture waste (bio-mass) and its disposal following composting-cum-gardening approach as material for Miyawaki plantations.		Nagar Nigam
iv)	Ensure ban on burning of agriculture waste and crop residues and its implementation	180 days	Agriculture Department & Haryana State Pollution Control Board
v)	Door to Door collection of segregated waste by agency and then its disposal directly in plant without dumping it on land.	90 days	Nagar Nigam
vi)	Establishment of composting pits in Parks/residential societies etc for management of biodegradable waste.	90 days	Nagar Nigam/GDA
vii)	No plot should be left open more than 02 years and planting of trees must be mandatory on vacant plots.	90 days	Nagar Nigam/GDA

viii)	Fly ash bricks use for protective tree guards	Regular activity	Nagar Nigam /PWD/Forest Dept. /Irrigation Dept.
Short Term Action Plan			
Sr. No.	Action Points	Time frame for 0 implementation	Action Required to be Taken by Responsible Departments
I	Identification of brick kilns and their regular monitoring including use of designated fuel, and closure of unauthorized units	Regular activity	Haryana State Pollution Control Board
II.	Monitoring of industrial emission including real time online monitoring through OCEMS (Online Continuous Emission Monitoring System) and live camera feed and to take action against non-complying industrial units	60 days, and thereafter, regular activity	Haryana State Pollution Control Board
III.	Bank guarantee should be taken for the compliance of conditions imposed in CTO/CTE for control of Environmental Pollution from industries. The bank guarantee shall be forfeited in case of any violation. Verification of these conditions to be carried out by HSPCB/selected Third Party Institutions/Quality control agencies etc.	60 days, and thereafter, regular activity	Haryana State Pollution Control Board
IV.	Installation of webcams and OCEMS in Grossly Polluting Industries.	60 days	Haryana State Pollution Control Board
V.	Power plant controls-implement stricter NO _x and SO ₂ Standards with continuous monitoring	60 days	Haryana State Pollution Control Board
VI.	Stricter dust control on stone crushers	60 days	Haryana State Pollution Control Board
VII.	Introduce and implement stringent PM ₁₀ and PM 2.5 Norms in industries through installations of wet scrubbers	60 days	Haryana State Pollution Control Board

Conclusion & Recommendations

- i.** State Pollution Control Board should post the information (district wise on its website) indicating industries projects granted with consents ameliorative steps and their compliance status.
- ii.** Industries discharging Air Emission and not having proper APCM are closed down as per Air Act till compliance is achieved.
- iii.** Public access for informing that if any industry is discharging unauthorized gaseous emissions, may be provided on the website of SPCB and such complaints be acted expeditiously.

Air Quality Management

a. Current Status related to Air Quality Management

Details of Data Requirement	Present Status
Number of Automatic Air Quality monitoring stations in the district. Operated by SPCB / State Govt / Central govt./PSU agency: Operated by Industry:	01 number CAAQMS installed at HQ HSPCB Sector-6 Panchkula
Number of manual monitoring States operated by SPCBs	02 number (One commercial location and one residential location). Monitoring done pre Diwali and Post Diwali annually.
Name of towns/cities which are failing to comply with national ambient air quality stations	NIL

No of air pollution industries	182
Prominent air polluting sources [Large Industry] / [Small Industry] / [Un paved Roads] / [Burning of Waste Stubble] / [Brick Kiln]/ [Industrial Estate]/[Others](Multiple selection)	No major/large air pollution industry in Panchkula district. However small air pollution industries and brick kiln major source of air pollution.

b. Identification of gaps and action plan:

S. No.	Action points	Indicative Action Plan	Time line for completion of action plan
1.	Identification of prominent air polluting sources?	inventory of air pollution sources in District including hot spots or areas of concern pertaining to air pollution in association with SPCBs carried out	NA. No gap.
2.	Ambient Air quality data?	01 number CAAQMS installed at HQ HSPCB Sector-6 Panchkula	NA. No gap.
3.	Setting up of Continuous Ambient Air Quality Monitoring Station	01 number CAAQMS installed at HQ HSPCB Sector-6 Panchkula	NA. No gap.
4.	District Level Action Plan for Air Pollution	Hotspots of air pollution identified. Mitigation plan of air pollution at the hotspots under preparation. Promotion of usage of cycles for transport facilitated through e cycles vending stations.	31/12/21
5.	Hot spots of air pollution in District	05 Hotspots of air pollution identified. Mitigation plan of air pollution at the hotspots under preparation	31/12/21

6.	Awareness on Air Quality	Display of data by the 01 number CAAQMS by way of LED screen underway. Public complaints regarding air pollution being dealt by CM window complaints portal as well as SAMEER app.	31/12/21
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Chapter 12

Mining Activity Management

Status of Industrial Mining Activity Management in the District (Graphical representation may be included)

The Boulder, Gravel and Sand are one of the most important construction materials. These minerals are found deposited in river bed as well as adjoining areas. These aggregates of raw materials are used in the highest volume on earth after water. Therefore, it is the need of hour that mining of these aggregates should be carried out in a scientific and environment friendly manner.

The important river/ stream of district are Ghaggar, Tangri, Begna and Sirsa river etc. Boulder, Gravel and Sand (Minor Minerals) finding use as construction material are found in the river bed areas. The mineral deposits are found in river bed areas as well as outside river bed areas of concerned villages of the districts Panchkula. All rivers in the district Panchkula are seasonal rivers. The water released in river during rainy season bring huge quantity of Boulder, Gravel and Sand which gets deposits in the river bed area. The flood plains also have huge deposits of Boulder, Gravel and Sand up to a depth of 10-12 meter.

Mineral Concession in respect of minor minerals are granted as per the provisions of the State Rules, framed by the State Government in exercise of powers conferred under section 15 of the Mines and Minerals (D&R) Act, 1957.

The mineral concessions in the Haryana are being granted in the form of "Mining Contract" or "Mining Lease" through competitive bidding process. The Mining Contracts are granted for a minimum period of 07 years and maximum period of 10 years. Whereas the Mining Leases are granted for a minimum period of 10 years and maximum period of 20 years. In district Panchkula mineral concessions are/were granted in the form of Mining contacts for the period varying between 7 to 10 years. The contracts are being granted through open auction/ e-auction mode. The Mineral concessions are being granted subject to condition that actual mining operation shall be allowed only after environment Clearance is/are obtained from the competent authority as per requirement of EIA Notification dated 14.09.2206 of the MoEF & CC, Gol.

The mineral concession holders are required to prepare a detailed "Mining Plan" for their specific project through Registered Qualified Person and get in approved from authorized officer of the State Government. The exhaustive mining plan are prepared inter alia giving details of mineral reserves, method of mining, extent of proposed mining and other related details. These are the projects specific detail⁵. Based on these details itself the project

proponents/ mineral concession holders obtains environmental clearances.

The river bed areas apart from other related condition for mining are allowed to excavate minerals (Boulder, Gravel or Sand) to ensure safety of rivers bed structures and the adjoining areas on the following specific conditions:

- (i) No mining would be permissible in a river-bed up to a distance of five times of the span of a bridge on up-stream side and ten times the span of such bridge on down-stream side, subject to a minimum of 250 meters on the up-stream side and 500 meters on the down-stream side;
- (ii) There shall be maintained an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the Director or any officer authorized by him;
- (iii) The maximum depth of mining in the river-bed shall not exceed three meters measured from the un-mined bed level at any point in time with proper bench formation;
- (iv) Mining shall be restricted within the central 3/4th width of the river/ rivulet;

The above said conditions have been decided after detailed discussions and recommendations of the PWD (B & R) department and Irrigation department, Haryana.

As the mining in river bed remains restricted in the Central 3/4th part of the river bed, the area left on both side of the river bank not only ensures the safety of banks (bank cutting due to water stream) but also ensures that in the central part of river, water stream flows smoothly during rains and process of river meandering does not occur.

The light weight excavator/JCBs are being deployed to remove mineral from river bed up to maximum depth of 03-meter layer from general level of the bed. The mining in the river bed are undertaken in mechanized manner. At times the RQPs do refers the excavation in river bed mining through excavators as "Semi Mechanized Mining".

The mineral excavated is directly loaded in the vehicles/dumpers and the vehicle owners and drivers take away the mineral directly to the stone crushers or screening plants or consumers. In certain cases, mineral concession holders stacks mineral on the river bank in case are not able to sell the material on actual mining itself.

During last 10 years the production of minor minerals excavated are tabulated as below: -

Year	Boulder/Gravel/ Bajri/ Sand
2011-2012	NIL
2012-2013	NIL
2013-2014	NIL
2014-2015	NIL
2015-2016	NIL
2016-2017	680956
2017-2018	1243280
2018-2019	2277440
2019-2020	1033750
2020-2021	1193505

Total	64,28,931
Average Per yr.	642893

Sr. No.	Mining Unit/Block Location	Area (In Hect.)	Period (In yrs)	Name of Minor Minerals	Status of Granted of Mineral Concession	Annual Capacity as per EC/Mining Plant/TOR in lakh MT.	Present Status
River bed Mining Areas							
1	Charnia	30.55	10	Boulder, Gravel, Sand	Yes	1400000 MT	Running
2	Rattewali	45.00	7	Boulder, Gravel, Sand	Yes	1900000 MT	Running
3	Sukhdarshanpur	37.38	7	Boulder, Gravel, Sand	Yes	1450000 MT	Running
4	Mandlai-2	10.60	7	Boulder, Gravel, Sand	No	-	Not Working/EC/CTO awaited
5	Naggal Block B-15	27.99	10	Boulder, Gravel, Sand	No	-	Not Working/EC/CTO awaited
6	Gorkhnath	12.94	7	Boulder, Gravel, Sand	No	582300 MT	Terminated
7	Kiratpur	13.40	7	Boulder, Gravel, Sand	No	603000 MT	Terminated
8	Gobindpur	28.40	10	Boulder, Gravel, Sand	No	1278000 MT	Terminated
9	Narainpur	32.63	7	Boulder, Gravel, Sand	No	1468350 MT	Revoked
10	Mandlai	13.20	10	Boulder, Gravel, Sand	No	792000 MT	Revoked
11	Manak Tabra	14.48	9	Boulder, Gravel, Sand	No	675390 MT	Terminated
12	Karanpur	17.05	9	Boulder, Gravel, Sand	No	360000 MT	Terminated
13	Kot	31.59	10	Boulder, Gravel, Sand	No	-	Terminated
14	Shamtoo-2	45.00	10	Boulder, Gravel, Sand	No	-	Terminated
15	Natwal	48.18	9	Boulder, Gravel, Sand	No	-	Terminated
16	Shamtoo-1	46.50	9	Boulder, Gravel, Sand	No	-	Terminated
17	Basawal Block	20.00	9	Boulder, Gravel, Sand	No	-	Terminated
18	Khatauli Block	24.15	9	Boulder, Gravel, Sand	No	-	Terminated

Mining Activity Management plan

a. Current Status related to Mining Activity Management

Details of Data Requirement Existing Mining operations

Type of Mining Activity Name of mines -

1. Tirupati Roadways, Vill. Rattewali, Distt. Panchkula.—Boulder Sand and Gravel Mine.
2. Shri Ganesh Royalty Company, Boulder Gravels and Sand Mining at Charnia Block/PKL-4, Vill. Karanpur, Johluwala, Distt. Panchkula — Boulder Sand and Gravel Mine.
3. Shiv Enterprises, Khasra No. 55 min., 48 min., Sukhdarshanpur Block, Vill. Shyamtoo and Sukhdarshanpur, Distt. Panchkula —Boulder Sand and Gravel Mine
4. Shree Balaji Mines and Minerals, Village Mandlai, Distt. Panchkula — Boulder Sand and Gravel Mine
5. R.M. Secure Services Pvt. Ltd., Alipur, Barwala, Panchkula—Sand Mine.

No of licenced Mining operations

In the District 05

% Area covered under mining in

the District 15 %

Area of Sand Mining 31.08 hectares

Area of sand Mining River Bed

b. Identification of gaps and action plan:

Sr.

No. Action points Gaps and Action Plan Time line for completion

1. Monitoring of Mining activity District level Task force committee in place to monitor mining activity in district=No gap. NA
2. Inventory of illegal mining if any mining Through surveillance, patrolling and enforcement.
District Level task Force is constituted for Control of illegal mining activity=No gap. NA.
3. Environment compliance by Mining industry 06 monthly compliance report reviewed and inspection of mines done to verify the conditions of EC granted.=No gap. NA

Chapter 13

Noise Pollution Management

Introduction of Noise Pollution Management

Noise pollution is generally defined as regular exposure to elevated sound levels that may lead to adverse effects in humans or other living organisms. According to the World Health Organization, sound levels less than 75 dB are not damaging to living organisms, regardless of how long or consistent the exposure is.

Main Sources of Noise Pollution are:

- Traffic noise.
- Industrial noise.
- Construction sites.

: Status of Noise Pollution Management in the District (Graphical representation may be included)

No.	Action Areas	Details of Data Requirement	Measurable Outcome	Please enter Measurable Outcome for District
NP1	Availability Monitoring equipment			Available with HSPCB
NP1a		No. of noise measuring devices with district administration	[Nos]/[None]	None
NP1b		No. of noise measuring devices with SPCBs	[Nos]/[None]	1
NP2	Capability to conduct noise level monitoring by State agency/District authorities			
NP2a		capability to conduct noise level monitoring by State agency/District authorities	[Available]/ [Not available]	Available with HSPCB
NP2	Management of Noise related complaints			Available with HSPCB
NP2a		No of complaints received on noise pollution in last 1year	[Nos]	5
NP2b		No of complaints redressed	[Nos]	5
NP3	Compliance to ambient noise standards			

NP3a		Implementation of Ambient noise standards in residential and silent zones	[Regular Activity]/ [Occasional]/ [Never]	Regular Activity
NP3b		Noise monitoring study in district	[carried out]/[not carried out]	Carried out during Deepawali festival
NP3c		Sign boards in towns and cities in silent zones	[Installed] / [Partial] / [Not Installed]	Installed

Strategies for Noise Pollution Management(Attached)

Sr. No.	Action Point	Timeline	Implementing Department /Agency
1	Impose restrictions in traffic hours	Regular Activities	DSP Traffic Police
2	To restrict the vehicular honking	Regular Activities	DSP Traffic Police
3	Impose restrictions of operating hours for various Urban functional zones	Regular Activities	Concerned SDM
4	Establish suitable buffer zones around residential are as in order to Insulate from noise emanating areas such as commercial, industrial, road, railway traffic, etc.	Immediate	Development Authority
5	Impose restriction on any sound creating activities in the silent zone	Regular Activities	Dist. Admin.
6	Enforce the Noise Pollution(Regulation and Control) Rules, 2000	Immediate	Concerned SDM, concerned DSP & concerned RO HSPCB
7	Aloud speaker or a public address system shall not be used except after Obtaining written permission from the authority.	Regular Activities	Dist. Admin.

Conclusion & Recommendations

- i. HSPCB may under take snap shot monitoring of Noise Level in a phased manner covering all cities and towns for wider coverage.
- ii. Surveillance squads/task forces may be setup at Ward and Circle level to prohibit DG & other Noise activities during function sand parties..

Noise Pollution Management plan

a. Current Status related to Noise Pollution Management

Details of Data Requirement	Measurable Outcome
No. of noise measuring devices available with various agencies in district	<ol style="list-style-type: none"> 1. 01 no. noise monitoring device-HSPCB. 2. 10 nos. noise monitoring devices being procured by Police department. (Target date 31/12/21)

b. Identification of gaps and action plan:

Sr. No.	Action points	Gaps and Action Plan	Timeline for completion of action plan
1.	Availability of Sound/Noise Level Meters.	<ol style="list-style-type: none"> 1. 01 no. noise monitoring device-HSPCB. 2. 10 nos. noise monitoring devices being procured by Police department. (Target date 31/12/21) 	NA. No gap.
2.	Ambient Noise Level monitoring.	ULBs shall ensure that ambient sound levels comply with notified standards for residential, sensitive Anaction.Apartfromportableanalyzers,fixedambien tnoiselevelmonitoringstationsmaybe installed in major cities and towns, such stations may be installed a by ULBs and SPCB/PCC.	31/12/21
3.	Sign boards in Noise zones	District administration to ensure that adequate number of sign boards installed at sensitive zones in towns / cities in towns and cities. An Action Plan may be prepared by district authority.	31/12/21
4.	Complaint redressing system	Complaints being dealt through online CM window portal, complaints received through hard copy and through e-mail. Further complaints are also dealt through PM portal and Social media Grievances portal.	NA. No Gap.

THE ENVIRONMENTAL IMPACT OF POULTRY

The main aim of the animal production is to produce animal proteins of high value in a sustainable manner. However, sustainability is not easy to define. It is a complex phenomenon, which includes integration of economic, social, and environmental dimensions of the certain production, within a given socio-economic context. In this respect, poultry production meets first two dimensions– it provides affordable dietary item for consumers and profit for producers. It additionally generates up and downstream investment opportunities and it contributes to the development of the local economy. However, with the concentration of poultry production and increase in operation size, considerable environmental problems have occurred. During the last several decades, the environmental impact of the poultry production has received an ever-growing attention. Nowadays, producers are under heavy pressure, from different fronts, to minimize the impact of their production on the environment and to adopt welfare friendly practices. The major challenges which will affect animal production in the future, will likely deal with the environment.

Introduction

During the last several decades, sustainable development has become one of the most important developmental priorities worldwide. Sustainable development is possible only if an integration of three different dimensions - economic, social and environmental is achieved. As poultry production provides an affordable dietary item of a good quality for consumers and profit for producers. Additionally it generates up and downstream investment opportunities and it contributes to the development of the local economy. Therefore, one can say that it clearly meets first two dimensions (economic and social) of sustainability. However, intensification, concentration, and an increase in operation size, have been coupled with some detrimental environmental consequences. Poultry is increasingly seen as a production that is not environmentally friendly and treated either as a pressure, or as a driving force.

As a result, producers are nowadays under intense pressure, from different fronts, to minimize the impact of their production on environment.

Poultry production as a polluter

Driven by economic efficiency, poultry production, like everything else in market economy, has been significantly developed and changed over the last several decades.

Global poultry population has grown manifolds and due to the increase in operational size, the concentration, and the intensification of poultry production, its off-site impacts have been considerably increased. Consequently, the public's perception of farmers is changing, and the public is less and less tolerant to those negative impacts. As a result, environmental regulation is increasingly developing and poultry producers have to comply with it. What always should be bear in mind is that people, not animals, are the ones who pollute, ignoring environmental constraints when managing their operations. Poultry production adversely affects the environment in numerous ways –through poor management of manure and litter, waste streams from processing plants (blood, bones, feathers, etc), birds' carcasses, dust, insects, odour, etc.

Furthermore, intensive poultry production is held responsible for the emission of green house gasses, acidification, and eutrophication.

The environmental impact of poultry production depends on numerous factors, among which are farm size, production system, diet composition, type of bedding used, etc. It is well known that, if properly managed, waste generated in the poultry production, especially manure and litter, could be a valuable resource, i.e. it could be used as fertilizer, soil conditioner, animal feed, or energy source.

However, thanks to the large amount of waste generated (which exceed crop fertilizer requirements), content of harmful elements (such as heavy metals, pesticide residues, pathogens, pharmaceuticals, etc.), and/or unwisely management, poultry waste is often polluter instead of the valuable resource.

Thus, producers have to search for environmentally sound ways of waste disposal, which inevitably affects their income. Interest in using poultry manure and litter as a soil fertilizer for crop production has emerged in parallel with rising interest in alternative agricultural production systems,. Poultry litter contains significant amounts of nutrients essential for plant growth. Its chemical composition can vary widely depending on the type and category of poultry, type and quantity of bedding used, environmental conditions in the facility, feed source, handling of manure, etc.

From an ecological viewpoint, organic amendments offer some advantages if compared to mineral fertilizers. In addition to nutrient supply, they improve soil structure, control erosion, and improve water-holding capacity. However, there are also some disadvantages, as **468**

unpleasant odours, high content of inorganic phosphorus, which exceeds the needs of plants, release of volatile and reactive organic compounds into the air, etc. The alternative use of poultry waste, as animal feed or as a source of energy, is rather limited due to contaminants and high moisture content. Farmers have to be aware of all these advantages and disadvantages in order to be able to find and adopt acceptable and sustainable solutions.

Conclusion

Since environmental burdens depend, to great extent, on chosen management practices, one can say that poultry industry will not threaten the environment only if both economically and environmentally acceptable management practices are applied. Unfortunately, it is still not the case and there are still many issues, related to environmental impact of poultry production, which have to be solved in the future (together with health and animal welfare issues). Unfortunately, existing scientific knowledge is sufficient for problem recognition, however it is still not capable of presenting a final solution.

Farmers must be aware of ways in which their production threatens environment. Only thus, they will be able to find and adopt solutions that will provide both profitability and sustainability of poultry production

Sr. No.	Action Point	Timeline	Implementing Department/Agency
1	Compliance of poultry farms to Environment department notification dated 29.05.2013	Regular Activities	HSPCB and Animal Husbandry department
2	Policy for covering of all Poultry Farms in the consent management of HSPCB (more than 5000 birds)	12 months	HSPCB

E Vehicle Policy

The vehicular population in Haryana has been increasing rapidly over the last decade. The vehicles driven on traditional fuels are the major source of environmental pollution and thereby are health hazards. Hence, this necessitates the exploration of alternative energy sources.

Electric vehicles are gaining popularity across the globe. Due to fast depletion of fossil fuels, the automotive industry is also shifting from traditional fuel based technology to eco-friendly technologies. Govt. of India has launched The Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME Scheme) in 2015, under National Electric Mobility Mission Plan (NEMMP) with an aim to promote eco-friendly vehicles in the country. In this backdrop, it becomes imperative for the state government to come up with an electric vehicle policy.

The Haryana Electric Vehicle Policy 2021 (draft) focuses on following aspects of EV sector:

1. Manufacturing of Electric Vehicles, major components of EVs, batteries for EVs and charging infrastructure.
2. Infrastructure Augmentation for supporting EV adoption among citizens.
3. Fiscal Incentives to reduce cost of business.
4. Human Capital development.
5. Strengthening EV Connectivity.
6. Encourage and incentivize EV manufacturing and promote green automotive technology through policy interventions. This policy places a special emphasis on the creation of end-to-end ecosystem for E-Mobility in the state and envisages at harnessing Haryana's inherent strength in automotive manufacturing sector for exploring opportunities in the EV manufacturing.

Objectives

1. To promote clean transportation by promotion of use of Electric Vehicles (EVs) in the State.
2. To encourage purchase and use of Electric Vehicles by giving incentives including exemptions in taxes, permit fee etc.
3. To increase feasibility of use of Electric Vehicles by setting up of a widespread and accessible charging infrastructure.
4. To make Haryana a global hub for development and manufacturing of Electric Vehicles (EVs), major components of EVs, batteries for EVs and charging infrastructure.
5. To attract manufacturers to set up their electric vehicles manufacturing units in the State.
6. To generate employment opportunities in the State.

Rural Environment Plan

1.	Population Rural	-	1,81,452
1.	Total No. Blocks	-	04
a.	Total No. of Gram Panchayats	-	128
a)	Total No. of Villages	-	165
I.	Total No. of Households	-	33321

SOLID WASTE MANAGEMENT

Total No. of Sheds	Completed	Functional	Completion Date
62	57 (5 sites under land dispute)	35	31.12.2021

Solid Waste generated–21TPD

SWM Sheds

Sr. No.	Block	Barwala	Morni	Pinjore	RaipurRani
1	Barwala-13 Morni- 01	Batour	Thapli	Garidan	RaipurRani
2	Pinjore-09 RaipurRani-12	Shyamtoo		Ramnagar	Mouli
3	Total-35	Sultanpur		Paploha	Natwal
4		Sunderpur		Goraknath	Hangola
5		Bhagwanpur		Chiken	Haripur

6		Manaktabra		Magniwala	Kakrali
7		Nayagaon		Kedarpur	Pyarewala
8		Kherwali Parwala		Ganespur Bhorian	Tibbi Majra
9		Bhareli		Kharkua	Kheri
10		Trilokpur			Bagwala
11		Tibbi			Golpura
12		Rehore			Tabar
13		Rattenwali			

COMPOST PITS







DOOR TO DOOR COLLECTION



SEGREGATION





SOLID WASTE MANAGEMENT SHED



LIQUID WASTE MANAGEMENT

Total	Completed	Functional	In Progress/Completion Date
32	27	27	05 Ponds (31.12.2021)

05 Pond System- Bhagwanpur & Batour Villages, Barwala.

03 Pond System- Natwal & Manaktabra Villages, RaipurRani.

LIQUID WASTE MANAGEMENT PONDS

Sr. No.	Block		Barwala	Morni	Pinjore	Raipur Rani
	1	Barwala	09	Batour	Kudana	Garidan
Morni		03				
Pinjore		10				
Raipur Rani		05				
Total		27				
2			Bhagwanpur	Bhoj Rajpura	Ram Nagar	Natwal
3			Manaktabra	Uttron	Paploha	Pyarewala
4			Bhrouli		Goraknath	Tibbi Majra
5			Trilokpur		Chiken	Kheri
6			Nayagoan		Magniwala	
7			Kherwali Parwala		Kedarpur Nandpur	
8			Dhandharu		Ganeshpur	
					Bhoriyan	

9		Rehore		Kharkua	
10				Mallaha	

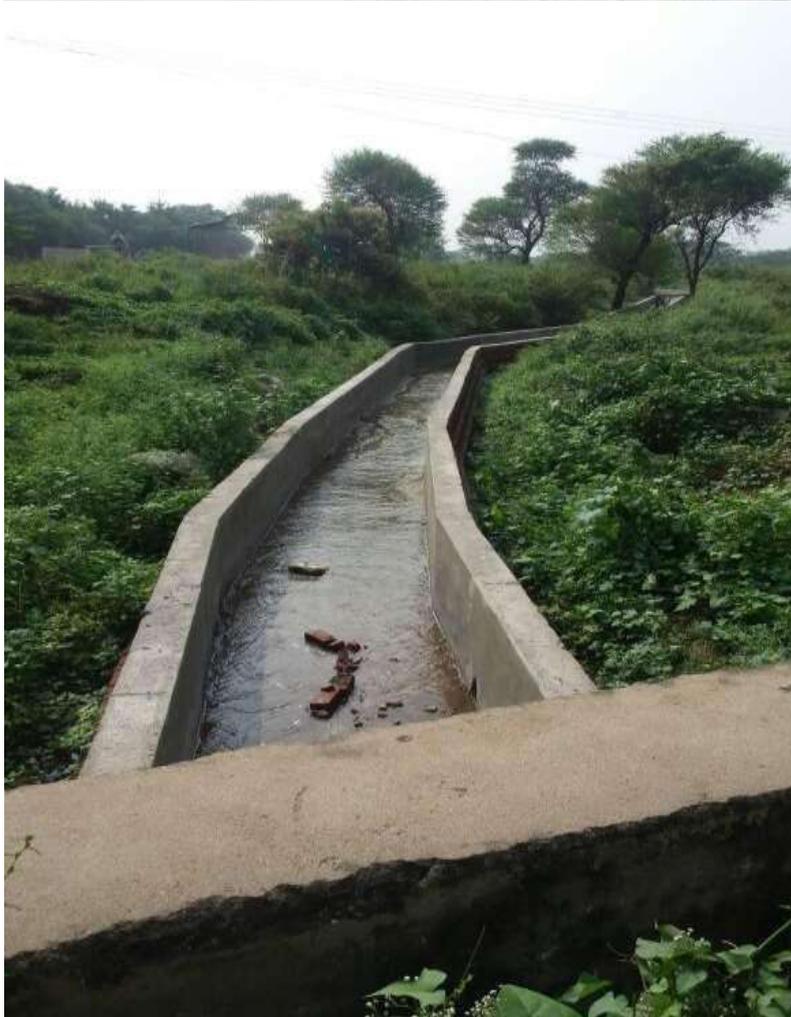
05 POND SYSTEM IN VILLAGE BATOUR BARWALA PANCHKULA

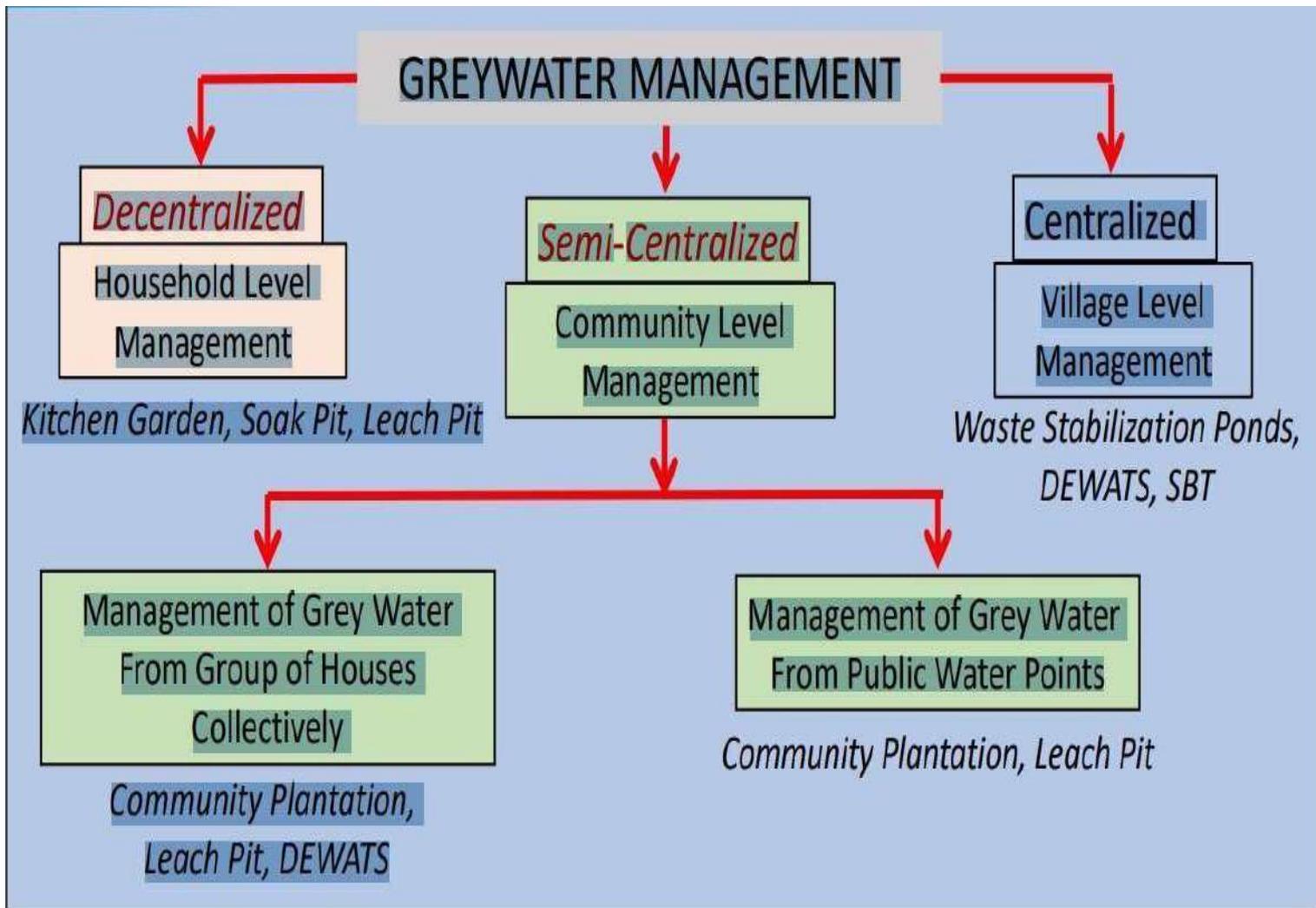


03 POND SYSTEM IN VILLAGE MANAKTABRA BARWALA PANCHKULA



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PLASTIC WASTE MANAGEMENT

Plastic waste generated – 7 TPD

The firm- M/s Singla Plastic Industries, Patiala has been engaged by the Development & Panchayats Department for collecting raw waste plastic. The minimum lot of collection of the plastic mix is 3.00 MT.

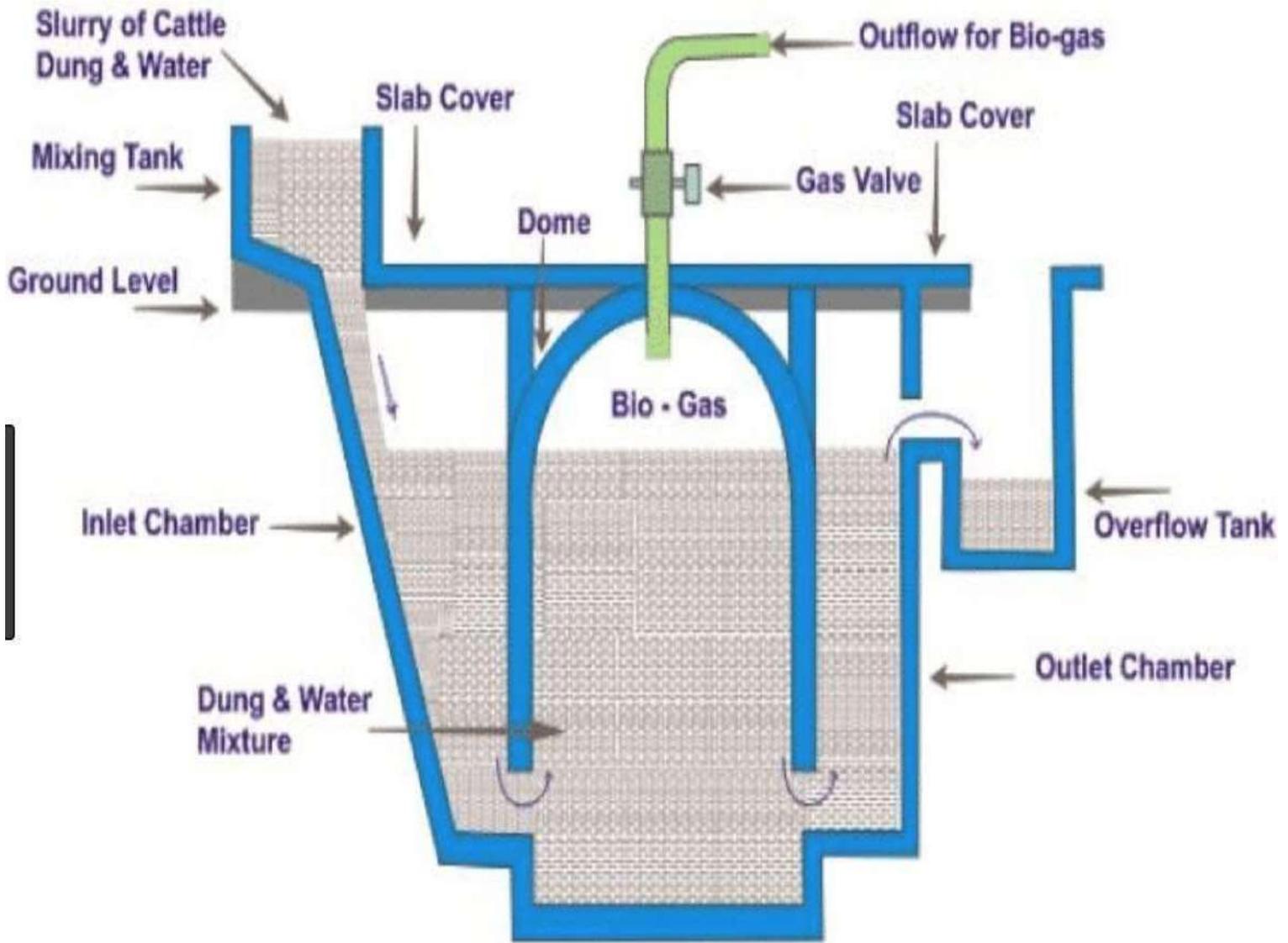




GOBARDHAN

1. Village	-	Rehore
1. Total Households	-	256
(i) Total Population	-	1390
- Gram Panchayat Land	-	1 Acre
1. Biogas generation Capacity	-	400 cum/day
2. Biogas Generation	-	160 kg/day
3. Live Stock in Village	-	899
(a) Bio-fertiliser Production	-	2.10MT/day

Administrative approval has been accorded to the XEN,PR, Panchkula.



PLANTATION UNDER MGNREGS

S.No.	Block Name	Panchayat Name	No. of Saplings Sanctioned	No. of Saplings Planted till date	Expected Date of Completion
1	Pinjore	Kona	12100	11000	August 2021
2	Morni	Manaktabra	12100	Nil	
3	Pinjore	Chicken	30250	Nil	
4	Pinjore	Mallah	24200	Nil	
5	Barwala	Bunga	12100	Nil	
6	Morni	Bhoj Jabyal/Ramsar	12100	0	
7	Morni	Uttron/Saryon	12100	0	
8	Morni	Darda/Churi	36300	10500	
			151250	21500	

Nursery Raising under MGNREGS

S.No.	Block Name	Panchayat Name	No of Plants /P. Bags Sanctioned	No of Plants Planted/P. Bags Prepared till date	Expected Date of Completion
1	Pinjore	Kona	50000	Nil	Sep. 2021
2	Pinjore	Chiken	30000	30000	
3	Pinjore	Mallah	24000	24000	
4	Barwala	Bunga	50000	50000	
5	Barwala	Mankatbra	30000	30000	
	Total		184000	134000	

JAL SHAKTI ABHIYAAN

Soak Pits					
		Target	Completed	In Progress	Target Date of Completion
1	Pinjore	298	59	8	30-11-2021
2	Barwala	192	70	5	30-11-2021
3	Morni	211	44	16	30-11-2021
4	Raipur Rani	356	68	57	30-11-2021
		1057	241	86	30-11-2021

Renovation of Traditional Water Bodies/Ponds					
		Target	Completed	In Progress	Target Date of Completion
1	Pinjore	5	0	0	30-11-2021
2	Barwala	9	2	4	30-11-2021
3	Morni	7	0	0	30-11-2021
4	Raipur Rani	7	2	2	30-11-2021
		28	4	6	30-11-2021

Roof Top Rain Water Harvesting Structures					
		Target	Completed	In Progress	Target Date of Completion
1	Pinjore	1	1	0	30-11-2021
2	Barwala	1	0	1	30-11-2021
3	Morni	1	0	0	30-11-2021
4	Raipur Rani	2	0	0	30-11-2021
		5	1	1	30-11-2021

Plantation under Jal Shakti Abhiyan

Target: 128000

Achievement: 18600

Target Date of Completion: 31-8-2021

Electric Animal Crematorium

Animal crematorium is being set up in Khairwali Parwala Village, Block Barwala.

Executive Engineer will execute this work and administrative approval for the purpose has been accorded.

The official Landline No. of ZP Office has been declared as Helpline No.

Conclusion

Efforts have been made to make a District Environmental Plan in line with the model District Environment Plan of CPCB covering the topics given therein. The users of this Plan should- bear in mind that this plan is not a- substitute to Govt. rules and regulations but a skeletal framework with action points and roles and responsibilities of stake holders. These are only suggestive but not exhaustive.