

Annual Report
on
Biomedical Waste Management for
the year 2023



Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change)
Parivesh Bhawan, East Arjun Nagar, Delhi – 110032

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1 Introduction

1.1 Biomedical Waste Management Rules, 2016

Government of India has notified Biomedical Waste Management Rules, 2016 (BMWM Rules, 2016) under the Environment (Protection) Act, 1986 which stipulates provision for treatment and disposal of biomedical waste in an environmentally sound manner and accordingly, biomedical waste is managed in line with the said Rules in the Country. The Rules are applicable to all persons who generate, collect, receive, store, transport, treat, dispose, or handle biomedical waste in any form.

As per the said Rules, the Health Care Facilities (HCFs) are required to handover the segregated biomedical waste to Common Biomedical Waste Treatment Facilities (CBWTFs) for further treatment and disposal.

The Rules stipulates that HCFs shall hand over segregated biomedical waste as per colour coded system prescribed under Schedule -I of BMWM Rules, 2016 in four categories i.e. Yellow category, red category, blue category and white category to CBWTF for treatment and final disposal in accordance with Schedule I and in compliance with the standards prescribed under Schedule-II of BMWM Rules, 2016.

BMWM Rules, 2016 have been amended on 16.03.2018, 19.02.2019 and 10.05.2019 to strengthen the framework for biomedical waste segregation, treatment, and disposal. The key changes in the amendments are in respect of efficient segregation, treatment & disposal methods for biomedical waste, reporting of annual report information through Form IV A and regulations to ensure proper management of liquid waste by small healthcare units (less than ten beds).

The BMWM Rules, 2016 stipulates duties of Occupiers, Operator of CBWTFs as well as duties for authorities' vis-a-vis Ministry of Environment Forest & Climate Change (MoEF & CC), Ministry of Health & Family Welfare (MoHFW), Ministry of Defense (MoD), Central Pollution Control Board (CPCB), State Government of Health (GoH), State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) and Municipalities or Urban Local Bodies (ULBs). As per the Rules, SPCB/PCC is the prescribed authority for implementation of BMWM Rules, 2016, in respective State/UT.

1.2 Annual Report on Biomedical Waste Management

As per BMWM Rules, 2016 every occupier and operator of CBWTF shall submit the annual report to the prescribed authority i.e. SPCBs/PCCs on or before the 30th June of every year for the period of January to December of the preceding calendar year. Thereafter, the prescribed authority shall compile, review and analyze the information received and send to Central Pollution Control Board (CPCB) on or before the 31st July of every year. The Annual Reports shall also be available online on the websites of Occupiers, SPCB/PCC and CPCB. The Annual Report provides the information regarding the biomedical waste generation, collection,

treatment, biomedical waste sent to recyclers after treatment, trainings conducted on biomedical waste management, no. of violators & action taken against violators of BMWM Rules, 2016, etc. These details provided through the Annual Report help in analyzing status of the biomedical waste management across the country, identifying the gaps in the biomedical waste management and addressing the shortcoming in the upcoming year for effective management of biomedical waste and implementation of BMWM Rules, 2016.

1.3 Status of Annual Report 2023 and Gaps identified

All States/UTs and Director General of Armed Force Research (DGAFMS) have submitted the annual reports information on biomedical waste management for the year 2023.

States/UTs namely Andaman Nicobar, Arunachal Pradesh, Andhra Pradesh, Chhattisgarh, Jharkhand, Jammu & Kashmir (J & K), Kerala, Ladakh, Manipur, Maharashtra, Karnataka, Tripura, Uttarakhand and Uttar Pradesh submitted the annual report information after July, 2024. However, other States submitted Annual Report before 31st July 2024.

The following common gaps/discrepancies were observed in the annual report information received from SPCBs/PCCs which were communicated to respective States/UTs for clarification and rectification.

- i) HCFs are operational without authorization.
- ii) HCFs are still using captive treatment facilities including deep burial for disposal of biomedical waste.
- iii) Gap in generation and treatment of bio-medical waste.
- iv) Effluent Treatment Plant is not installed by all bedded HCFs.

The response received from SPCBs/PCCs have been incorporated in Annual Report.

1.4 Brief Summary of Bio-medical Waste Management in India

There are 4,34,966 no. of HCFs in the country, out of which 1,37,132 no. of HCFs are bedded (total beds : 30,41,937) and 2,97,584 no. of HCFs are non-bedded. About 743 tons/day of biomedical waste was generated in the country, out of which 694 tons/day was treated and disposed-off through CBWTFs and Captive Treatment Facilities (CTFs). 3,10,606 no. of HCFs i.e. around 71 % of total HCFs utilize CBWTFs for the collection, treatment, & disposal of biomedical waste, while 15,870 no. i.e. around 3.6 % of HCFs have captive treatment facilities for the treatment and disposal of biomedical waste. 28.59 % of HCF reported neither using CBWTF nor CTF. Some of the States/UTs submitted that the gap between generation & treatment and the HCFs which are neither using CBWTF nor using CTF, is due to non-submission of information regarding deep burials being used by HCFs. There are 234 no. of CBWTFs in operation and 30 no. of CBWTFs are under construction. **Annexure-I** provide details of biomedical waste management in State/UTs. Brief of biomedical waste scenario of the Country is given below:

No. of HCFs	4,34,966
No. of bedded HCFs	1,37,132
No. of non-bedded HCFs	2,97,584
No. of beds	30,41,937
No. of CBWTFs	234* + 30**
No. of HCFs obtained authorization	1,44,905
No. of HCFs utilizing CBWTFs	3,10,606
No. of HCFs having Captive Treatment Facilities	15,870
No. of Captive Incinerators Operated by HCFs	69
Quantity of BMW generated in tons/day	743
Quantity of BMW treated in tons/day	694
No. of HCFs/CBWTFs violated BMW Rules	20,081
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	8082

Note: (i) * - CBWTFs in operation (ii) ** - CBWTFs under construction

1.5 Comparison of Biomedical Waste Management between year 2022 and 2023

According to the annual report for 2023, around 743 tons/day of biomedical waste is generated, surpassing the 705 tons/day of biomedical waste generated in year 2022. This marks a significant increase in waste generation. This represents a significant rise in waste generation, which can be attributed to the 9.4% increase in the number of healthcare facilities in 2023 compared to the previous year.

The report also highlights a rise in the number of CBWTFs, increasing from 218 in 2022 to 234 in 2023, facilitating the treatment and disposal of biomedical waste. Alongside this growth, there was a decline in the number of captive treatment facilities, which decreased from 17,490 to 15,870, and a reduction in the number of captive incinerators, which is decreased from 153 to 69. Captive treatment facilities are mainly found in remote and hilly areas, where access to CBWTFs is limited.

Detailed comparison on biomedical waste management scenario during 2022 and 2023 is mentioned in Table 1 below:

Table 1: Comparative BMWWM scenario in 2022 and 2023

Particulars	Year 2022	Year 2023
No. of HCFs	3,93,939	4,34,966
No. of bedded HCFs	1,25,259	1,37,132
No. of non-bedded HCFs	2,67,155	2,97,584
No. of beds	24,65,063	30,41,937

No. of CBWTFs	218* + 34**	234* + 30**
No. of HCFs utilizing CBWTF	3,10,809	3,10,606
No. of HCFs obtained Authorization	1,56,637	1,44,905
No. of HCFs having Captive Treatment Facilities	17,490	15,870
No. of Captive Incinerators Operated by HCFs	153	69
Quantity of BMW generated (Tons/day)	705	743
Quantity of BMW treated (Tons/day)	645	694
No. of HCFs/CBWTFs violated BMWM Rules, 2016	22,306	20,081
No. of Show-cause notices/Directions issued to defaulter HCFs	8291	8,082

Note: (i) * - CBWTFs in operation (ii) ** - CBWTFs under construction

2 Status of Healthcare Facility

2.1 Availability of Healthcare Facilities

As per BMWM Rules, 2016, Health Care Facility means a place where diagnosis, treatment or immunization of human beings or animals is provided irrespective of type, size of health treatment system, and research activity pertaining thereto. It includes bedded and non-bedded HCFs.

As per the annual report information received from SPCBs and PCCs for the year 2023, there are 4,34,966 no. of HCFs, out of which 1,37,132 no. of HCFs are bedded and 2,97,584 no. of HCFs are non-bedded. Detail of number of HCFs in States/UTs and DGAFMS are given in fig. 1 and 2. In case of States, Maharashtra has the highest number of HCFs followed by Karnataka and Uttar Pradesh. Arunachal Pradesh has the lowest number of HCFs followed by Sikkim and Mizoram. In case of Union territories, Delhi has the highest number of HCFs and the lowest number of HCFs are present in Lakshadweep. Number of HCFs generally depends on the geographical area of the State/UT, population density, availability of the health workers, financial restrains of State, workload of healthcare facility, etc. The figure no. 1 & 2 also depict the same.

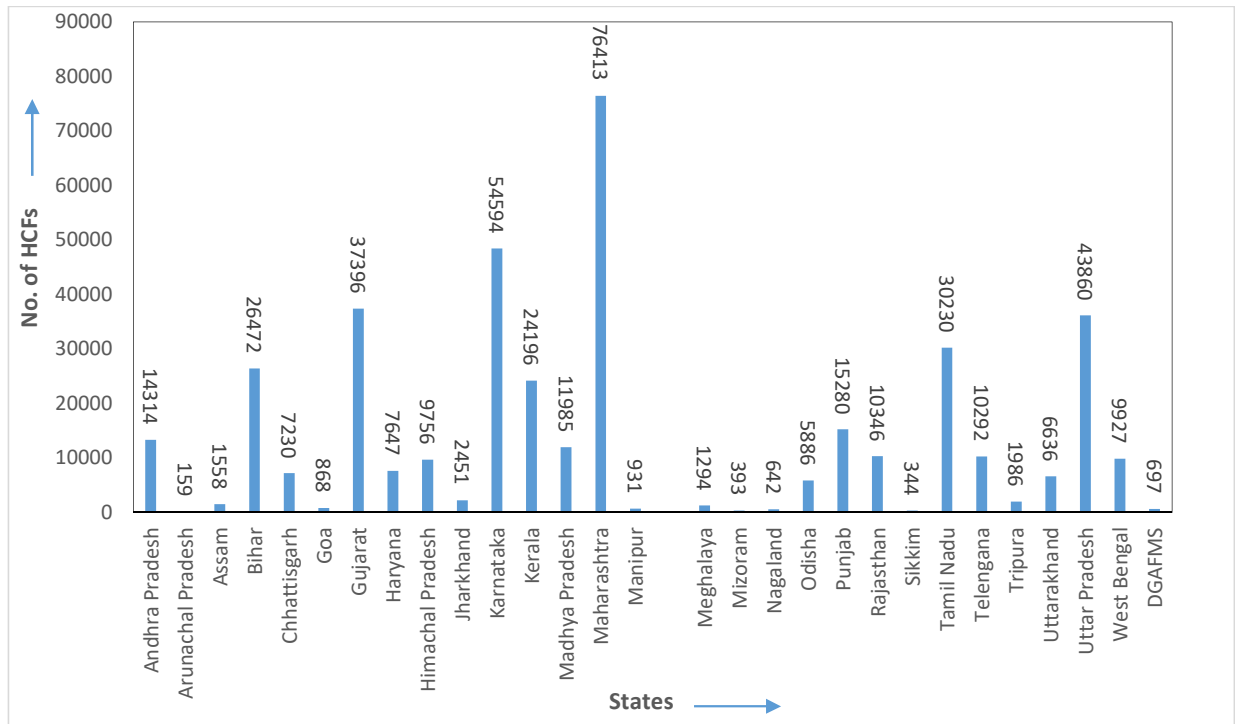


Figure 1: No. of HCFs in States & DGAFMS

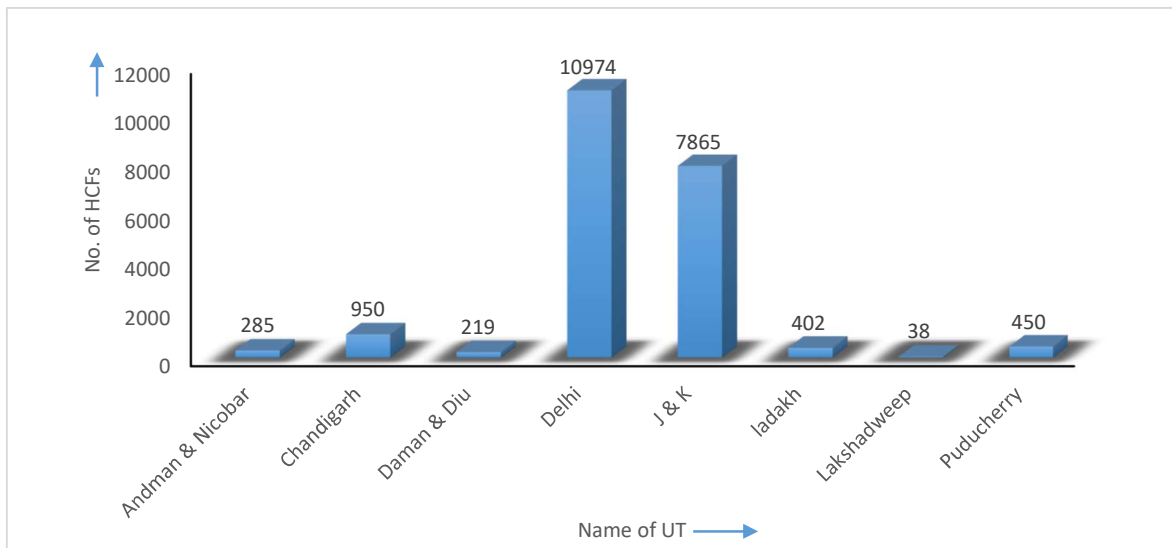


Figure 2: No. of HCFs in UTs

2.2 Authorization of Healthcare Facilities

Authorization is a process to bring HCFs and CBWTFs under the purview of BMW Rules, 2016. BMW Rules, 2016 stipulate that every healthcare facility (bedded & non bedded) is required to obtain authorization from concerned SPCB/PCC. It has been observed that some

of the HCFs are not yet authorized which is a violation of BMWM Rules, 2016. SPCB/PCC should ensure authorization of every HCFs under BMWM Rules, 2016 and take action against HCFs which are operational without having authorization.

As per the Annual Report information, in States/UTs namely Chandigarh, DD & DNH, Goa, Lakshadweep, Manipur, Mizoram, Nagaland, Puducherry, Sikkim, Tamil Nadu, Tripura, West Bengal and DGAFMS., 100 % HCFs are authorized.

HCFs are in operation without authorization in the States/UTs namely Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, J & K, Karnataka, Kerala, Ladakh, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Rajasthan, Telangana, Uttarakhand and Uttar Pradesh. Some SPCBs/PCCs submitted that non-bedded HCFs like small clinics, dispensaries etc. never applied for authorization and list of such HCFs are forwarded to State Health Departments to direct these HCFs to obtain authorization.

As informed by SPCBs/PCCs, efforts are being made to bring remaining HCFs under the ambit of authorization as inventorization and authorization is a continuous process. Status of authorization of HCFs in States/UTs are given in fig. 3 & 4.

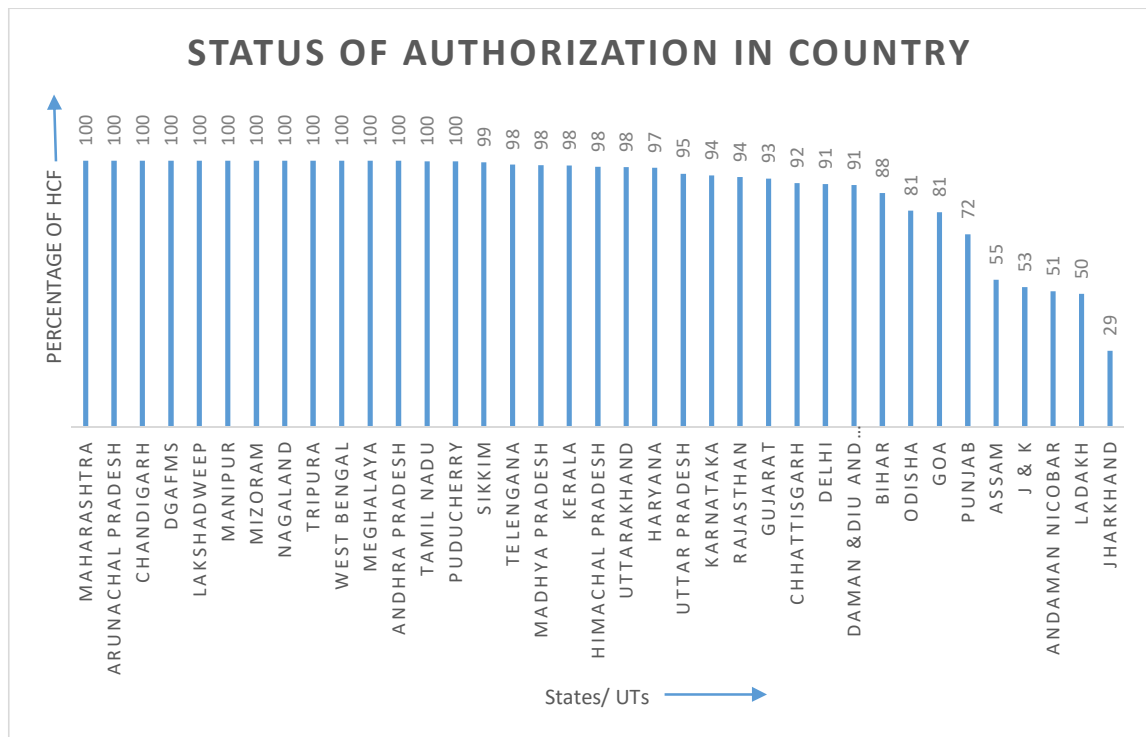


Figure 3: Percentage of HCFs authorized during year 2023 in States/UTs

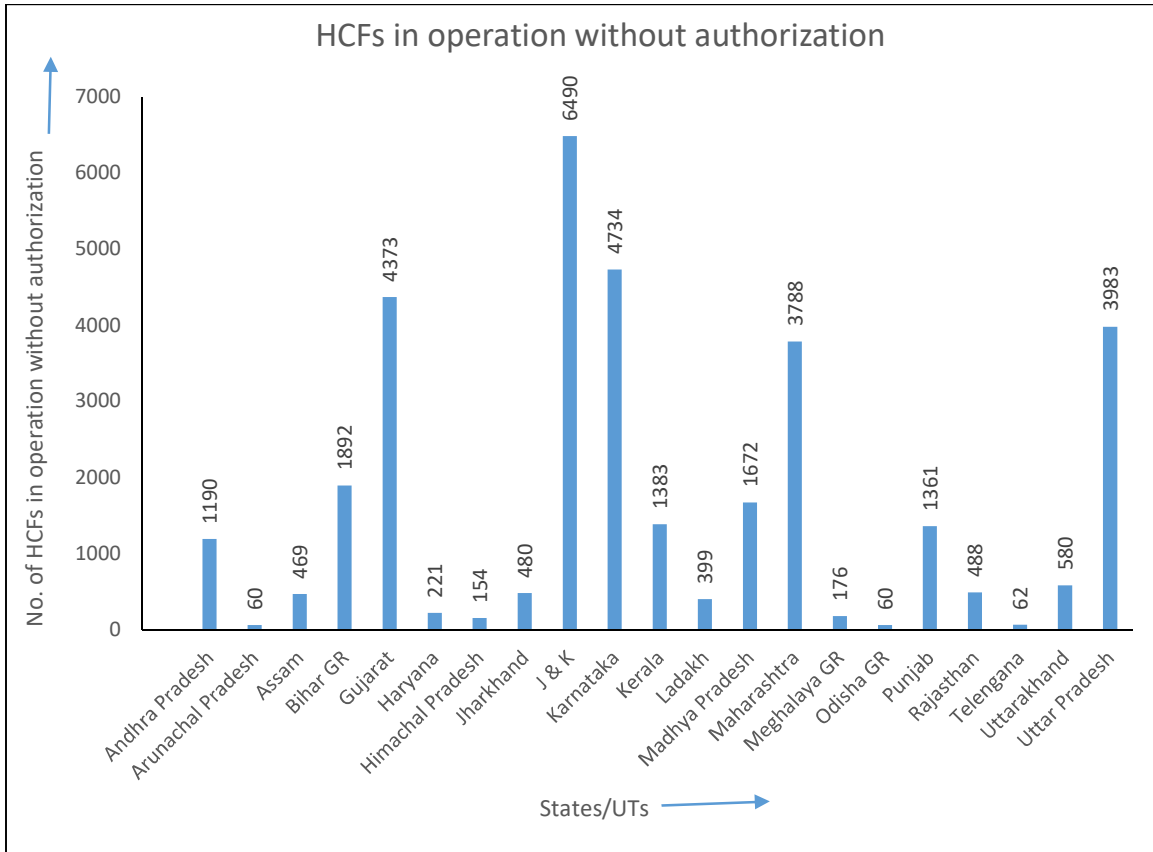


Figure 4: Unauthorized HCFs in operation in States/UTs

3 Status of Biomedical Waste Generation & Treatment

3.1 Biomedical Waste Generation

Bio-medical waste means any waste which is generated during the diagnosis, treatment or immunization of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule I of BMW Rules, 2016. As reported by SPCBs/PCCs, about 743 tons/day of biomedical waste was generated during the year 2023 by 4,34,966 numbers of HCFs. The biomedical waste generation generally depends on the number of healthcare facilities present in the State, population density, type of healthcare facility, etc. the quantity of biomedical waste generated in the States and UT in year 2023 is given in fig 5 and 6.

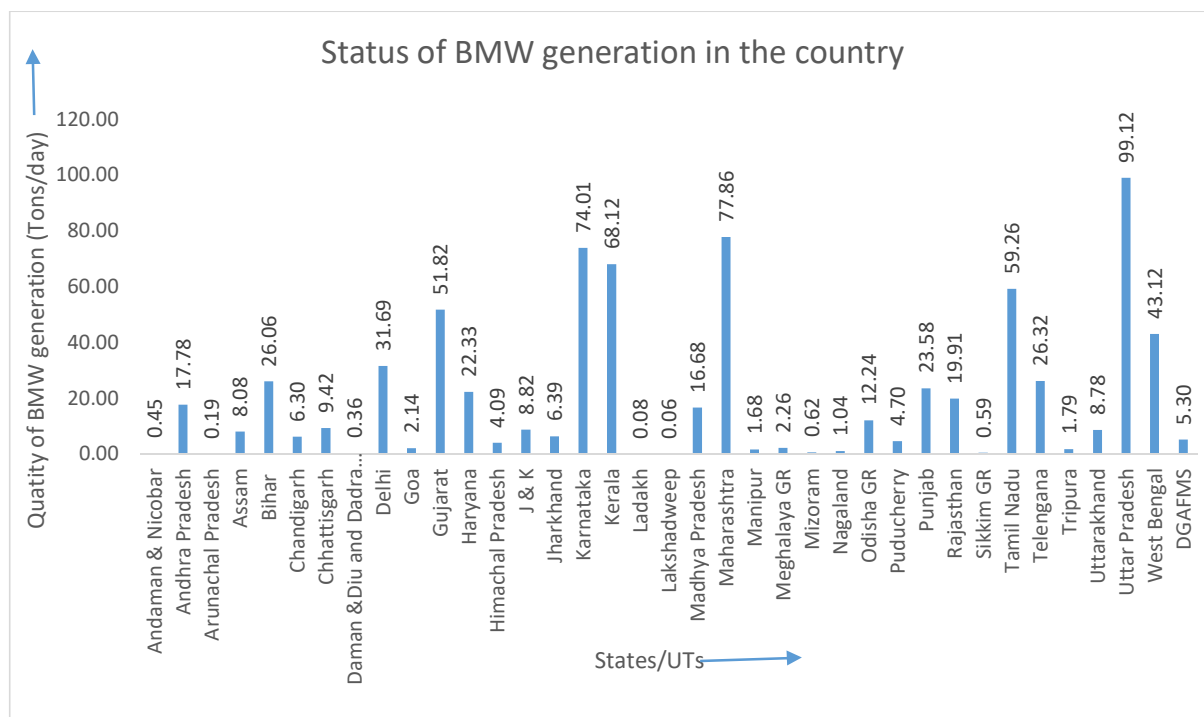


Figure 5: Total Quantity of BMW generated (tons/day) in the States/UTs and DGFAMS

3.2 Treatment of Biomedical Waste

As per Rule 7 (1), biomedical waste is required to be treated and disposed of in accordance with Schedule I, and in compliance with the standards provided in Schedule-II of BMW Rules, 2016. Out of 859 tons/day of biomedical waste generated in the country, 694 tons/day of BMW is treated and disposed of by CBWTFs and CTFs installed by HCFs.

For environment friendly disposal of biomedical waste, there should be no gap between generation and treatment & disposal of biomedical waste. However, the gap in generation, treatment & disposal has been observed in States/UTs namely Assam, Bihar, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Mizoram, Nagaland and Puducherry (figure 6). The gap in generation, treatment and disposal was also observed in year 2022 in States namely Assam, Bihar, Karnataka, Jharkhand, Madhya Pradesh, Kerala, Meghalaya & Uttarakhand. CPCB has

communicated the gaps observed to the respective SPCB/PCC to ensure rectify the issue and ensure the disposal of all biomedical waste generated in State/UT accordance with the BMWM Rules, 2016.

Some SPCBs/PCCs submitted that the gap between treatment and disposal is due to incomplete information submitted by HCFs and CBWTFs in annual report with respect to generation, treatment and disposal of biomedical waste. Further, continuous efforts are being made by SPCBs/PCCs to ensure that there is no gap between generation and treatment of biomedical waste.

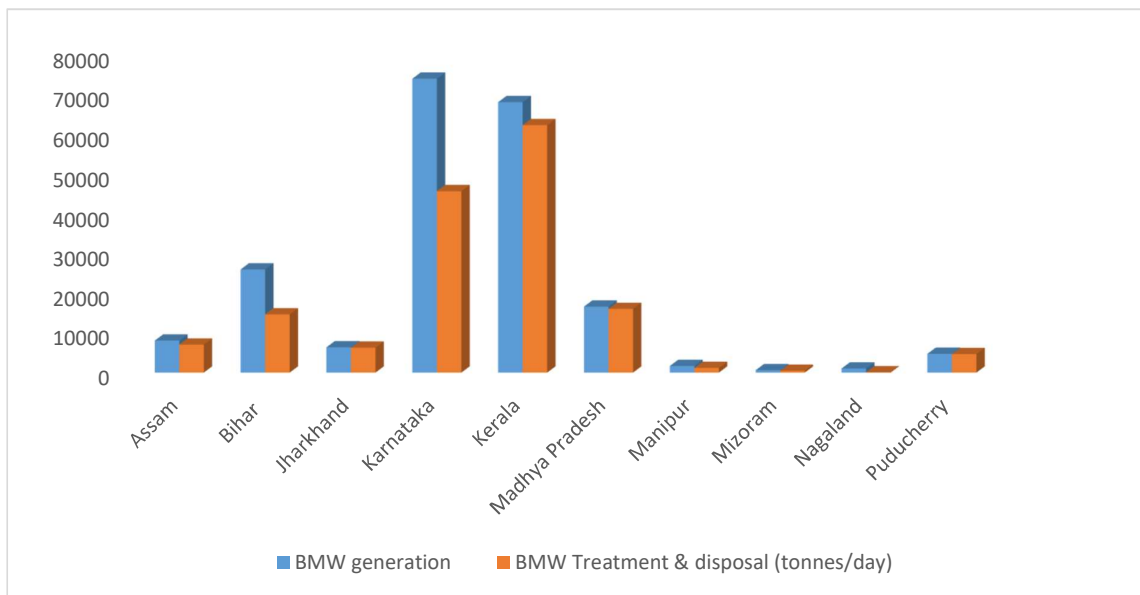


Figure 6: Status of generation, treatment & disposal of biomedical waste

4 Status of Common Biomedical Waste Treatment Facilities (CBWTF)

4.1 Availability of CBWTF

CBWTF means the facility which is involved in collection, treatment and disposal of bio- medical waste. As per BMWM Rules, 2016, it is the duty of CBWTF operator to 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 BMWM Rules, 2016 and guidelines issued by the CPCB.

As per the Annual Report Information submitted by SPCBs/PCCs for the year 2023, currently there are 234 number of CBWTFs operated in the Country and 30 CBWTFs are under construction. In the year 2023, there are an increase in number of CBWTFs in Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Uttar Pradesh and West Bengal as compared to year 2022. Daman & Diu and Dadra & Nagar Haveli utilizes the CBWTF of Gujarat State for treatment and disposal of biomedical waste. Similarly, Lakshadweep is utilizing the CBWTF situated in Kerala for treatment and disposal of Red and Blue category biomedical wastes. In remaining States/UTs, disposal of biomedical waste is being done through captive treatment facilities including deep burials. In this regard, CPCB requested such SPCBs/PCCs for submitting the proposal for setting up of CBWTFs to cover entire districts of State/UT for which they may avail financial assistance from Ministry of

Environment Forests & Climate Change. No. of CBWTF present and under construction in State and UTs is represented in fig. 7.

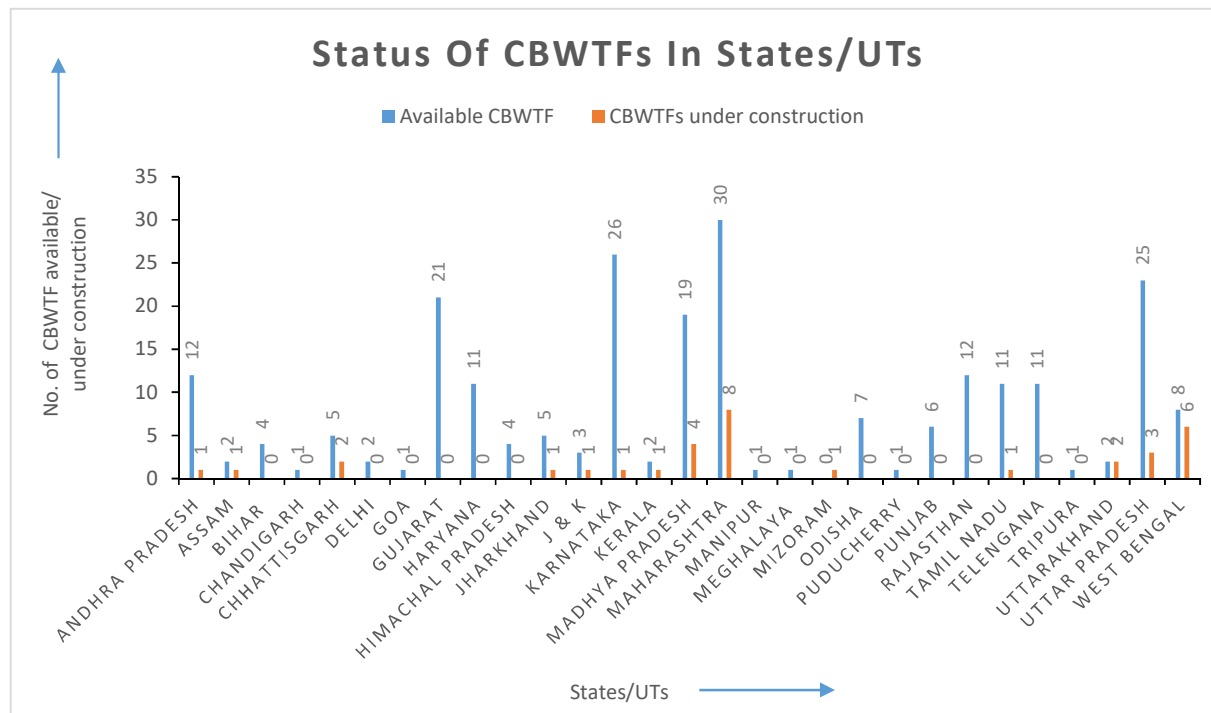


Figure 7: No. of CBWTFs operational and under construction in the States/UTs

CBWTFs are under construction in States like Andhra Pradesh, Assam, Chhattisgarh, Jharkhand, J & K, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram, Tamil Nadu, Uttarakhand and West Bengal. The availability of CBWTFs operated in States varies based on the area of the State, population density, number of HCFs in the States/UT, capacity of the CBWTF, accessibility of CBWTF etc.

Andaman and Nicobar, Arunachal Pradesh, Ladakh, Lakshadweep, Mizoram, Nagaland and Sikkim have reported that no CBWTF is present in the State/UTs. In this regard, CPCB requested such SPCBs/PCCs to initiate action for establishment of CBWTF and submit action taken to CPCB.

4.2 Utilization of CBWTF

As per Rule 7 (3) of the BMWN rules, 2016, “no occupier shall establish on-site treatment and disposal facility, if a service of common biomedical waste treatment facility is available at a distance of seventy-five kilometers”. As per Annual Report information for year 2023, all HCFs operating in States/UTs namely Andhra Pradesh, Chandigarh, Goa, Gujarat, Haryana, Punjab, Tamil Nadu, Telangana and West Bengal are using CBWTF for treatment and disposal of biomedical waste. In other States/UTs namely Assam, Bihar, Chhattisgarh, Delhi, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Odisha, Rajasthan, Sikkim, Tripura, Uttarakhand, Uttar Pradesh and DGAFMS are using captive treatment facilities along with CBWTF.

Some of the HCFs of these States are having captive treatment facility (captive incinerator) for treatment and disposal of bio-medical waste. States/UTs may look into the accessibility of CBWTFs and come up with new CBWTFs to cover all HCFs in the State/UT. Utilization of CBWTFs by HCFs (in percentage) is given in fig. 8

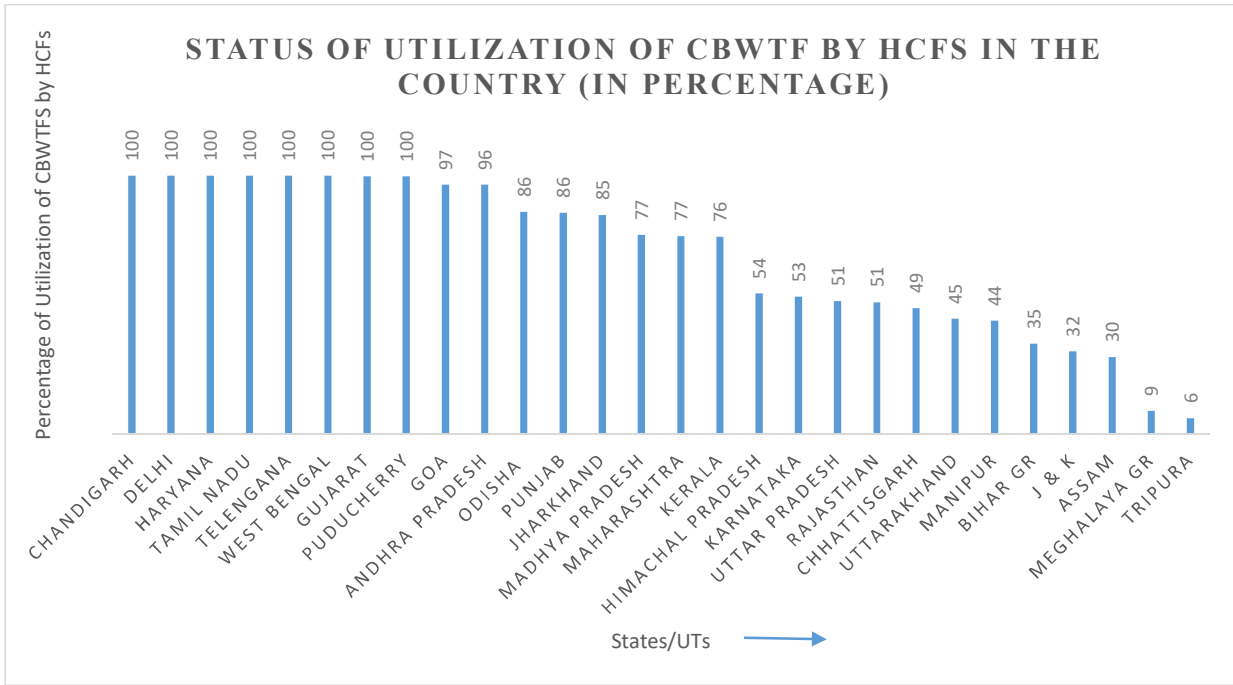


Figure 8: Percentage of HCF utilizing the CBWTF in various States/UT

The CBWTFs in the country are operating at cumulative treatment and disposal capacity of 1717 MT/day, of which incineration capacity is 990 MT/day and autoclave capacity is 727 MT/day. The present generation of 743 MT/day may look adequate for treatment and disposal of BMW. However, availability of CBWTFs may vary at State Level. Biomedical waste generated and remaining treatment capacity of CBWTFs after treatment of generated biomedical waste is given in figure 9.

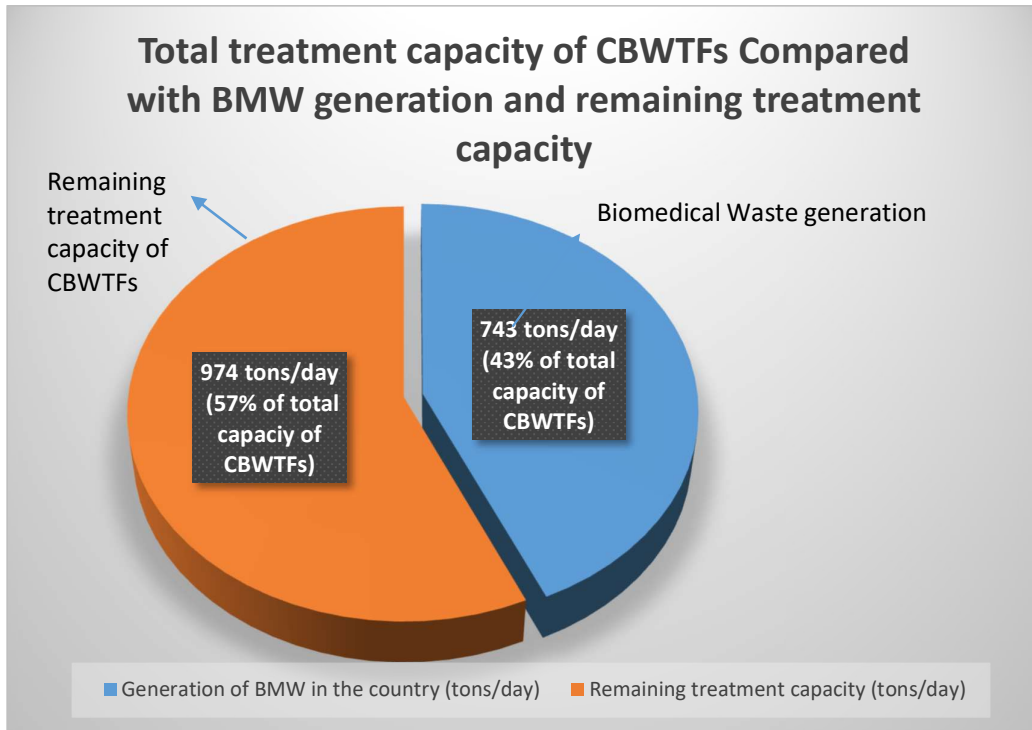


Figure 9 : Total treatment capacity of CBWTFs compared with biomedical waste generation and remaining treatment capacity

As per Annual report information for year 2023, there is a gap between biomedical waste generation and its treatment & disposal. However, Figure 9 depicts that only 43% of the treatment capacity of CBWTFs is being used for processing the generated biomedical waste, leaving 57% of the capacity still available for biomedical waste treatment and disposal.

5 Status of Captive Treatment Facility (CTF) including deep burial

BMWM Rules, 2016 restricts on-site treatment and disposal facility, if a service of CBWTF is available at a distance of 75 Km. However, 15,870 numbers of HCFs are having captive treatment facility. States/UTs namely Chandigarh, Daman, Diu and Dadar and Nagar Haveli, Andhra Pradesh, Goa, Gujarat, Haryana, Punjab, Tamil Nadu, Telangana and West Bengal are not utilized captive treatment facility. Number of HCFs having captive treatment facility in various States/UTs are showing in figure 10. These States/UT should explore the possibility of treating and disposing biomedical waste through CBWTF.

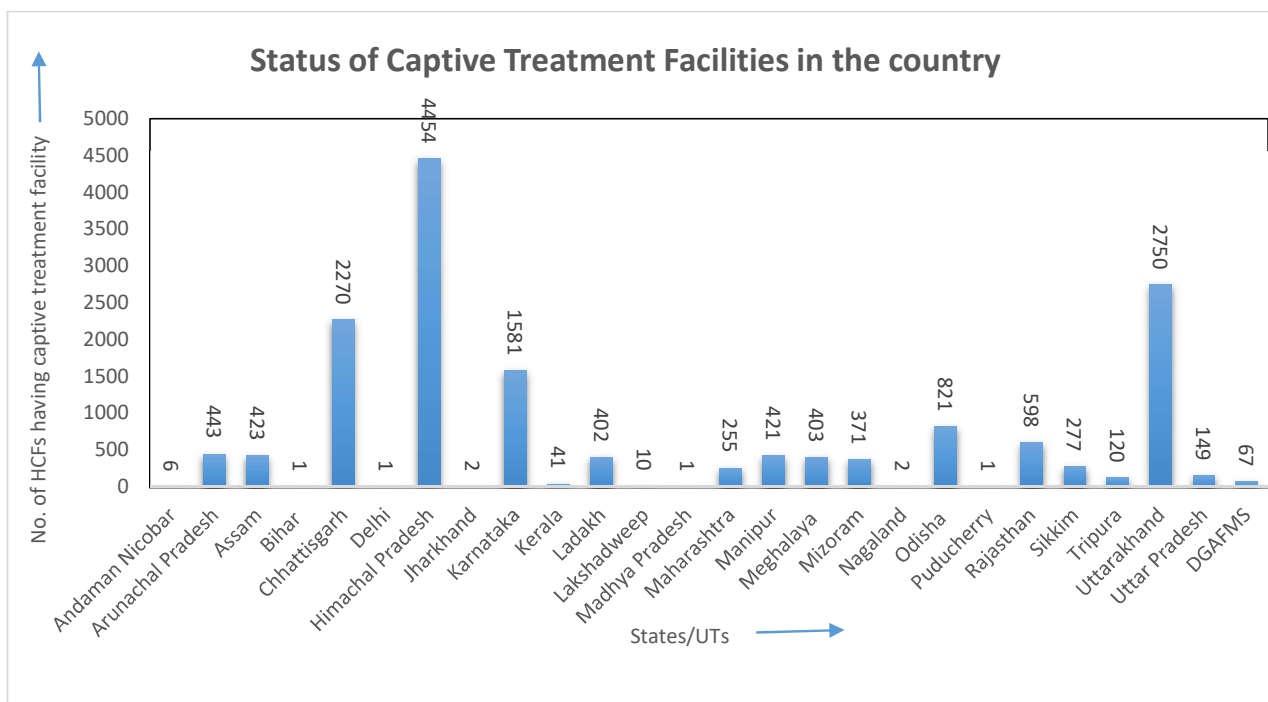


Figure 10 : Number of HCFs having captive treatment in States/UTs

As per the clarification received from the State namely Meghalaya and Madhya Pradesh, there are CTF operating by the HCFs due to operation of HCFs in rural areas, where there was no CBWTF or before the issuance of guidelines of CBWTF. CPCB requested SPCBs/PCCs to restrict use of captive treatment facilities in case CBWTF is available within 75 km. SPCBs/PCCs should also ensure that if CBWTFs are not available within radius of 75 Km, captive treatment facility operated by HCFs should with prior approval from the prescribed authority and as per the Standards specified in Schedule-III of BMWM Rules, 2016. The deep burial facility shall be located as per the provisions and guidelines issued by Central Pollution Control Board from time to time. As per the information submitted by the SPCB/PCCs, deep burial pits are installed by the HCFs of Andaman & Nicobar, Arunachal Pradesh, Assam, Chhattisgarh, Himachal Pradesh, Jharkhand, J & K, Karnataka, Kerala, Ladakh, Lakshadweep, Maharashtra, Meghalaya, Mizoram, Nagaland, Odisha, Rajasthan, Sikkim, Tripura, Uttarakhand and Uttar Pradesh. The status of deep burial pits installed by HCFs is given in figure 11. CPCB directed all

SPCBs/PCCs regarding verification of captive treatment facilities including deep burials installed by HCFs and ensure that these are in line with the standards given under BMWM Rules, 2016 and CPCB guidelines. SPCBs/PCCs should initiate steps to cover entire State/UT by CBWTF so as to minimize usage of captive treatment facility including deep burial pits by HCFs.

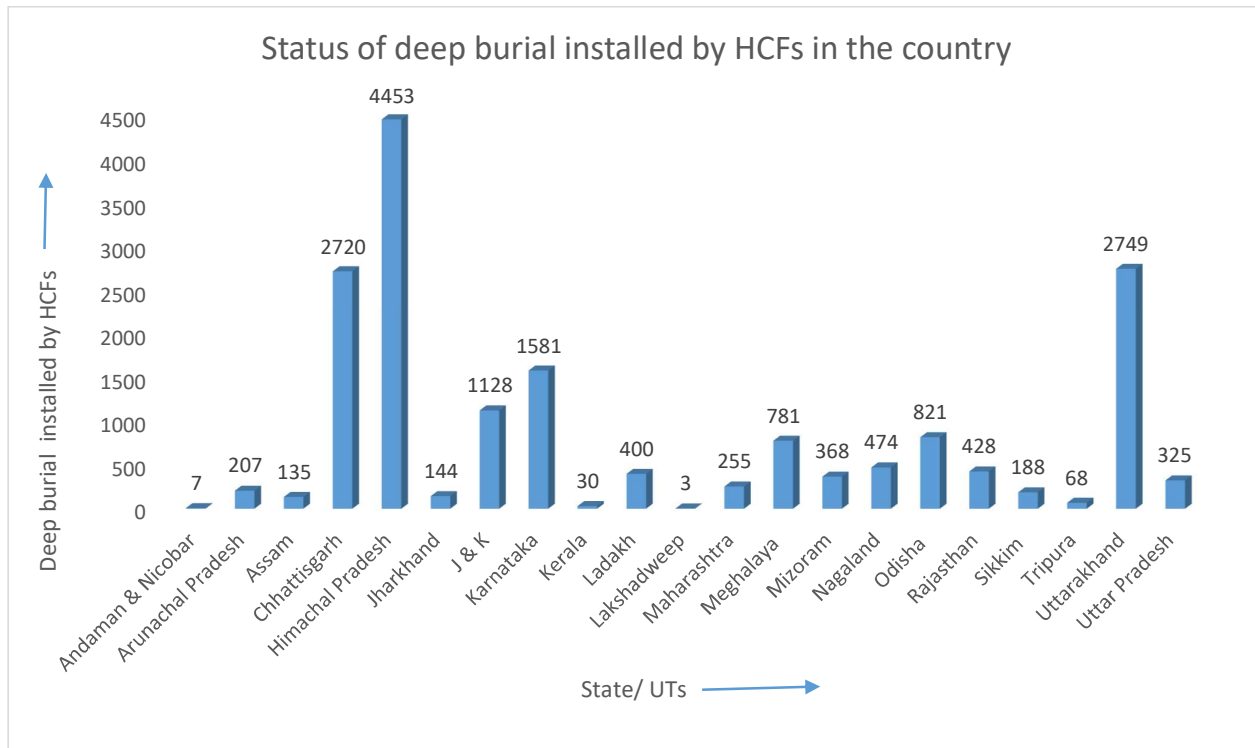


Figure 11: Deep burial installed by HCFs in States/UTs

6 Online Continuous Emission Monitoring System (OCEMS)

BMWM Rules, 2016 stipulates that every occupier or operator of the common bio-medical waste treatment facility shall install Online Continuous Emission Monitoring System (OCEMS) for the parameters as stipulated by SPCBs/PCCs in authorization and transmit the real time data to the servers at SPCB/PCC and CPCB. As per the submitted information, 229 out of 234 nos. i.e. about 98 % of present CBWTFs have installed OCEMS for continuous emission monitoring. Further, it has been observed by CPCB that some of the CBWTFs connected to OCEMS portal are not transmitting data regularly to CPCB server. States namely Assam, Chhattisgarh, Jharkhand and Kerala should ensure the installation of OCEMS by all existing CBWTFs and transmission of the real time data to the SPCB and CPCB server. CBWTFs where OCEMS is not installed is shown in figure 12.

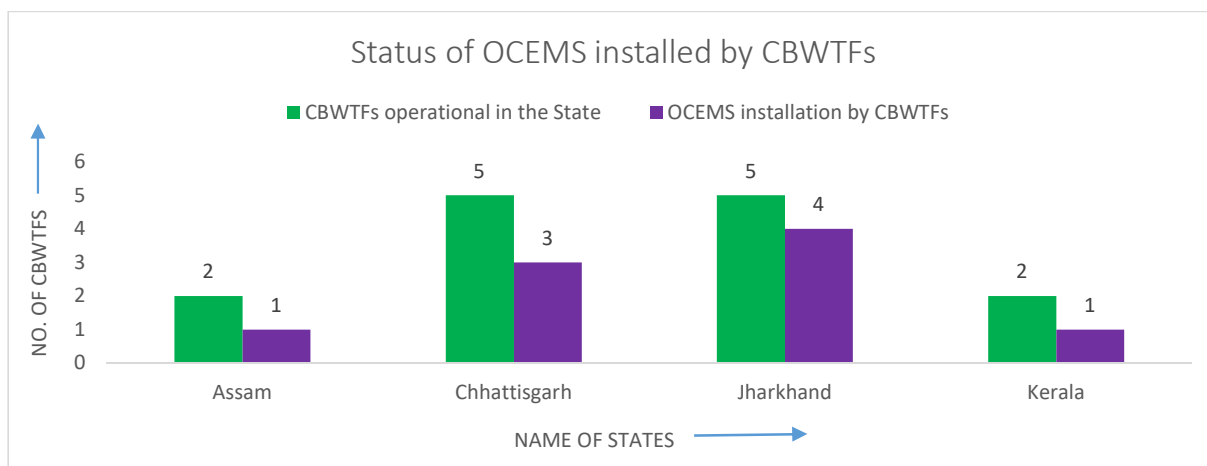


Fig 12; Status of no. of CBWTFs not installed OCEMS in States

7 Biomedical Waste Management in Healthcare Establishments of Armed Force Medical Services (AFMS)

The prescribed authority for Armed Force Medical Services is DGAFMS. As reported, 697 HCFs are established under DGAFMS that generates about 5.3 tons/day bio-medical waste, which is entirely treated and disposed-off through CBWTFs and Captive Treatment Facilities. Out of 697 no. of HCFs, there are 226 bedded HCFs and 471 are non-bedded. Out of 697 no. of HCFs, 630 no. of HCFs are using CBWTFs and 67 no. of HCFs are using Captive Treatment Facility. Further, 0.53 tons/day of biomedical waste is being treated by captive treatment facilities of HCFs, which is not recommended under BMWM Rules, 2016 if CBWTF is available within radius of 75 Km and 4.7 tons/day of biomedical waste is being treated and disposed-off through CBWTF. As per the clarification received 67 HCF are located in remote location/isolated far flung areas where CBWTF is not available within the range of 75 km. However, Armed Forces Health Care Establishments (AFHCEs) is making a continuous effort to reduce the number of HCFs disposing through captive treatment facility. The number of HCFs disposing through captive treatment facility have been reduced to 67 in 2023 as compared to 75 in 2022.

Central Pollution Control Board (CPCB) has conducted the inspection of 20 AFHCEs in year 2023 located in Assam, Bihar, Goa, Odisha, Kerala, Kolkata, Karnataka, Maharashtra, Madhya Pradesh and Uttar Pradesh to verify the compliance status of BMWM Rules, 2016. Based on observations of CPCB, recommendations were forwarded to DGAFMS and requested to take necessary action against the defaulting AFHCFs and to ensure corrective measures in respect of violation observed by CPCB.

A meeting was also conducted by CPCB to discuss the implementation of BMWM Rules, 2016 in AFHCEs wherein various issues regarding installation of ETP/STP plant, disposal of liquid bio-medical waste, implementation of bar code system and other issues were discussed.

8 Issues and way forward

- Some of the HCFs are still not authorized even after 8 years of the notification of the BMWM, 2016. SPCB/PCCs shall ensure authorization of every HCF and take action against HCFs operational without authorization.
- Some of the States/UTs namely Assam, Jharkhand, Karnataka, Kerala, Karnataka, Maharashtra, Manipur, Mizoram, Nagaland and Puducherry submitted that there is gap between generation and

treatment of biomedical waste. SPCBs/PCCs should ensure that all biomedical waste generated from HCFs should be treated and disposed of in line with BMW Rules, 2016.

- SPCBs shall ensure that recyclable waste collected by CBWTFs should be treated properly and sent to registered recyclers only.
- SPCBs/PCCs shall ensure timely submission of annual report pertaining to their respective State or Union Territory within stipulated time period i.e. on or before 31st July.
- Despite of availability of service of CBWTF, Captive Treatment Facilities including deep burials are still being used in 18 States/UTs. Therefore, SPCBs/PCCs should restrict usage of captive treatment facilities including deep burial pits where CBWTF is accessible and ensure that it is in line with the standards as prescribed under BMW Rules, 2016.
- Adequacy of treatment capacity of existing CBWTFs and their compliance status be regularly monitored by the SPCBs/PCCs to assess the requirement of additional treatment facility for the State / Union Territory.
- All SPCBs/PCCs should also conduct gap analysis with respect to generation of biomedical waste and available treatment capacity to check adequacy of available treatment capacity of CBWTF.
- For continuous monitoring of emission from incinerators, SPCBs/PCCs shall ensure that OCEMS is installed in every CBWTFs and connected to CPCB/SPCB server.

9 State/UT wise status of Biomedical Waste Management

9.1 Andaman and Nicobar Islands

No. of HCFs	285
No. of bedded HCFs	87
No. of non-bedded HCFs	198
No. of beds	1328
No. of CBWTFs	NIL
No. of HCFs granted authorization	145
No. of HCFs utilizing CBWTFs	NIL
No. of HCFs having Captive Treatment Facilities	6
No. of Captive Incinerators Operated by HCFs	6
Quantity of BMW generated in kg/day	452.79
Quantity of BMW treated in kg/day	452.79
No. of HCFs/CBWTFs violated BMW Rules	5
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	5

Andaman and Nicobar Islands are geographically isolated and most HCFs are located in the remote locations, therefore deep burial pits are being used by the HCF for disposal of biomedical waste. Currently there is no operational CBWTF in the UT, although Directorate of Health Service (DHS) has initiated for identification of land for establishment of CBWTF. All biomedical waste generated in UT is being treated and disposed through captive incinerators including deep burial pits.

9.2 Andhra Pradesh

No. of HCFs	14,314
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No. of bedded HCFs	7,687
No. of non-bedded HCFs	6,631
No. of beds	1,68,043
No. of CBWTFs	12
No. of HCFs granted authorization	3218
No. of HCFs utilizing CBWTFs	13,804
No. of HCFs having Captive Treatment Facilities	NIL
No. of Captive Incinerators Operated by HCFs	NIL
Quantity of BMW generated in kg/day	17,784.118
Quantity of BMW treated in kg/day	17,784.118
No. of HCFs/CBWTFs violated BMW Rules	1194
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	1194

Currently all the BMW generated in the State is treated through CBWTF and no captive treatment facility is operational in the State. There are 1,190 occupiers that are currently operational without authorization in the State. Only 822 occupier installed liquid waste treatment facility. SPCB should authorize the remaining occupiers and improve the compliance regarding liquid waste treatment by HCFs.

9.3 Arunachal Pradesh

No. of HCFs	159
No. of bedded HCFs	126
No. of non-bedded HCFs	33
No. of beds	1,839
No. of CBWTFs	NIL
No. of HCFs granted authorization	443
No. of HCFs utilizing CBWTFs	NIL
No. of HCFs having Captive Treatment Facilities	443
No. of Captive Incinerators Operated by HCFs	7
Quantity of BMW generated in kg/day	185.85
Quantity of BMW treated in kg/day	185.85
No. of HCFs/CBWTFs violated BMW Rules	60
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	60

Currently there is no CBWTF operational in the State and the generated biomedical i.e. 185.85 kg/day is treated and disposed through captive treatment facility. Though the HCFs are located in remote areas, development of CBWTF should be explored by SPCB to restrict use of captive treatment facility

including deep burial.

9.4 Assam

No. of HCFs	1,558
No. of bedded HCFs	675
No. of non-bedded HCFs	883
No. of beds	29,265
No. of CBWTFs	02
No. of HCFs granted authorization	602
No. of HCFs utilizing CBWTFs	464
No. of HCFs having Captive Treatment Facilities	423
No. of Captive Incinerators Operated by HCFs	INP
Quantity of BMW generated in kg/day	8,084
Quantity of BMW treated in kg/day	7,068
No. of HCFs/CBWTFs violated BMW Rules	Nil
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	Nil

Currently there are 02 no. of CBWTFs is present in the State and 4,044 kg/day of BMW is treated and disposed through CBWTF. 423 no. of HCFs in the State have captive treatment facility and 3,024 kg/day of BMW is treated and disposed through captive treatment facilities. A gap of around 12.56 % is observed between the generation and disposal of the biomedical waste in the State. 469 no. of occupiers are currently in operation without applying for authorization. 786 no. of occupiers have installed the liquid waste treatment facility. SPCB should ensure implementation of BMWM Rules, 2016 and minimize the gaps identified in Annual Report.

9.5 Bihar

No. of HCFs	26,472
No. of bedded HCFs	6,781
No. of non-bedded HCFs	19,691
No. of beds	1,04,943
No. of CBWTFs	04
No. of HCFs granted authorization	2427
No. of HCFs utilizing CBWTFs	9262
No. of HCFs having Captive Treatment Facilities	01
No. of Captive Incinerators Operated by HCFs	01
Quantity of BMW generated in kg/day	26,061.35
Quantity of BMW treated in kg/day	14,701.9
No. of HCFs/CBWTFs violated BMW Rules	316
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	316

There is a gap of around 44% between the generated and treated biomedical waste in the State.

17, 209 no. of HCFs are neither having the captive treatment facility nor utilizing the CBWTF. 1, 892 no. of HCFs are operational in the State without authorisation. 708 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.6 Chandigarh

No. of HCFs	950
No. of bedded HCFs	50
No. of non-bedded HCFs	900
No. of beds	4,952
No. of CBWTFs	01
No. of HCFs granted authorization	46
No. of HCFs utilizing CBWTFs	950
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	6,347
Quantity of BMW treated in kg/day	6,347
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there is 01 CBWTF is present in the UT and total generated biomedical waste ie. 6347 kg/day is treated and disposed through CBWTF. There is no captive treatment facility in the UT and all occupiers are currently authorised by PCC.

9.7 Chhattisgarh

No. of HCFs	7,230
No. of bedded HCFs	2,498
No. of non-bedded HCFs	4,732
No. of beds	54,987
No. of CBWTFs	5
No. of HCFs granted authorization	2,462
No. of HCFs utilizing CBWTFs	3,528
No. of HCFs having Captive Treatment Facilities	2270
No. of Captive Incinerators Operated by HCFs	INP
Quantity of BMW generated in kg/day	9418.28
Quantity of BMW treated in kg/day	9418.28
No. of HCFs/CBWTFs violated BMW Rules	12
No. of Show-Cause notices/Directions issued to defaulter	9

HCFs/CBWTFs

State has not submitted information regarding captive treatment facilities being used by HCFs. States shall submit the complete information in the Annual Report information and minimise the gaps observed in the Annual reports communicate by CPCB.

9.8 Daman &Diu and Dadra & Nagar Haveli

No. of HCFs	219
No. of bedded HCFs	83
No. of non-bedded HCFs	136
No. of beds	1,476
No. of CBWTFs	Utilising CBWTF of Gujarat
No. of HCFs granted authorization	118
No. of HCFs utilizing CBWTFs	222
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	358.03
Quantity of BMW treated in kg/day	358.03
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	16

Currently only 1 CBWTF which is situated in the Gujarat State is being utilised by the HCF of the UT for disposal of the biomedical waste. No captive treatment facility is operational in the UT. No occupier in the UT has installed liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.9 Delhi

No. of HCFs	10,974
No. of bedded HCFs	1,209
No. of non-bedded HCFs	9,765
No. of beds	61,581
No. of CBWTFs	2
No. of HCFs granted authorization	1,166
No. of HCFs utilizing CBWTFs	10,974
No. of HCFs having Captive Treatment Facilities	1
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	31,692
Quantity of BMW treated in kg/day	31,692
No. of HCFs/CBWTFs violated BMW Rules	0

No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0
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Currently there are 02 no. of CBWTF is present in the UT and 31,692 kg/day of biomedical waste is treated and disposed through CBWTF. 01 no. of HCF in the UT have captive treatment facility and 491.8 kg/day of biomedical waste is treated and disposed through captive treatment facility. 166 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.10 Goa

No. of HCFs	868
No. of bedded HCFs	107
No. of non-bedded HCFs	761
No. of beds	5,121
No. of CBWTF	1
No. of HCFs granted authorization	341
No. of HCFs utilizing CBWTFs	838
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	2,136.09
Quantity of BMW treated in kg/day	2,136.09
No. of HCFs/CBWTFs violated BMW Rules	51
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	51

Currently there is 01 no. of CBWTF is present in the State and total generated waste i.e. 2136.09 kg/day is treated and disposed through CBWTF. There is no captive treatment facility in the State. 22 no. of occupiers have installed liquid waste treatment facility.

9.11 Gujarat

No. of HCFs	37,396
No. of bedded HCFs	13,124
No. of non-bedded HCFs	24,281
No. of beds	2,42,421
No. of CBWTFs	21
No. of HCFs granted authorization	4,877
No. of HCFs utilizing CBWTFs	37,322
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	51,823
Quantity of BMW treated in kg/day	51,823
No. of HCFs/CBWTFs violated BMW Rules	661

No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	661
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Currently there is 21 CBWTF is present in the State and total generated BMW i.e. 51,823 kg/day is treated and disposed through CBWTF and no captive treatment facility present in the State. 4,373 nos. occupiers are currently in operation without applying for the authorisation. 3,998 occupiers have installed liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.12 Haryana

No. of HCFs	7,647
No. of bedded HCFs	3,708
No. of non-bedded HCFs	3,939
No. of beds	71,598
No. of CBWTFs	11
No. of HCFs granted authorization	7,229
No. of HCFs utilizing CBWTFs	7,647
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	22,333
Quantity of BMW treated in kg/day	22,333
No. of HCFs/CBWTFs violated BMW Rules	221
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	231

Currently there is 11 no. of CBWTF is present in the State and total generated BMW i.e. 22,333 kg/day is treated and disposed through CBWTF and no captive treatment facility present in the State. 221 no. of occupiers are currently in operation without applying for the authorization. 456 occupiers have installed liquid waste treatment facility.

9.13 Himachal Pradesh

No. of HCFs	9,756
No. of bedded HCFs	652
No. of non-bedded HCFs	9,104
No. of beds	19,615
No. of CBWTFs	4
No. of HCFs granted authorization	9,383
No. of HCFs utilizing CBWTFs	5,303
No. of HCFs having Captive Treatment Facilities	4,454
No. of Captive Incinerators Operated by HCFs	1
Quantity of BMW generated in kg/day	4,093
Quantity of BMW treated in kg/day	4,093
No. of HCFs/CBWTFs violated BMW Rules	16

No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	16
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Currently there are 04 no. of CBWTF is present in the State and 3968.96 kg/day of BMW is treated and disposed through CBWTF. 4,454 no. of HCF in the State have captive treatment facility and 123.47 kg/day of BMW is treated and disposed through CTF. 154 occupiers are currently in operation without applying for authorisation. 9,383 no. of occupiers have installed the liquid waste treatment facility.

9.14 Jharkhand

No. of HCFs	2,451
No. of bedded HCFs	1,355
No. of non-bedded HCFs	1,094
No. of beds	36,268
No. of CBWTFs	5
No. of HCFs granted authorization	222
No. of HCFs utilizing CBWTFs	2,076
No. of HCFs having Captive Treatment Facilities	2
No. of Captive Incinerators Operated by HCFs	2
Quantity of BMW generated in kg/day	6394.3154
Quantity of BMW treated in kg/day	6294.187
No. of HCFs/CBWTFs violated BMW Rules	361
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	361

Currently there are 05 no. of CBWTF is present in the State and 6294.187 kg/day of biomedical waste is treated and disposed through CBWTF. 480 no. of occupiers are currently in operation without applying for authorization. 195 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.15 Jammu and Kashmir

No. of HCFs	7,865
No. of bedded HCFs	1,829
No. of non-bedded HCFs	6,036
No. of beds	18,550
No. of CBWTFs	03
No. of HCFs granted authorization	722
No. of HCFs utilizing CBWTFs	2,513
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	8,819.27
Quantity of BMW treated in kg/day	8,819.27
No. of HCFs/CBWTFs violated BMW Rules	6,491

No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	129
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Information regarding captive treatment facility is not submitted by State. 6, 490 no. of occupiers are currently in operation without applying for the authorization. 113 no. of occupiers have installed liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.16 Karnataka

No. of HCFs	54,594
No. of bedded HCFs	10,183
No. of non-bedded HCFs	44,411
No. of beds	2,43,071
No. of CBWTFs	26
No. of HCFs granted authorization	5,313
No. of HCFs utilizing CBWTFs	29,013
No. of HCFs having Captive Treatment Facilities	1,581
No. of Captive Incinerators Operated by HCFs	1
Quantity of BMW generated in kg/day	74,013.82
Quantity of BMW treated in kg/day	45,738
No. of HCFs/CBWTFs violated BMW Rules	1,808
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	415

Currently there are 26 CBWTF is present in the State and 44,756 kg/day of biomedical waste is treated and disposed through CBWTF. 1,581 no. of HCF in the State have captive treatment facility and 982 kg/day of BMW is treated and disposed through CTF. 4,734 no. of occupiers are currently in operation without applying for authorization. 17,364 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.17 Kerala

No. of HCFs	24,196
No. of bedded HCFs	2,182
No. of non-bedded HCFs	22,014
No. of beds	1,28,955
No. of CBWTFs	2
No. of HCFs granted authorization	21,823
No. of HCFs utilizing CBWTFs	18,463
No. of HCFs having Captive Treatment Facilities	41
No. of Captive Incinerators Operated by HCFs	13
Quantity of BMW generated in kg/day	68,122.53

Quantity of BMW treated in kg/day	62,329.89
No. of HCFs/CBWTFs violated BMW Rules	165
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	165

Currently there are 2 no. of CBWTF is present in the State and 60,969.57 kg/day of biomedical waste is treated and disposed through CBWTF. 41 no. of HCFs in the State have captive treatment facility and 1,360.327 kg/day of biomedical waste is treated and disposed through CTF. A gap of around 8.5% has been observed between the generated and treated BMW. 1,383 no. of occupiers are currently in operation without applying for authorization. 13,274 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.18 Ladakh

No. of HCFs	402
No. of bedded HCFs	334
No. of non-bedded HCFs	68
No. of beds	1,046
No. of CBWTFs	0
No. of HCFs granted authorization	2
No. of HCFs utilizing CBWTFs	0
No. of HCFs having Captive Treatment Facilities	402
No. of Captive Incinerators Operated by HCFs	2
Quantity of BMW generated in kg/day	81.37
Quantity of BMW treated in kg/day	81.37
No. of HCFs/CBWTFs violated BMW Rules	399
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	399

Currently there are 4 no. of CBWTFs are operational in the UT. The generated BMW i.e. 81.37 kg/day is treated and disposed through captive treatment facility present with 402 no. of HCFs. There are 399 no. of occupiers operating without applying for the authorization. Installation of liquid waste treatment facility is under process in all HCFs. SPCB should rectify the gaps identified in Annual Report and expedite the process of establishment of CBWTF.

9.19 Lakshadweep

No. of HCFs	38
No. of bedded HCFs	10
No. of non-bedded HCFs	28
No. of beds	270
No. of CBWTFs	Nil
No. of HCFs granted authorization	48
No. of HCFs utilizing CBWTFs	0
No. of HCFs having Captive Treatment Facilities	10

No. of Captive Incinerators Operated by HCFs	1
Quantity of BMW generated in kg/day	59.65
Quantity of BMW treated in kg/day	59.65
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there are no CBWTF present in the UT. The generated waste i.e. 59.65 kg/day is treated using captive treatment facility including deep burial pits by the HCFs. No occupier is operating without applying for authorization. No occupier has installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report and expedite the process of establishment of CBWTF.

9.20 Madhya Pradesh

No. of HCFs	11,985
No. of bedded HCFs	4,424
No. of non-bedded HCFs	7,561
No. of beds	1,47,165
No. of CBWTFs	20
No. of HCFs granted authorization	5,724
No. of HCFs utilizing CBWTFs	9,234
No. of HCFs having Captive Treatment Facilities	1
No. of Captive Incinerators Operated by HCFs	1
Quantity of BMW generated in kg/day	16681.7
Quantity of BMW treated in kg/day	16092.61
No. of HCFs/CBWTFs violated BMW Rules	1641
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	803

Currently there are 20 no. of CBWTFs is present in the State and 16000.5 kg/day of biomedical waste is treated and disposed through CBWTF. Only 1 HCF in the State have captive treatment facility and 92.11 kg/day of biomedical waste is treated and disposed through CTF. A gap of around 3.53% has been observed between the generated and treated BMW. 1,672 no. of occupiers are currently in operation without applying for authorisation. 3,934 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.21 Maharashtra

No. of HCFs	76,413
No. of bedded HCFs	22,783
No. of non-bedded HCFs	53,630
No. of beds	3,58,789
No. of CBWTFs	30
No. of HCFs granted authorization	2,186
No. of HCFs utilizing CBWTFs	58,515

No. of HCFs having Captive Treatment Facilities	255
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	77,862
Quantity of BMW treated in kg/day	77,861
No. of HCFs/CBWTFs violated BMW Rules	483
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	199

Currently there are 30 no. of CBWTFs is present in the State and 77,861 kg/day of BMW is treated and disposed through CBWTF. 08 no. of CBWTFs are currently under construction in the State. 255 no. of HCFs in the State have captive treatment facility and 528 kg/day of BMW is treated and disposed through CTF. 3,788 no. of occupiers are currently in operation without applying for authorization. 846 nos. of occupier have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.22 Manipur

No. of HCFs	931
No. of bedded HCFs	206
No. of non-bedded HCFs	725
No. of beds	5,393
No. of CBWTFs	1
No. of HCFs granted authorization	931
No. of HCFs utilizing CBWTFs	408
No. of HCFs having Captive Treatment Facilities	421
No. of Captive Incinerators Operated by HCFs	2
Quantity of BMW generated in kg/day	1680.7
Quantity of BMW treated in kg/day	1166.14
No. of HCFs/CBWTFs violated BMW Rules	1
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there are 01 CBWTF is present in the State and 566.2 kg/day of biomedical waste is treated and disposed through CBWTF. 421 no. of HCFs in the State have captive treatment facility and 599.94 kg/day of biomedical waste is treated and disposed through captive treatment facility. No occupier is reported to be currently in operation without applying for authorization. 81 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.23 Meghalaya

No. of HCFs	1,294
No. of bedded HCFs	193
No. of non-bedded HCFs	1,101
No. of beds	8,186
No. of CBWTFs	1

No. of HCFs granted authorization	1,117
No. of HCFs utilizing CBWTFs	115
No. of HCFs having Captive Treatment Facilities	403
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	2,257.03
Quantity of BMW treated in kg/day	2,257.03
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there is 1 CBWTF is present in the State and 908.823 kg/day of BMW is treated and disposed through CBWTF. 403 no. of HCFs in the State have captive treatment facility and 1348.21 kg/day of BMW is treated and disposed through captive treatment facilities. 176 occupiers are currently in operation without applying for authorisation. 42 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.24 Mizoram

No. of HCFs	393
No. of bedded HCFs	82
No. of non-bedded HCFs	311
No. of beds	3,610
No. of CBWTFs	0
No. of HCFs granted authorization	90
No. of HCFs utilizing CBWTFs	0
No. of HCFs having Captive Treatment Facilities	371
No. of Captive Incinerators Operated by HCFs	8
Quantity of BMW generated in kg/day	620.42
Quantity of BMW treated in kg/day	468.42
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there are no CBWTF present in the State. 1 no. of CBWTF is currently in the construction stage. Out of total generated waste i.e. 468.42 kg/day is treated using captive treatment facility including deep burial pits by the HCF. No occupier is operating without applying for authorization. 82 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report and expedite the process of establishment of CBWTF.

9.25 Nagaland

No. of HCFs	642
No. of bedded HCFs	245
No. of non-bedded HCFs	397
No. of beds	3,681

No. of CBWTFs	0
No. of HCFs granted authorization	642
No. of HCFs utilizing CBWTFs	0
No. of HCFs having Captive Treatment Facilities	2
No. of Captive Incinerators Operated by HCFs	2
Quantity of BMW generated in kg/day	1035.88
Quantity of BMW treated in kg/day	64.3
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there are no CBWTF present in the State. Out of total generated biomedical waste i.e. 64.3 kg/day is treated using captive treatment facility including deep burial pits by the HCF. No occupier is operating without applying for authorization. 13 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report and expedite the process of establishment of CBWTF.

9.26 Odisha

No. of HCFs	5,886
No. of bedded HCFs	1,722
No. of non-bedded HCFs	4,164
No. of beds	5,547
No. of CBWTFs	7
No. of HCFs granted authorization	1,644
No. of HCFs utilizing CBWTFs	5,065
No. of HCFs having Captive Treatment Facilities	821
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	12,239
Quantity of BMW treated in kg/day	12,239
No. of HCFs/CBWTFs violated BMW Rules	54
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	54

Currently there is 07 no. of CBWTFs is present in the State and 9301.63 kg/day of BMW is treated and disposed through CBWTF. 821 no. of HCFs in the State have captive treatment facility and 2937.635 kg/day of BMW is treated and disposed through captive treatment facilities. 60 no. of occupiers are currently in operation without applying for authorization. 101 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.27 Puducherry

No. of HCFs	450
No. of bedded HCFs	126

No. of non-bedded HCFs	324
No. of beds	12,142
No. of CBWTFs	1
No. of HCFs granted authorization	449
No. of HCFs utilizing CBWTFs	449
No. of HCFs having Captive Treatment Facilities	1
No. of Captive Incinerators Operated by HCFs	1
Quantity of BMW generated in kg/day	4,753.8
Quantity of BMW treated in kg/day	4,686.4
No. of HCFs/CBWTFs violated BMW Rules	8
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	5

Currently there is 01 CBWTF is present in the State and 4,671 kg/day of biomedical waste is treated and disposed through CBWTF. 01 HCF in the State have captive treatment facility and 15.4 kg/day of biomedical waste is treated and disposed through captive treatment facility. No occupier is currently in operation without applying for authorisation. 35 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.28 Punjab

No. of HCFs	15,280
No. of bedded HCFs	4,601
No. of non-bedded HCFs	10,679
No. of beds	90,569
No. of CBWTFs	6
No. of HCFs granted authorization	2,767
No. of HCFs utilizing CBWTFs	13095
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	23,582.83
Quantity of BMW treated in kg/day	23,582.83
No. of HCFs/CBWTFs violated BMW Rules	903
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	903

Currently there is 06 no. of CBWTFs is present in the State and total generated BMW i.e. 23,583.83 kg/day is treated and disposed through CBWTF and no captive treatment facility present in the State. 1,361 no. of occupiers are currently in operation without applying for the authorization. SPCB should rectify the gaps identified in Annual Report. 11,847 no. of occupiers have installed the liquid waste treatment facility.

9.29 Rajasthan

No. of HCFs	10,346
No. of bedded HCFs	7,128
No. of non-bedded HCFs	3,218
No. of beds	1,89,012
No. of CBWTFs	12
No. of HCFs granted authorization	1,501
No. of HCFs utilizing CBWTFs	5,278
No. of HCFs having Captive Treatment Facilities	598
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	19,907.64
Quantity of BMW treated in kg/day	19,907.64
No. of HCFs/CBWTFs violated BMW Rules	651
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	651

Currently there is 12 no. of CBWTFs are present in the State and 19907.64 kg/day of BMW is treated and disposed through CBWTF. 488 occupiers are currently in operation without applying for authorisation. 366 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.30 Sikkim

No. of HCFs	344
No. of bedded HCFs	33
No. of non-bedded HCFs	311
No. of beds	2,366
No. of CBWTFs	0
No. of HCFs granted authorization	342
No. of HCFs utilizing CBWTFs	0
No. of HCFs having Captive Treatment Facilities	277
No. of Captive Incinerators Operated by HCFs	7
Quantity of BMW generated in kg/day	586
Quantity of BMW treated in kg/day	586
No. of HCFs/CBWTFs violated BMW Rules	4
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	4

Currently there are no CBWTF present in the State. The generated waste i.e. 586 kg/day is treated using captive treatment facility including deep burial pits by the HCF. 02 no. of occupiers are operating without applying for authorization. 46 occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report and expedite the process of establishment of CBWTF.

9.31 Tamil Nadu

No. of HCFs	30,230
No. of bedded HCFs	8,127
No. of non-bedded HCFs	22,103
No. of beds	2,04,717
No. of CBWTFs	11
No. of HCFs granted authorization	30,163
No. of HCFs utilizing CBWTFs	29,871
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	59,261.04
Quantity of BMW treated in kg/day	59,261.04
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there is 11 no. of CBWTFs are present in the State and total generated biomedical waste i.e. 59261.04 kg/day is treated and disposed through CBWTF and no captive treatment facility present in the State. 6248 no. of occupiers have installed liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.32 Telangana

No. of HCFs	10,292
No. of bedded HCFs	5,386
No. of non-bedded HCFs	4,906
No. of beds	1,43,313
No. of CBWTFs	11
No. of HCFs granted authorization	5,553
No. of HCFs utilizing CBWTFs	10,292
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	26,316
Quantity of BMW treated in kg/day	26,316
No. of HCFs/CBWTFs violated BMW Rules	232
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	232

Currently there is 11 no. of CBWTFs are present in the State and total generated BMW i.e. 26,316 kg/day is treated and disposed through CBWTF and no captive treatment facility present in the State. 62 no. occupiers are currently in operation without applying for the authorisation. 1,908 occupiers have installed liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report

9.33 Tripura

No. of HCFs	1,986
No. of bedded HCFs	156
No. of non-bedded HCFs	1,830
No. of beds	4,798
No. of CBWTFs	01
No. of HCFs granted authorization	127
No. of HCFs utilizing CBWTFs	123
No. of HCFs having Captive Treatment Facilities	120
No. of Captive Incinerators Operated by HCFs	4
Quantity of BMW generated in kg/day	1789.97
Quantity of BMW treated in kg/day	1789.97
No. of HCFs/CBWTFs violated BMW Rules	0
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	0

Currently there is 01 no. of CBWTF is present in the State and 286.57 kg/day of BMW is treated and disposed through CBWTF. 120 no. of HCFs in the State have captive treatment facility and 1503.4 kg/day of BMW is treated and disposed through captive treatment facility. No occupiers are currently in operation without applying for authorisation. 36 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.34 Uttarakhand

No. of HCFs	6,636
No. of bedded HCFs	1,949
No. of non-bedded HCFs	4,687
No. of beds	32,985
No. of CBWTFs	2
No. of HCFs granted authorization	5,899
No. of HCFs utilizing CBWTFs	2,955
No. of HCFs having Captive Treatment Facilities	2750
No. of Captive Incinerators Operated by HCFs	2
Quantity of BMW generated in kg/day	8776.51
Quantity of BMW treated in kg/day	8776.51
No. of HCFs/CBWTFs violated BMW Rules	584
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	107

Currently there is 02 no. of CBWTFs are present in the State and 6804.7 kg/day of BMW is treated and disposed through CBWTF. 2750 no. of HCFs in the State have captive treatment facility and 1972 kg/day of BMW is treated and disposed through captive treatment facility. 580 no. of occupiers are currently in operation without applying for authorization. 263 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.35 Uttar Pradesh

No. of HCFs	43,860
No. of bedded HCFs	23,856
No. of non-bedded HCFs	20,004
No. of beds	4,27,372
No. of CBWTFs	25
No. of HCFs granted authorization	15,168
No. of HCFs utilizing CBWTFs	22,541
No. of HCFs having Captive Treatment Facilities	149
No. of Captive Incinerators Operated by HCFs	8
Quantity of BMW generated in kg/day	99115.08
Quantity of BMW treated in kg/day	99115.08
No. of HCFs/CBWTFs violated BMW Rules	3503
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	839

Currently there are 25 no. of CBWTFs are present in the State and 99115.08 kg/day of biomedical waste is treated and disposed through CBWTF. There are 01 CBWTF currently under construction. 149 no. of HCFs in the State have captive treatment facility and 99115.08 kg/day of biomedical waste is treated and disposed through captive treatment facility. 355 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

9.36 West Bengal

No. of HCFs	9,927
No. of bedded HCFs	3,209
No. of non-bedded HCFs	6,718
No. of beds	1,68,323
No. of CBWTFs	8
No. of HCFs granted authorization	9,927
No. of HCFs utilizing CBWTFs	9,927
No. of HCFs having Captive Treatment Facilities	0
No. of Captive Incinerators Operated by HCFs	0
Quantity of BMW generated in kg/day	43120.87
Quantity of BMW treated in kg/day	43120.87
No. of HCFs/CBWTFs violated BMW Rules	257
No. of Show-Cause notices/Directions issued to defaulter HCFs/CBWTFs	257

Currently 08 no. of CBWTFs are present in the State and 43120.87 kg/day of biomedical waste is treated and disposed through CBWTF. There are 06 no. of CBWTFs currently under construction. No HCF in the State have captive treatment facility. No occupiers are currently in operation without applying for authorisation. 1,206 no. of occupiers have installed the liquid waste treatment facility. SPCB should rectify the gaps identified in Annual Report.

Name of the State/UT	Total no. of Bedded Health Care Facilities (HCFs)	Total no. of Non-bedded Health Care Facilities (HCFs)	Total no. Health Care Facilities (HCFs)	Total no. of Beds	Authorization Status			No. of HCFs utilization CBWTFs	Total Quantity of BMW generated (kg/day)	Total Quantity of BMW Treated and Disposed (kg/day)	Captive BMW Treatment Facilities Operated by the (HCFs)		Common Bio-medical Waste Treatment Facilities (CBWTFs)		Deep burial installed by HCF & CBWTFs		Total BMW treated by captive treatment facilities by HCF in Kg/day	Total BMW treated by CBWTFs kg/day)	Total no. of violation by HCFs & CBWTFs	Total No. of show cause notices/Directions issued to defaulter HCFs/CBWTFs	No. of CBWTFs that have installed COEMS
					Total no. of HCFs applied for authorization	Total no. of HCFs granted authorization	Total no. of HCFs in operation without Authorization				No. of HCFs having Captive Treatment Facilities	No of Captive Incinerators Operated by HCFs	CBWTFs Operational	CBWTFs under Construction	HCF	CBWTFs					
II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XII.	XIII.	XVI.	XV.	XVI.	XVII.	XVIII.	XIX.	XX.	XXI.	XXII.	XXIII.	XXIV.
Andaman Nicobar	87	198	285	1328	285	145	INP	0	452.79	452.79	6	6	0	0	7	0	452.79	0	5	5	0
Andhra Pradesh	7687	6631	14314	168043	3220	3218	1190	13804	17784.11	17784.11	0	0	12	0	0	0	0	17784.118	1194	1194	12
Arunachal Pradesh	126	33	159	1839	443	443	60	0	185.85	185.85	443	7	0	0	207	0	185.85	0	60	60	0
Assam	675	883	1558	29265	1089	602	469	464	8084	7068	423	INP	2	1	135	0	3024	4044	0	0	1
Bihar	6781	19691	26472	104943	2763	2427	1892	9262	26061.35	14701.9	1	1	4	0	nil	0	143.52	14558.38	316	316	4
Chandigarh	50	900	950	4952	46	46	0	950	6347	6347	0	0	1	0	0	0	0	6347	0	0	1
Chhattisgarh	2498	4686	7230	54987	2687	2462	INP	3528	9418.28	9418.28	2270	INP	5	2	2720	7	1414.31	8003.97	12	9	3
Daman & Diu and Dadra & Nagar Haveli	83	136	219	1476	130	118	Nil	222	358.03	358.03	Nil	0	Utilizing CBWTF of Gujarat	0	0	0	0	358.03	Nil	16	Utilising Gujarat facility-OCEMS installed
Delhi	1209	9550	10974	61581	1277	1166	INP	10974	31692	31692	1	0	2	0	0	0	491.8	31201	0	0	2
Goa	107	761	868	5121	423	341	Nil	838	2136.09	2136.09	0	0	1	0	0	0	0	2136.09	51	51	1
Gujarat	13124	24281	37396	242421	5227	4877	4373	37322	51823	51823	0	0	21	0	0	0	0	51823	661	661	21
Haryana	3708	3939	7647	71598	7426	7229	221	7647	22332.96	22332.96	0	0	11	0	0	0	0	22332.96	221	231	11

Himachal Pradesh	652	9104	9756	19615	9602	9383	154	5303	4092.44	4092.43	4454	1	4	0	4453	0	123.47	3968.96	16	16	4
Jharkhand	1355	1094	2451	36268	778	222	480	2076	6394.315	6338.652	2	2	5	1	144	0	341.4648	5997.187	361	361	4
J & K	1829	6036	7865	18550	1375	722	6490	2513	8819.27	8819.27	0	0	3	1	1128	0	0	8819.27	6491	129	3
Karnataka	10183	44411	54594	243071	5628	5313	4734	29013	74013.82	45738	1581	1	26	1	1581	0	982	44756	1808	415	26
Kerala	2182	22014	24196	128955	22241	21823	1383	18463	68122.53	62329.897	41	13	2	1	30	0	1360.327	60969.57	165	165	1
Ladakh	334	68	402	1046	3	2	399	nil	81.37	81.37	402	2	0	0	400	0	81.37	0	399	399	0
Lakshadweep	10	28	38	270	48	48	nil	nil	59.65	59.65	10	1	0	0	3	0	59.65	0	0	0	0
Madhya Pradesh	4424	7561	11985	147165	5822	5724	1672	9234	16681.7	16092.61	1	1	19	4	0	3	92.11	16000.5	1641	803	19
Maharashtra	22783	53630	76413	358789	2173	2173	3788	58515	77862	77861	255	0	30	8	255	0	528	77333	483	199	30
Manipur	206	725	931	5393	931	931	NIL	408	1680.7	1166.14	421	2	1	0	INP	0	599.94	566.2	1	0	1
Meghalaya	193	1101	1294	8186	1118	1117	176	115	2257.039	2257.039	403	0	1	0	781	0	1348.216	908.823	0	0	1
Mizoram	82	311	393	3610	90	90	0	0	620.42	468.42	371	8	0	1	368	0	468.42	0	0	0	0
Nagaland	245	397	642	3681	642	642	nil	nil	1035.88	64.3	2	2	0	0	474	0	64.3	0	0	0	0
Odisha	1722	4164	5886	5547	2025	1644	60	5065	12239	12239	821	0	7	0	821	7	2937.365	9301.635	54	54	7
Puducherry	126	324	450	12142	450	449	0	449	4753.8	4686.4	1	1	1	0	0	0	15.4	4671	8	5	1
Punjab	4601	10679	15280	90569	3826	2767	1361	13095	23582.83	23582.83	0	0	6	0	0	0	0	23582.83	903	903	6
Rajasthan	7128	3218	10346	189012	1600	1501	488	5278	19907.64	19907.64	598	0	12	0	428	0	1834.33	18073.314	651	651	12
Sikkim	33	311	344	2366	344	342	NIL	0	586	586	277	7	0	0	188	0	586	0	4	4	0
Tamil Nadu	8127	22103	30230	204717	30230	30163	0	30230	59261.04	59261.04	0	0	11	1	0	0	0	59261.04	0	0	11
Telangana	5386	4906	10292	143313	5638	5553	62	10292	26316	26316	0	0	11	0	0	0	0	26316	232	232	11
Tripura	156	1830	1986	4798	127	127	0	123	1789.97	1789.97	120	4	1	0	68	0	1503.4	286.57	0	0	1
Uttarakhand	1949	4687	6636	32985	6048	5899	580	2955	8776.51	8776.7	2750	2	2	2	2749	0	1972	6804.7	584	107	2
Uttar Pradesh	23856	20004	43860	427372	15942	15168	3983	22541	99115.08	99115.08	149	8	25	1	325	0	1515.3	97599.7	3503	839	25
West Bengal	3209	6718	9927	168323	9927	9927	0	9927	43120.87	43120.87	0	0	8	6	0	0	0	43120.87	257	257	8
DGAFMS	226	471	697	38640	101	101	0	0	5302.182	5302.182	67	0	0	0	0	0	531.303	4770.879	0	0	0
Total	137132	297584	434966	3041937	151725	144905	34015	310606	743147.5	694308.0	15870	69	234	30	17265	17	22315.171	671993.596	20081	8082	229