

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 823
TO BE ANSWERED ON 09.02.2023

Hazardous waste management in India

823. SHRI MOHAMMED NADIMUL HAQUE:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether Government has clearly classified types of hazardous wastes in India;
- (b) if so, details thereof, if not, reasons therefor;
- (c) the segregated data on the quantum of hazardous waste generated in all non-attainment cities along with State and UT-wise details during last three years;
- (d) whether Government has plans to develop scientific waste treatment facilities in each district for its safe handling;
- (e) if so, details thereof, if not, reasons therefor;
- (f) whether Government has plans to impart training to the ragpickers on the safe handling of hazardous waste; and
- (g) if so, details thereof, if not, reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) & (b) Government of India has notified the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, under the Environment (Protection) Act, 1986 to ensure safe storage, treatment and disposal of hazardous wastes in an environmentally sound manner without causing adverse effect to environment and human health.

As per Rule 3. (1) 17 of the aforesaid Rules, the Hazardous waste has been defined as any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances, and shall include wastes as applicable in respect of Schedule I, Schedule II and Schedule III of the said rules.

(c) As per the provision laid down under Rule 20 of the said Rules, State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) are required to prepare annual inventory of the waste generated, recycled, utilized, disposed, etc. for the respective States/Union Territories (UTs) and submit the same to Central Pollution Control Board (CPCB). Based on the annual inventory submitted by the SPCBs/PCCs of the respective States/UTs, CPCB has prepared consolidated report on management of hazardous and other wastes. The States/UTs wise status on quantity of hazardous waste generated in last three years i.e. 2019 to 2022 is given

at Annexure-I, and quantity of hazardous waste generated in all Districts of Non-Attainment Cities is given at Annexure-II.

(d) & (e) As per Rule 5.(1) of the said Rules, responsibility for earmarking or allocation of industrial space or shed for recycling, pre-processing and other utilisation of hazardous or other waste in the existing and upcoming industrial park, estate and industrial clusters has been upon concerned State Government. Further, under the Schedule-VII of the said Rules, duty of identification and notification of sites for Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF) has been entrusted upon the State Government. Currently, there are 2310 authorised recycling facilities for commonly recycled hazardous wastes, namely used oils, waste oils, zinc/copper dross, spent catalysts, waste batteries; 1502 hazardous waste utilization facilities (captive and Non-Captive) and 104 Hazardous waste Co-processing facilities in India. The States/UTs wise list of the same is given at Annexure-III.

Further, for disposal of hazardous waste there are 50 CHWTSDFs (20 integrated Treatment Storage Disposal Facility (TSDFs), 19 Secured Landfills (SLFs) and 11 standalone incinerators) in 20 States/UTs and 141 captive TSDFs (14 integrated TSDFs, 47 SLFs and 80 standalone incinerators). The State/UT wise list of the same is given at Annexure-IV.

(f) & (g) As per Rule 5.(2) of the said Rules as amended in 2020, responsibility for recognition, registration, skill development, annual; monitoring for health and safety of workers involved in the generation, handling, collection, reception, treatment, transport, storage, reuse, recycling, recovery, pre-processing, utilization including co-processing and disposal of hazardous waste has been entrusted upon State Government and its agencies. Further, as per the Rule 5. (3) of the said Rules, every State Government is required to prepare integrated plan for effective implementation of the provisions under Rule 5.

State-wise Status on Generation of Hazardous Waste in the Country

SPCBs/PCCs	Total quantity of Hazardous waste generated (MT)		
	(2019-20)	(2020-21)	(2021-22)*
Andaman and Nicobar Islands	**		
Andhra Pradesh	620952	648308	1117509
Arunachal Pradesh	**	03	**
Assam	52394	87324	129745
Bihar	7630	7717	14522
Chandigarh	2125	1279	2089
Chhattisgarh	172438	155721	176706
Daman Diu & Dadra and Nagar Haveli (DD&DNH)	4631	**	
Delhi	2683	2945	23649
Goa	28569	27016	37620
Gujarat	2485317	3193378	4202837
Haryana	200606	133804	200397
Himachal Pradesh	27725	27849	46609
Jammu & Kashmir	1213	1358	1343
Jharkhand	409761	202814	230385
Karnataka	**	292661	506582
Kerala	311042	57863	61251
Lakshadweep	**		
Madhya Pradesh	232199	207928	232601
Maharashtra	999566	771321	1199266
Manipur	**	01	39
Meghalaya	276	**	
Mizoram	20	51	24
Nagaland	29	31	0
Odisha	679860	690246	969083
Puducherry	34907	33483	31088
Punjab	122167	118727	122095
Rajasthan	587554	643861	1199196
Sikkim	1722	1942	1783
Tamil Nadu	964811	791029	821361
Telangana	317091	333335	324789
Tripura	**	257	235
Uttar Pradesh	362114	585683	476608
Uttarakhand	21818	22736	10625
West Bengal	131412	197433	203272
Total	8782632	9238104	12354272

Note: *National Inventory on Hazardous Waste generation and management for the year 2021-22 is under finalization. Data may change during the final compilation.

**Annual Inventory not submitted

Non-Attainment City District wise - Status on Hazardous Waste Generation

S. No.	States & UTs	Sl. No.	District/City/Town	Total quantity of Hazardous waste generated (Metric Tonnes)
1.	Andhra Pradesh	1	Anantapuram (Anantapur)	8476.789
		2	Chittoor (Chittor)	79856.89
		3	West Godavari (Eluru)	51909.7875
		4	Guntur (Guntur)	8572.968
		5	YSR Kadapa (Kadapa)	116.27
		6	Kurnool (Kurnool)	5976.457
		7	SPSR Nellore (Nellore)	8674.4016
		8	Prakasam (Ongole)	4715.6354
		9	East Godavari (Rajahmundry/ Rajamahendravaram)	63903.583
		10	Srikakulam (Srikakulam)	138170.798
		11	Krishna (Vijaywada)	18806.9703
		12	Visakhapatnam (Vishakhapatnam)	705598.734
		13	Vizianagaram (Vizianagaram)	22730.0641
2.	Assam	14	Kamrup M (Guwahati)	14884.093
		15	Nagaon (Nagaon)	109.313
		16	Nalbari (Nalbari)	7.328
		17	Cachar (Silchar)	18.52
		18	Sivasagar (Sivasagar)	685.9
3.	Bihar	19	Gaya (Gaya)	5.76
		20	Muzaffarpur (Muzaffarpur)	170.3418
		21	Patna (Patna)	7973.79
4.	Chandigarh	22	Chandigarh All District	2087.86
5.	Chattisgarh	23	Durg-Bhillainagar	8089
		24	Korba	129971.65
		25	Raipur	31716.72
6.	Delhi	26	Delhi All District	23648.78
7.	Gujarat	27	Ahmedabad East (Ahmedabad)	436504
		28	Rajkot	2928
		29	Surat	615616
		30	Vadodara	478297
8.	Haryana	31	Faridabad	1969.03
9.	Himachal Pradesh	32	Baddi (Solan)	42460.386
		33	Damtal (Kangra)	205.564
		34	Kala Amb (Sirmaur)	1404.673
		35	Nalagarh (Solan)	Provided above at S. No. 32

S. No.	States & UTs	Sl. No.	District/City/Town	Total quantity of Hazardous waste generated (Metric Tonnes)
		36	Paonta Sahib (Sirmaur)	Provided above at S. No. 34
		37	Parwanoo (Solan)	Provided above at S. No. 32
		38	Sunder Nagar (Mandi)	98.987
10.	Jammu & Kashmir	39	Jammu	18.44
		40	Srinagar	Not reported
11.	Jharkhand	41	Dhanbad	279.46
		42	Jamshedpur (East Singhbhum)	155874.71
		43	Ranchi	10957.14
12.	Karnataka	44	Bangalore (Banglore City East)	300.36
			Bangalore (Banglore City West)	1111.266
			Bangalore (Banglore City South)	498.24
		45	Devanagere	230.17
		46	Gulburga / Kalaburgi	72.03
		47	Hubli-Dharwad	1163.367
13.	Madhya Pradesh	48	Bhopal	1876.08
		49	Dewas	4794.68
		50	Gwalior	224.25
		51	Indore	14547.32
		52	Jabalpur	867.64
		53	Sagar	20333.91
		54	Ujjain	25325.2
14.	Maharashtra	55	Akola	327.24
		56	Amravati	1254.34
		57	Aurangabad	124130.82
		58	Thane (Thane, Badlapur, Ulhasnagar & Navi Mumbai)	204850.21
		59	Chandrapur	10551.11
		60	Jalgaon	4899.52
		61	Jalna	985.48
		62	Kolhapur	25647.2
		63	Latur	4276.21
		64	Mumbai & Mumbai Suburban (Mumbai)	34684.37
		65	Nagpur	39604.06
		66	Nashik	54260.6
		67	Raigad (Navi Mumbai)	189074.67
		68	Pune	47561.67
		69	Sangli	12760.37

S. No.	States & UTs	Sl. No.	District/City/Town	Total quantity of Hazardous waste generated (Metric Tonnes)
		70	Solapur	5426.04
		71	Thane	Provided above at S. No. 58
		72	Ulhasnagar	Provided above at S. No. 58
		73	Palghar (Vasai-Virar)	238387.67
15.	Meghalaya	74	Byrnihat	Not reported
16.	Nagaland	75	Dimapur	6
		76	Kohima	1
17.	Odisha	77	Angul	187991
		78	Balasore	1636
		79	Bhubneshwar (Khurda District)	8014
		80	Cuttack	7472
		81	Kalinga Nagar (Jajpur District)	46716
		82	Rourkela (Sundergarh District)	98603
		83	Talcher (Angul District)	Not reported
18.	Punjab	84	Amritsar	652
		85	Dera Baba Nanak (Gurdaspur District)	126
		86	DeraBassi (Mohali)	21087
		87	MandiGobindgarh (Fatehgarh Sahib)	4883
		88	Jalandhar	3870
		89	Khanna	900
		90	Ludhiana	32794
		91	NayaNangal (District Rupnagar Old Name Ropar)	7054
		92	Patiala	3246
19.	Rajasthan	93	Alwar	75165
		94	Jaipur	15166
		95	Jodhpur	38001
		96	Kota	8857
		97	Udaipur	41167
20.	Tamilnadu	98	Chennai	4752
		99	Madurai	526
		100	Trichy	6418
		101	Tuticorin / Thoothukudi	13404
21.	Telangana	102	Hyderabad	3263
		103	Nalgonda	9011
		104	Patencheru(Medak)	5901
		105	Sangareddy	148707
22.	Uttar	106	Agra	54

S. No.	States & UTs	Sl. No.	District/City/Town	Total quantity of Hazardous waste generated (Metric Tonnes)
	Pradesh	107	Allahabad	39553
		108	Anpara (Sonbhadra)	87442
		109	Bareily	1028
		110	Firozabad	99
		111	Gajraula (Amroha)	74257
		112	Ghaziabad	12748
		113	Gorakpur	814
		114	Jhansi	271
		115	Kanpur	6026
		116	Khurja (Bulandsehar)	1556
		117	Lucknow	2693
		118	Meerut	34158
		119	Moradabad	228
		120	Noida	2103
		121	Raebareli	601
		122	Varanasi	284
23.	Uttarakhand	123	Dehradun	332
		124	Kashipur (U. S. Nagar)	15791
		125	Rishikesh (Dehradun)	Not reported
24.	West Bengal	126	Asansol (PaschimBardman)	60171
		127	Barrackpore (North 24 Pargana)	5383
		128	Durgapur (PaschimBardman)	Not reported
		129	Haldia (PurbaMadnipur)	54890
		130	Howrah	16976
		131	Kolkata	4384
Total				5370750.7

Annexure-III

State-wise Details on Hazardous Waste Recycling/ Utilization/Co-Processing facilities

S. No.	States/UTs	No. of Authorized facilities			
		Commonly Recyclable Hazardous Waste	Utilization of Hazardous Waste under Rule 9	Captive utilization of hazardous and other wastes	Co-processing in Cement Plants
1.	Andaman and Nicobar Islands	Inventory not received			
2.	Andhra Pradesh	83	103	471	9
3.	Arunachal Pradesh	Inventory not received			
4.	Assam	10	0	0	0
5.	Bihar	11	2	0	1
6.	Chandigarh	0	0	0	0
7.	Chhattisgarh	37	74	125	8
8.	DD&DNH	Inventory not received			
9.	Delhi	0	0	0	0
10.	Goa	1	4	0	0
11.	Gujarat	327	231	0	12
12.	Haryana	191	19	6	0
13.	Himachal Pradesh	38	20	0	3
14.	Jammu and Kashmir	25	0	0	0
15.	Jharkhand	12	0	0	1
16.	Karnataka	156	23	4	10
17.	Kerala	7	2	0	0
18.	Lakshadweep	Inventory not received			
19.	Madhya Pradesh	100	33	0	3
20.	Maharashtra	411	149	0	3
21.	Manipur	0	0	0	0
22.	Meghalaya	Inventory not received			
23.	Mizoram	0	0	0	0
24.	Nagaland	0	0	0	0
25.	Odisha	17	22	0	2
26.	Puducherry	2	4	7	0
27.	Punjab	167	7	2	0
28.	Rajasthan	176	7	41	25
29.	Sikkim	0	0	0	0
30.	Tamil Nadu	95	31	0	14
31.	Telangana	77	19	0	10
32.	Tripura	0	0	0	0
33.	Uttar Pradesh	245	23	17	3
34.	Uttarakhand	4	0	1	0
35.	West Bengal	118	21	10	0
Total		2310	796	684	104

Annexure-IV

**State/UT wise Availability of Common/Captive Treatment, Storage & Disposal
Facilities (TSDFs)**

S. No.	States/UTs	Integrated TSDFs (with both SLF & Incinerator)		TSDFs with only Secured Landfills		TSDFs with Only Incinerator	
		Common	Captive	Common	Captive	Common	Captive
1.	Andhra Pradesh	1	1	1	2	0	5
2.	Chhattisgarh	0	0	0	2	0	1
3.	DD&DNH	1	0	0	0	0	0
4.	Delhi	1	0	0	0	0	0
5.	Goa	1	0	0	1	0	1
6.	Gujarat	2	2	7	8	2	42
7.	Haryana	0	0	1	1	0	3
8.	Himachal Pradesh	0	0	1	0	0	0
9.	Jharkhand	1	0	0	4	0	2
10.	Karnataka	1	1	2	1	7	2
11.	Kerala	0	1	1	3	0	0
12.	Madhya Pradesh	1	0	0	1	0	2
13.	Maharashtra	3	0	1	0	0	1
14.	Odisha	0	3	1	8	0	3
15.	Punjab	1	0	0	1	0	2
16.	Rajasthan	0	1	2	3	1	2
17.	Tamil Nadu	1	2	1	12	0	1
18.	Telangana	1	0	0	0	0	0
19.	Uttar Pradesh	2	1	1	0	1	11
20.	Uttarakhand	1	0	0	0	0	0
21.	West Bengal	2	2	0	0	0	2
Total		20	14	19	47	11	80