

HAZARDOUS WASTE MANAGEMENT

Implementation of the Guidelines Finalized by CPCB as per Directives of the Hon'ble Supreme Court:

Supreme Court Monitoring Committee (SCMC) members had observed during their visit to States/UTs that the authorizations granted by some of the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) are deficient or incomplete for the purpose of effective enforcement of hazardous waste management. SCMC suggested in its 18th meeting held on September 11, 2006 that Central Pollution Control Board to re-circulate guidelines i.e. i) Guidelines for transportation of hazardous waste, ii) Guidelines for upkeep of disposal sites and iii) Check list for issuance of authorization by SPCBs./PCCs, to all the SPCBs/PCCs and also to request them to ensure adoption of the above guidelines while granting authorization to the hazardous waste generating units in the respective States/UTs.

As a follow-up of the decision taken in 18th meeting of the SCMC, Central Pollution Control Board circulated published version of the afore said guidelines to all the SPCBs and PCCs and requested vide CPCB letter No. B-29016 (SC)/1/06/PCI-I/2615-2649 dated October 04, 2006 to take necessary action for ensuring compliance of implementation of the above guidelines while granting authorization to the Occupier/Transporter/Operator of a Facility as applicable.

Also, in order to assess operation of the Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) developed or in the process of commissioning in the States, Central Pollution Control Board requested all the Zonal Offices to take up the assessment falling under their jurisdiction as well as to examine the above issues as suggested by SCMC during their visit to TSDF and for submission of the assessment report in the light of the format circulated to all the SPCBs and PCCs in the 51 Conference of the Chairpersons and the Member Secretaries of the SPCBs and PCCs.

Status of Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) and Interstate Movement and Disposal of Hazardous Waste

As per the information received from the SPCBs/PCCs, at present, there are only ten Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) in operation in the States of Andhra Pradesh (01), Gujarat (07) and Maharashtra (02). The State Pollution Control Boards of West Bengal, Rajasthan and Madhya Pradesh have also made considerable progress and the TSDFs in these States are expected to be operational in a short period. The State Pollution Control Board of Goa have obtained NOC from Maharashtra State Pollution

Control Board for the purpose of disposal of incinerable hazardous wastes generated in their State through Incineration facility at TSDF, Taloja in Maharashtra.

The State Pollution Control Board of Assam held meeting with the Northeastern state Pollution Control Boards in the month of September 2006 for development of a TSDF for the purpose of disposal of hazardous wastes generated from all the North –Eastern States. Further, the State Pollution Control Board of Assam requested Assam State Revenue Department for allotment of 60 acres of land for the purpose.

Inventory of Hazardous Waste Generation as per Hazardous Waste (Management & Handling) Amendment Rules, 2003

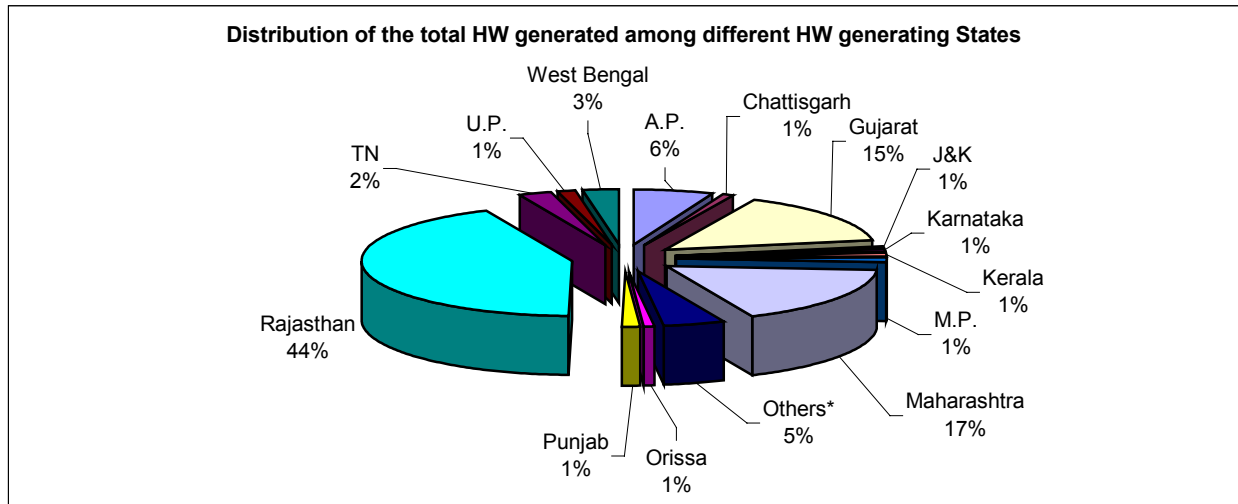
As per the directives of the Hon'ble Supreme Court, all SPCBs/PCCs are required to carryout inventory of hazardous waste generating units. So far, **24** SPCBs namely Andhra Pradesh, Assam, Bihar, Chattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, J & K, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Tamilnadu, Tripura , Uttar Pradesh, Uttaranchal & West Bengal and **03** UTs namely Chandigarh, Daman, Diu, Dadra & Nagar Haveli, and Pondicherry have completed the inventory and submitted reports to CPCB. The **04** States namely Arunachal Pradesh, Manipur, Mizoram, Sikkim and **02** UTs namely Lakshdweep and Andaman & Nicobar Islands reported that there is no Hazardous waste generating unit in their UTs. Delhi Pollution Control Committee yet to submit the industry-wise HW generating units and the hazardous waste generation in the light of the Hazardous Waste (M & H) Amendment Rules, 2003 to CPCB for carrying out random checks.

Mizoram State Pollution Control Board have provided list of units and the quantities of wastes generated, which are likely to fall under the hazardous waste generating units category. The State of Tripura has completed the inventory by engaging M/s. National Productivity Council and same has been received through MoEF.

Zonal Offices of CPCB have completed random checks, as per the directives of Hon'ble Supreme Court, in **21** States namely Andhra Pradesh, Assam, Bihar, Chattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, J & K, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Tamilnadu, Uttaranchal & West Bengal and **03** UTs namely Chandigarh, Daman, Diu Dadra & Nagar Haveli, and Pondicherry. The random checks in other States/UTs viz., Goa, Uttar Pradesh, Tripura, Mizoram, are under progress.

Random check report received from respective Zonal Office in respect of J & K, Nagaland and Tamil Nadu were communicated along with observations of the

Central Pollution Control Board Board for rectification of the inventory by the J & K, Nagaland and the Tamil Nadu State Pollution Control Boards in the light of the guidelines circulated by CPCB, Hazardous Waste (M & H) Amendment Rules, 2003 and keeping in view afore said observations made by the CPCB. The rectified inventory received from the West Bengal State Pollution Control Board has been examined and observations made on the inventory have been communicated to West Bengal State Pollution Control Board for incorporation of the corrections appropriately.



The information on Hazardous Waste generating units and the Hazardous Waste generation as reported by the SPCBs/PCCs and subsequently submitted by the Supreme Court Monitoring Committee to the Hon'ble Supreme Court on November 29, 2006 is given below.

State-wise Inventory of Hazardous Waste Generating Units

S. No.	State / UT	As per Hazardous Waste (Management & Handling) Rules, 2003	
		Number of Units	Quantity in TPA
1.	Andhra Pradesh **	1,583	4,95,985
2.	Arunachal Pradesh****	0	0
3.	Assam ***	53	16,038
4.	Bihar **	34	3,967
5.	Chhattisgarh ***	152	73,001
6.	Delhi**	2,411	18,600
7.	Goa **	204	10,274
8.	Gujarat ***	5,739	12,76,027
9.	Haryana **	1,458	19,240
10.	Himachal Pradesh ***	880	33,517 [†]
11.	Jammu & Kashmir **	147	41,353

S. No.	State / UT	As per Hazardous Waste (Management & Handling) Rules, 2003	
		Number of Units	Quantity in TPA
12.	Jharkhand *	352	1,81,227
13.	Karnataka ***	1,621	71,625
14.	Kerala ***	530	88,794
15.	Madhya Pradesh **	1085	1,21,537 ††
16.	Maharashtra **	4,571	14,07,480
17.	Manipur ****	0	0
18.	Mizoram ****	0	0
19.	Meghalaya***	39	29,493
20.	Nagaland *	03	11
21.	Orissa **	257	83,915
22.	Punjab ***	2,189	1,13,248
23.	Rajasthan ***	588	35,57,323
24.	Sikkim ****	0	0
25.	Tamilnadu **	2,422	1,90,924
26.	Tripura *	135	264
27.	Uttaranchal **	51	7,759
28.	Uttar Pradesh **	1,777	1,17,572
29.	West Bengal **	640	2,36,000
30.	Andaman & Nicobar****	0	0
31.	Chandigarh **	111	836
32.	Daman, Diu, D & NH**	598	30,862
33.	Lakshadweep ****	0	0
34.	Pondicherry ***	86	34,768

Note: The data is based on preliminary inventory completed by the SPCBs/PCCs on HW generating units and the HW generation. Hence, the figures may vary on submission of the final inventory reports.

* States/Union Territories, which have not completed the inventory as per 2003 amendment.

** States/Union Territories, which have completed the inventory as per 2003 amendment.

*** States/Union Territories, which have updated the inventory as per the CPCBs observations after random checks (pertaining to category (2) above.

**** States/Union Territories, which have reported that there are no HW generating units.

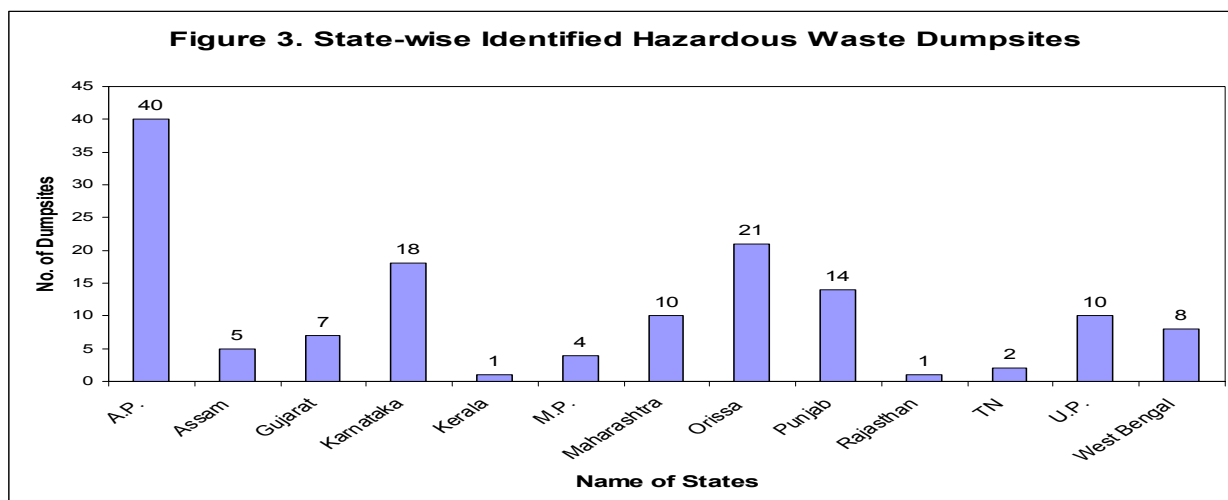
† Excluding the Empty Drums: 45079 Nos.

†† Excluding empty drums: 207935 Nos and assumed KL waste taken as 1 Tonne.

Inventory of HW Dump Sites and Preparation of Rehabilitation Plans

As per Hon'ble Supreme Court Directives, SPCBs / PCCs are also required to carryout inventory on hazardous waste dumpsites and are required to make assessment with regard to the extent of soil or ground water contamination in & around identified dump sites and are required to prepare and submit the rehabilitation plans for remediation of the dump sites.

Based on the information received from the SPCBs / PCCs and the consolidated report of the SCMC, 15 SPCBs namely Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim, Tripura, Uttaranchal and 06 PCCs namely, Andaman & Nicobar Islands, Chandigarh, Daman, Diu & Dadra Nagar Haveli, Delhi, Pondicherry and Lakshadweep have reported that there are no illegal hazardous waste dump sites in their respective States/UTs. 141 hazardous waste dumpsites have been identified and reported by 13 States namely Andhra Pradesh (40 in Hyderabad Region only), Assam (05), Gujarat (07), Karnataka (18); Kerala (01), Maharashtra (10 in MIDC Area), Madhya Pradesh (04), Orissa (21), Punjab (14), Rajasthan (01); Tamil Nadu (02), Uttar Pradesh (10) and West Bengal (08). State-wise hazardous waste dumpsites identified are depicted below:



In order to review the assessment made by concerned State Pollution Control Boards, visit to the States were made by CPCB alongwith Dr. Klemens Mueller, a short term expert engaged under GTZ-ASEM along with the Official (s) of SPCBs during the months of October and November 2006. Visits to 11 States namely Punjab, West Bengal, Orissa, Rajasthan, Madhya Pradesh, Gujarat, Maharashtra, Uttar Pradesh, Andhra Pradesh, Tamil Nadu, and Karnataka have been made and about 30 dumpsites were visited. During the visit to the afore-said States, interaction meetings were held with the officials of the SPCBs.

Assessments studies conducted by the SPCBs through consultants were reviewed during the visit to hazardous waste dumpsites and interaction meetings with the concerned SPCBs, based on the information provided and reports available. After visit, further information have been gained from the Internet & other sources and assessments carried out, brief observations made during the visit were presented by the GTZ-Expert at CPCB on November 28, 2006.

Cleaner Technologies in Industries

In order to comply with the directives of Hon'ble Supreme Court in respect of carrying out R & D Work, Central Pollution Control Board sought proposals from the Organizations like Indian Institute of Chemical Technology, Hyderabad; National Chemical Laboratory, Pune; Central Leather Research Institute, Chennai; National Metallurgical Laboratory, Jamshedpur for preparation of base document based on the R & D already carried out by these organizations in respect of the Bulk Drug & Pharmaceutical, Pesticides and Dyes & Dye Intermediates; Tanneries and Non-ferrous metallurgical sectors respectively.

Central Pollution Control Board also sponsored an amount of Rs. 3.0 lacs to Pondicherry Engineering College, Pondicherry towards organizing international workshop on "Cleaner Technologies and Environmental Management Systems" during January 04-06, 2007. One more workshop is being planned for the officials of the SPCBs, PCCs, Industry and the respective associations.

Battery (Management & Handling) Rules 2001

The rule 12 of Battery (Management & Handling) Rules 2001 requires the State pollution Control Boards / Pollution Control Committees to ensure compliance to these rules as well as file annual compliance status report to the Central Pollution Control Board by 30th April of every year. The Rule 13 of these Rules requires CPCB to (i) compile and publish the reports filed by the SPCBs / PCCs (ii) Periodically review compliance for improvement of the collection and recycling of batteries, and (iii) Apprise MoEF of the implementation status To have uniformity in submission of the compliance reports, Central Pollution Control Board prepared a format and circulated to all the SPCBs / PCCs. Central Pollution Control Board have received annual compliance status report for the financial year 2005-06 from **09** SPCBs (ie., States of Rajasthan, Goa, Tamil Nadu, Maharashtra, Madhya Pradesh, Gujarat, Meghalaya, and Karnataka) and **01** PCC (ie UT of Pondicherry). Compilation of information is under progress.