

## HAZARDOUS WASTE MANAGEMENT

### 9.1. Management of Hazardous Wastes (HW)

Common Treatment, Storage and Disposal Facilities (TSDF) have been developed for the disposal of land disposable HW at 22 different places in 10 States namely Gujarat (7 Nos.), Maharashtra (4 Nos.), Uttar Pradesh (3 Nos.), Andhra Pradesh (2 Nos.), Himachal Pradesh (1 No.), Madhya Pradesh (1 No.), Punjab (1 No.), Rajasthan (1 No.), Tamil Nadu (1 No.), and West Bengal ( 1 No.). Total waste handling capacities (disposal capacity) of these facilities, is 15,00,568 MTA which is much less than the present generation of 27,28,326 MTA of land-disposable Hazardous Wastes.

The details of Hazardous Wastes Management facilities available in India is given below:

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|--|-------------------------|
| • Common Incinerators                                    | - 13 Nos. in 6 States   |
| • Individual Incinerators                                | - 127 Nos. in 12 States |
| • Total incineration capacity                            | - 3,27,705 MTA          |
| • Present generation of Incinerable waste in the country | - 4,15,794 MTA          |
| • Deficit of Incineration capacities                     | - 88,089 MTA            |



**Figure: 9.1.1. Common Hazardous Waste Incinerator at Ankleshwar**

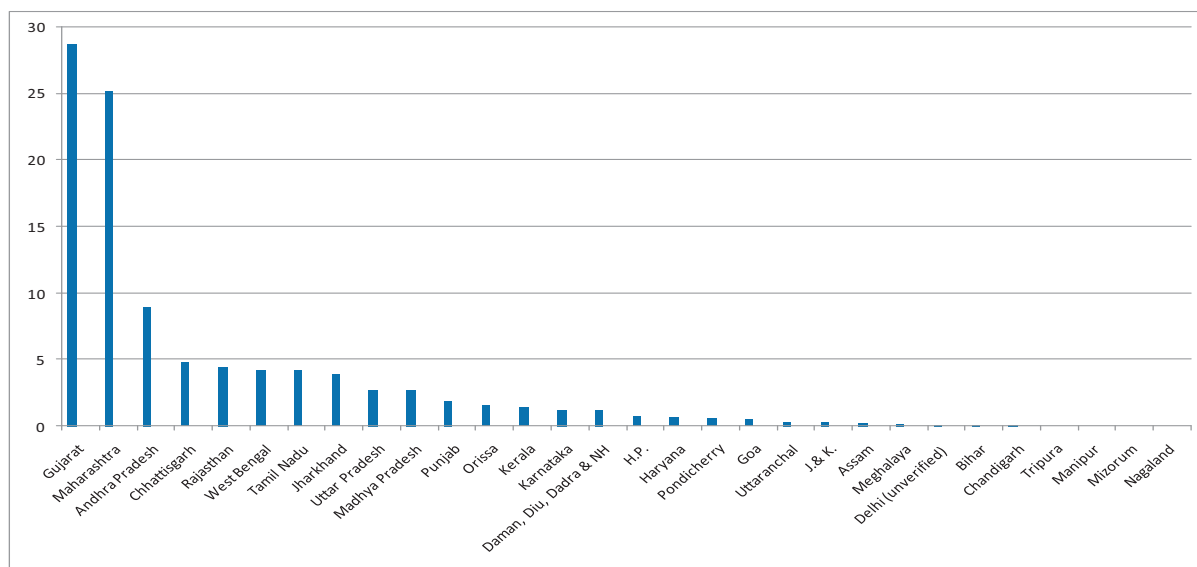
### 9.2. National Inventory of Hazardous Wastes Generating Industries

The Ministry of Environment & Forests, Government of India, notified the Hazardous Waste (Management & Handling) Rules on July 28, 1989 under the provisions of the Environment (Protection) Act, 1986. The Rules have been amended in year 2003 as the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules -2008 in 2008. Based on information provided by 27 SPCBs and 3 PCCs pertaining to the period 2007-08, the report on 'National Inventory of Hazardous Wastes Generating Industries' has been prepared and posted on Central Pollution Control Board website.

The HW management at a glance:

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|----------------------------------|-----------|
| • Land Fillable Hazardous Wastes | - 49.55 % |
|----------------------------------|-----------|

- Incinerable Hazardous Wastes - 6.67 %
- Recyclable Hazardous Wastes - 43.78 %



**Figure: 9.2.1. Relative %age Contribution towards HW Generation by States /UTs**

### 9.3. Registration of Hazardous wastes Recycling Units

It is mandatory for the hazardous waste recycling units to register with Central Pollution Control Board under the provisions of Hazardous Waste (Management & Handling) Rules, 1989 as amended from time to time. Inspections carried out in 95 industrial units located in western zone for registration/renewal of registration as actual user of hazardous waste with environmentally sound management facility.

### 9.4. Performance of Captive Secured Landfill Sites (SLFs) in Central Zone

Many industrial units have been permitted to develop captive SLFs within their own premises to dispose the hazardous wastes generated in the processes. It was expected that once the common hazardous wastes TSDf are established, the wastes will be sent to the common facility for disposal. The captive SLFs were mostly aimed at a temporary measure to store the waste safely. Most of the recyclers/re-processors of non-ferrous wastes such as lead, zinc etc. and waste/used oil were also permitted to have captive SLFs in their premises.

### 9.5. TSDFs in Andhra Pradesh

Two TSDf sites namely (i) M/s Coastal Waste Management Project (CWMP), Parvada, Vishakhapatnam and (ii) M/s. Hyderabad Waste Management Project (HWMP), Dundigal, RR District have been established in Andhra Pradesh. Both the facilities have been inspected and monitored during the year 2008.

### 9.6. TSDf M/s Coastal Waste Management Project (CWMP), Parvada, Vishakhapatnam

It is located in the pharma city - J.N.Pharma City (India) Ltd - at Paravada Village, 24 km west of Visakhapatnam city with a capacity of 40, 000 TPA (including incinerator of 1.5 TPH).

### 9.7. TSDf M/s Hyderabad Waste Management Project, Dundigal, Rangareddy District

This is the first common HW treatment facility established in South India and located in RR District 25 km away from Hyderabad. It started operation during the year 2001 with a capacity of 1,50,000 MT. The facility for incineration was commissioned in the year 2007.

### 9.8. Performance of Common HW Incinerators in West Zone

In the West Zone the states Gujarat, Maharashtra and UT of Daman, Diu & Dadra, Nagar Haveli have six Common HW treatments, storage, disposal facility (CHWTSDf) with landfill, stabilization and incineration facility have been established for the proper disposal of hazardous waste.

### 9.9. Performance of Common HW Incinerators in Central Zone

Two TSDFs namely Pithampur, Dhar (M.P.) and Gudli, Udaipur (Rajasthan) were studied by CPCB OZnal Office at Bhopal.

Pathway	Year		
	2006	2007	2008
Direct land fill	1959.130	11921.880	7556.071
Landfill treatment after	1396.310	4186.670	4158.262
Incinerable waste	0.000	657.968	478.352
<b>TOTAL</b>	<b>3355.440</b>	<b>16766.518</b>	<b>12192.685</b>

**Table : 9.9.1. Hazardous waste handled at TSDF Pithampur, Dhar, M.P.**

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