



# Rise in Plastic Waste Generation

## Why in News?

According to the **Haryana State Pollution Control Board's annual report**, there is an **increase in plastic waste production** in 2023 to 1,79,406.5 tonnes, marking a 38% surge from 2022's 1,29,866.7 tonnes. About **14% of this waste was disposed of in landfills**.

## Key Points

- The report has highlighted a **rise in plastic consumption in the state**, possibly leading to more plastic waste.
  - This development is concerning as it presents major hurdles for **waste management** and can have lasting **environmental consequences**.
  - Experts suggest that the solution to this problem involves cutting down on plastic usage and encouraging the adoption of eco-friendly alternatives.
- **Burning plastic waste in landfills** poses a significant environmental issue as it can lead to **toxic Particulate Matter (PM) and gaseous emissions** due to poorly managed sites where fires can commonly occur.
  - Therefore, it is advised to minimize the disposal of plastics in landfills as a preventive measure.
- **The Urban Local Body (ULB) department** has devised a strategy for managing plastic waste, which has been submitted to **the Central Pollution Control Board (CPCB)**.
  - All municipal corporations have been instructed to establish **Material Recovery Facilities (MRFs)** as necessary and to handle their plastic waste in accordance with the **Solid Waste Management Rules, 2016**, and **Plastic Waste Management Rules, 2016**.

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# 25K TONNES OF WASTE SENT TO LANDFILLS IN 2023

Haryana produced 38% more plastic waste in 2023

2022

(All figures in metric tonnes)

Recycled  
**89,634.6**

Sent to landfills  
**14,398.5**

Other uses  
**10,305.9**



2023

Recycled  
**1,40,555.3**

Sent to landfills  
**25,719.1**

Other uses  
**6,544.7**



SECTOR 53



## Central Pollution Control Board (CPCB)

- CPCB is a **statutory organisation** which was **constituted in September, 1974** under the **Water (Prevention and Control of Pollution) Act, 1974**.
- It was entrusted with the powers and functions under **the Air (Prevention and Control of Pollution) Act, 1981**.
- It serves as a field formation and also provides technical services to the **Ministry of Environment and Forests and Climate Change** of the provisions of the **Environment (Protection) Act, 1986**.

## Haryana State Pollution Control Board

- It was formed as a **statutory organisation** by Government of Haryana in the **year 1974** to preserve the wholesomeness of water and prevent water pollution after Government of **India** legislation of **Water Act, 1974**.

## Particulate Matter (PM)

- Particulate matter, or PM, refers to a complex mixture of extremely **small particles and liquid droplets** suspended in the air. These particles come in a wide range of sizes and can be made up of hundreds of different compounds.
  - **PM10 (coarse particles)** - Particles with a diameter of 10 micrometres or less.
  - **PM2.5 (fine particles)** - Particles with a diameter of 2.5 micrometres or less.

## Particulate Size Matters: Comparing sizes

Small particles pose the greatest risk to human health. While the nose can filter most coarse particles, fine and ultrafine particles are inhaled deeper into the lungs where they can be deposited or even pass into the bloodstream.

Measurement indicate microns in diameter ( $\mu\text{m}$ ).

### PM10 ( $\leq 10 \mu\text{m}$ ) Coarse Particles



Pollen



Mold spores



Dust

### PM2.5 ( $\leq 2.5 \mu\text{m}$ ) Fine Particles



Bacterium



T4 Bacteriophage



Dust mite allergens



Pet dander

### UF ( $< 0.1 \mu\text{m}$ ) Ultrafine Fine Particles



Influenza A



Smoke



Soot/ Black Carbon



SARS-CoV-2

Human hair  
50-180  $\mu\text{m}$

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