



At a Glance

WASTE AND HEALTH

Hazardous waste is generated by factories, industries and common household objects that produce **toxic metallic, organic, electronic and electrical toxins**. **Toxins from landfills, open dump sites and leachate contaminate the air, water and soil through which they enter the food chain and subsequently the human body with deadly consequences.**

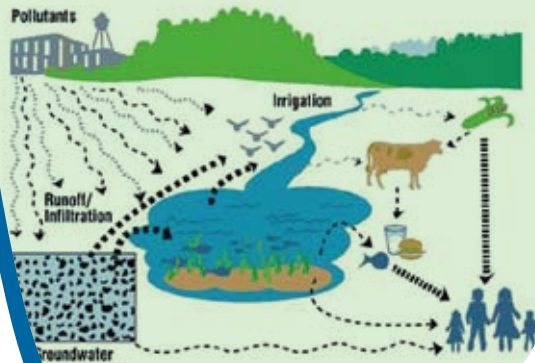
THE CRISIS

- Of the 62 million MT municipal solid waste generated in urban India annually, less than 60% is collected and about 15% treated.¹ The rest is **dumped indiscriminately in water bodies and on land, or burnt.**
- **Common household products contain a multitude of contaminants** that pose grave hazards to human health.
- **Populations that live and work around landfills and dump sites have a higher rate of low birth weight babies, neonatal deaths, and congenital anomalies.**
- **Incinerators release a cocktail of toxic chemicals** that increase child cancers and neurological disorders, and lung cancer in people who live and work near them.
- **Dioxins, a long-lived toxic by-product of incineration of PVC plastic, are**

¹ Report of the Task Force on Waste to Energy (Vol 1) 2014, Planning Commission, New Delhi, May, p 4, as viewed on http://planningcommission.nic.in/reports/genrep/rep_wte1205.pdf

NO TIME TO WASTE

- Municipal solid waste generated in India annually: 62 million MT
- Percentage of urban municipal solid waste collected: less than 60%
- Percentage of solid waste treated: 15%
- Toxic gases released by 1 MT of burnt waste: 5,000 m³



transported by air currents to become **global contaminants** that enter the food chain.

- **Municipal solid waste leachate from landfills contaminates ground and surface water** with volatile organic chemicals that cause eye and skin irritation.

HOUSE OF HORRORS

- Acrylic acid in wall paint can irritate the mucous membranes
- Benzene in varnish can damage the immune system
- Cadmium in batteries can cause cancer
- Lead in computers can lower IQ in children
- Methylene chloride in household cleaners affects the central nervous system
- Mercury in fluorescent lamps can cause renal failure
- Xylene in fabric and cosmetics can cause neurological disorders
- Nitrobenzene in shoe polish can lead to coma

- **Studies in Uttarakhand, Punjab, Tamil Nadu and Kerala have shown that toxins from solid waste and leachate have given rise to a host of diseases**, including malaria, diarrhea, dengue filarial, typhoid, cancer, renal failure, skin and respiratory disorders, and DNA damage in exposed populations.

GOING FORWARD

- **The Environment and Health Ministries and other stakeholders must come together to prioritise precautionary action** to reduce pollution from waste.
- **Urban local bodies must opt for environment-friendly rather than polluting technologies** that will increase the disease burden in the future.

DEATH BY BREATH

A 2010 study of people living near 373 toxic waste sites in India (see map, below), Indonesia and Philippines showed that the exposed population of 8,629,750 would lose 828,722 years of full health due to illness, disability or premature death. Women of childbearing age constituted 65% of the population.

- **Studies and research must be undertaken** to understand the linkages between waste and human health and take remedial actions accordingly.
- **Environmental health interventions must be cost-effective** and benefit the overall well being of the community.
- **Extended Producer Responsibility (EPR) must be strictly enforced** to reduce the toxins that can leach into the environment.




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