

# Sea of trash pollutes water, air

## Capital Panel Reports Major Groundwater Contamination Near All Four Landfills

TIMES NEWS NETWORK



Location	pH	TDS	Chlorides	Hardness	Ca	SO4
Permissible limit	6.5-8.5	500	250	300	75	200
Bhalswa SG Transport Nagar	6.9	1,290	490	940	376	37.4
Bhalswa Dairy	7.2	1,130	490	1,200	480	28.2
Bhalswa Landfill	6.9	1,700	1,365	2,176	870	24.7
Bhalswa Janata Colony	7.1	1,360	1,140	1,080	432	33.1
Okhla Landfill	7.2	650	680	1,000	400	33.3
Okhla ESI Hospital	7.4	400	140	300	120	41.5
Okhla Workshop	7.1	680	565	712	285	38.8
Ghazipur Dairy	7.2	560	140	640	256	25.5
Behind Ghazipur Dairy	7.2	600	240	560	224	31.9
Ghazipur Landfill	7.1	850	500	680	272	46.6

All measures save pH are in milligrams per litre | TDS: Total dissolved solids; Ca: Calcium; SO4: Sulphates; Hardness: Presence of calcium carbonate

Air is free. **STOP** making Delhi's people pay a price for it!



### POLLUTION BLIGHT

AIR QUALITY INDEX PM2.5

Delhi	225	Poor
Tomorrow	212	Poor
Pune	55	Good
Tomorrow	58	Good

Source: SAFAR@MoES-IITM-IMD (10 stations)

Hyderabad	57	Good
Chennai	74	Good
Kolkata	71	Good
Mumbai	21	Good

US Embassy data calculated as per Indian standards by SAFAR@MoES-IITM-IMD

Based on 1 Station Data Per City at 4pm

rable particulate matter)—a component of SPM that can get lodged in people's lungs. Neither did it estimate the levels of oxides of nitrogen or extremely toxic compounds such as diox-

ins and furans. Dioxins are often released near landfill sites due to burning of plastics.

The groundwater quality also seems to be very poor. Even though, DPCC didn't detect any heavy metals in the water, experts say it definitely cannot be used for drinking. "These landfills were made in way such that leachate leaked out from the dump into the soil. When they were made there was hardly any habitation around. But solid waste obviously decomposes here and, when rain falls, the leachate moves into the groundwater system. We have to learn from our mistakes. The authorities should also study how far the leachate has travelled. For instance, has it travelled from Bhalswa to, say, Mayur Vihar?" Shashank Shekhar, assistant professor of geology at DU, said. He added that such water can affect health and cause skin problems. The only saving grace is that carcinogenic heavy metals have not been detected in the samples.

Importantly, a 2012 study by the School of Environmental Sciences in JNU has found high levels of nickel, zinc, arsenic, lead, chromium and other heavy metals in the solid waste samples collected before and after monsoon from Ghazipur, Bhalswa and Okhla landfills which was an indication that the groundwater may also be contaminated.

**New Delhi:** People living close to some of Delhi's landfills are routinely exposed to extremely polluted air and those drinking groundwater from the area are actually drinking water that's far from being fit for consumption. The Delhi Pollution Control Committee has recently submitted a status report of air and water quality around Ghazipur, Okhla and Bhalswa landfills which shows that the suspended particulate matter levels around these landfills are up to 30 times the standard in some places. The water is hard with very high levels of total dissolved solids which can cause it to taste bitter and be toxic in nature.

The SPM levels near Bhalswa, for instance, were about 3,633 micrograms per cubic metre while the safe standard for PM-10 (coarse air pollution particles) is only 100 micrograms per cubic metre. At another spot close to Bhalswa landfill, it was 1,571 micrograms per cubic metre. At Bawana landfill, SPM was about 777 micrograms per cubic metre and at one of the locations in Ghazipur it was 1,124 micrograms per cubic metre.

Shriram Institute of Industrial Research, which conducted the monitoring work in these areas last month, however, did not measure PM-2.5 (fine, respi-