

PRESS RELEASE

Lead Contamination Near Multiple Battery Recycling Sites Exceeds Safety Limits

Toxics Link study found that 52% of the soil samples contained lead concentrations exceeding 5000 ppm

New Delhi, April 8, 2026 — A new study by Toxics Link highlights high levels of lead contamination in soil surrounding battery recycling units across India, raising serious concerns about both public health and environmental safety.

The report, **“Soiled with Lead: from Battery Recycling”**, assesses contamination in and around authorised (formal) and unauthorised (informal) recycling units across Delhi NCR, Haryana, Rajasthan, and Uttar Pradesh, and highlights significant gaps in the enforcement of India’s Battery Waste Management Rules, 2022 and Extended Producer Responsibility framework.

Health and Economic Burdens of Lead Poisoning Globally

Lead, a cumulative toxicant with no known safe level of exposure, remains one of the most serious environmental health risks globally, contributing to an estimated 540,000 deaths and a loss of 13.9 million Disability-Adjusted Life Years (DALYs) annually, mostly in Low and Medium Income Countries (LMICs), a WHO report found. Lead has also been classified as a Group II human carcinogen by the International Agency for Research on Cancer (IARC).

Lead enters the body through multiple pathways including inhalation, ingestion of contaminated food or dust or through skin contact. Once absorbed, it is carried through the blood to different body parts leading to serious health impacts. Children and pregnant women are most at risk, as even low levels of lead can disrupt brain development, leading to cognitive impairment, behavioural disorders, attention deficits, and lifelong learning difficulties. Severe exposure can result in coma, convulsions, or death, while survivors may suffer from permanent neurological damage.

Lead contamination can result in GDP loss for a country, according to a global study by NYU. The same study noted an annual loss of \$977 billion due to reduced IQ and productivity among lead-exposed children in LMICs. India estimatedly suffers from an economic loss **of \$236 billion per year, or roughly 5% of GDP, from lead poisoning.**

Toxics Link Study Findings

The study analysed 23 soil samples collected near lead-acid battery recycling units in selected cities, including locations close to residential areas, local communities, and primary schools. All samples showed evidence of widespread lead contamination ranging from 100 ppm to 43,800 ppm.

With reference to the Environment Protection (Management of Contaminated Sites) Rules, 2025, our findings indicate that 52% (12 out of 23 samples) of the collected soil samples contained lead concentrations exceeding 5000 ppm benchmark for the category of Hazardous Contaminated Site. Findings also reveal that 31% of the samples surpassed the permissible limits for industrial areas as prescribed in the Rule.

At some sites, waste from battery recycling units was openly dumped on bare ground, further aggravating the risk of soil and groundwater contamination.

Unexpectedly, higher levels of lead, on average, were detected in samples collected from authorised recycling units (formal units) compared to the ones collected from the unauthorised units.

“The results point to the gaps in the management of the environmental leakage of this heavy metal,” said **Satish Sinha, Associate Director, Toxics Link.**

Urgent Need for Action

Given the widespread contamination and serious health risks identified, the report calls for urgent and coordinated interventions as outlined below:

Recommendations

- Restrict unregulated and unauthorised recycling of lead-acid batteries.
- Strengthen enforcement of Extended Producer Responsibility (EPR) guidelines.
- Introduce and implement Best Available Technology and Best Environmental Practices in all such facilities.
- Increased monitoring to assess lead contamination in soil, air, water, and household dust near recycling sites.
- Create a national database of contaminated sites linked to CPCB-led remediation efforts.
- Conduct regular health assessments, including blood lead level (BLL) testing in exposed populations.
- Increase consumer awareness on lead hazards and promote returning used batteries through authorised channels.

ENDS

About Toxics Link

Toxics Link is an Indian environmental research and advocacy organisation set up in 1996, engaged in disseminating information to help strengthen the campaign against toxics pollution, provide cleaner alternatives, and bring together groups and people affected by this problem. Toxics Link’s Mission Statement - “Working together for environmental justice and freedom from toxins.”

More at: www.toxicslink.org

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