

# BEST Standard



The Better Environmental Sustainability Targets (BEST) Standard 1001 for lead battery manufacturers was developed in an open and transparent forum with participation from industry, government, NGOs, and

other experts. The Standard was developed following the Code of Good Practice established by the International Social and Environmental Accreditation and Labeling Alliance (ISEAL). ISEAL is the association of international standard-setting organizations.

The BEST Standard 1001 is a comprehensive set of voluntary environmental certification criteria for lead battery manufacturing facilities including provisions for:

- Environmental Lead Emissions
- Occupational Lead Emissions
- Waste Disposal
- Energy & Water Consumption
- Emergency Response
- Chemical Storage and Handling
- Take Back Provisions for Used Batteries

The BEST Certification is a voluntary incentive program for lead battery manufacturers who meet environmental performance standards and agree to take back used batteries for environmentally sound recycling.



*Hazardous battery recycling on the streets of New Delhi. A child disassembles a used truck battery on the sidewalk to sell lead to unregistered recycling units.*

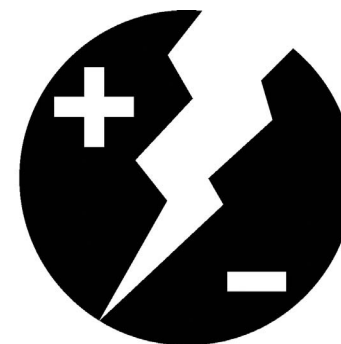


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# BEST

Better Environmental  
Sustainability Targets

## Environmental Standards for Lead Battery Manufacturing



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## Problem Description

Lead poisoning has reached epidemic proportions. Average exposure levels in children residing near battery plants in developing countries are four times higher than the current level of concern established by the World Health Organization (WHO). Average blood lead levels among workers in these plants are approximately twice the recommended level. WHO estimates that 120 million people are overexposed to lead (approximately three times the number infected by HIV/AIDS) and 99 percent of the most severely affected are in the developing world. More than 80 percent of all lead production goes into batteries. Battery manufacturers in developing countries generally don't collect more than a small percentage of used batteries for proper recycling. As a result, backyard smelters for recycling batteries have proliferated, further contributing to lead poisoning and environmental contamination.



*During battery manufacturing operations, lead is melted and the resulting fumes are released into the air, poisoning workers and contaminating the environment.*

## BEST Certification Program

The BEST certification program is designed to restructure the incentives that drive industry behavior. At the same time it creates a self-sustaining revenue stream from licensing the eco-label. Participating battery companies that meet specific emission standards and take back used batteries for environmentally sound recycling, qualify to place the BEST eco-label on their products. An accredited local auditor conducts an annual assessment to verify compliance with these minimum performance standards.

## Lead Poisoning

Lead poisoning is the most serious environmental health threat to children and one of the most significant contributors to occupational disease. Lead causes symptoms ranging from the loss of neurological function to death depending upon the extent and duration of exposure. In children, moderate lead exposure is responsible for decreasing school performance, lowering IQ scores, and is also linked with hyperactive and violent behavior. Both children and adults can suffer from a range of illnesses including harm to the central nervous system, kidneys, gastrointestinal tract, and blood forming system. It also affects the reproductive system in both men and women. The annual cost to society due to lead poisoning in children in the U.S. alone is estimated to exceed \$43.4 billion. Worldwide estimates are not available but would greatly exceed this figure, as exposures are known to be significantly higher in developing countries.



*Battery manufacturing plant's young neighbors are exposed to hazardous lead debris dumped out their back door.*

## About OK International

OK International is a nonprofit organization dedicated to improving public health through innovative strategies to reduce exposures to industrial pollutants. The organization seeks to address inequities in environmental standards between developed and developing countries by working in partnership with industry, government and non-governmental organizations (NGOs).

## BEST Program Accomplishments

- Reached consensus among all stakeholders on the BEST Standard for certifying lead battery companies
- Established partnership with NGOs, major battery companies, and bulk purchasers
- The partnership was selected as a SEED Award finalist -- having been recognized as one of the world's top entrepreneurial projects for sustainable development



## BEST Program NGO Partners



Occupational Knowledge International  
(OK International)  
San Francisco, USA



Development Alternatives  
New Delhi, India



NRCLPI-St. John's

National Referral Centre for Lead  
Poisoning in India  
Bangalore, India

## Program Funders

- United Nations Environment Programme (UNEP)
- Richard and Rhoda Goldman Fund
- International Finance Corporation (World Bank)
- Deshpande Foundation
- Environ Foundation
- Mailman Foundation
- Sigrid Rausing Trust
- The Krieger Charitable Trust