

OK Environment  
Standard Setting Work Program

Better Environmental Sustainability Targets (BEST) Standard 1001  
For Lead Battery Manufacturers

June 1, 2009

Contact:

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Standard: BEST Standard 1001

Program Description:

The Better Environmental Sustainability Targets (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 and Water Consumption, Emergency Response, Chemical Storage and Handling, and Take Back Provisions for Used Batteries. This Standard for lead battery manufacturers was developed with active participation from industry, government, NGOs, and other experts.

Program Need:

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.

### Program Objectives:

Objective 1: Reduce lead exposures in communities where lead batteries are manufactured.

Objective 2: Reduce lead exposures and improve the health status of workers in lead battery manufacturing facilities that are occupationally exposed to lead and other hazardous materials.

Objective 3: Increase the adoption of sustainable practices in order to reduce the environmental impact of lead battery manufacturing by encouraging efforts to minimize waste, lower emissions, reduce energy and water consumption, and encourage environmentally sound recycling.

### Amendments to the Standard (2009):

On May 19, 2009, the take-back criteria specified in Annexe 1 of the BEST Standard 1001 was amended by unanimous resolution of the Directors of OK International. Sections specifying minimum take back rates were deleted and language was added to require a specific plan that would indicate measures to continually improve the collection rate. This amendment is a result of the dramatic decline in the price of lead on the global market over the past year, which has negatively impacted collection rates.

Further issues raised since the release of the BEST Standard also convinced the board to act, including the Standard's failure to account for differences between companies that manufacture primarily for export and those that manufacture for the domestic markets. For example some Chinese companies indicated that they are exporting 90 percent of their production and could therefore not qualify to meet a 20 percent take back criteria. In addition, the deleted sections of the Annexe required cooperation from bulk purchasers to structure procurement contracts to allow for the manufacturer to take back an equal number of batteries, but cooperation from government and other purchasers was not always forthcoming. Although no additional amendments to the BEST Standard are anticipated at this time, the board has agreed to consider other options regarding the take back provisions during the next scheduled review of the BEST Standard.

### Governance:

OK Environment, Inc., a wholly owned subsidiary of Occupational Knowledge International, is charged with overseeing the accreditation and performance of independent auditors, as well as updating the BEST Standard 1001 on a three-year schedule. The Board of Directors of OK Environment represents all key stakeholder groups with two members from the battery industry, auto industry/major purchasers, NGOs, two appointed by OK International and the President of the Board of OK International. The initial nine Board Members have been assigned to serve either two or three year terms to allow for staggered

turnover.

Date of Inception and Revision:

The BEST Standard 1001 was formally adopted by the OK Environment Board of Directors in November 2007. According to the BEST Quality Management Plan, the BEST Standard is to be updated on a three-year schedule. Therefore, the BEST Standard is scheduled to be reviewed by the Board of Directors in 2010.

Accredited Certification Bodies:

Battery manufacturers seeking BEST certification must undergo an annual third-party audit conducted by an accredited certification body. Certification bodies must submit applications demonstrating the required experience, education and training, and be approved by a majority vote of the OK Environment Board of Directors. Currently, the following certification bodies have been accredited to conduct environmental audits under the BEST Standard 1001:

- 1) TUV Rheinland (India) Pvt. Ltd., Bangalore, India, and
- 2) TUV India Pvt. Ltd., Mumbai, India.