BEST News

Better Environmental Sustainability Targets (BEST)
Published by Occupational Knowledge International



May 2010 - Volume 6

Statement on Lead Poisoning Prevention Issued at ICEOM Conference in Chengdu, China

Occupational Knowledge (OK International) arranged a plenary session on lead poisoning prevention at the 5th International Conference on Environmental and Occupational Medicine (ICEOM) in Dujiangyan, China on April 9, 2010. The conference was organized by the Shanghai Center for Disease Control and Prevention and the California



Department of Public Health. The conference resulted in a statement calling for increased cooperation between U.S. and Chinese Governments, industry, and academia to eliminate lead poisoning in China.

Conference speakers included Mary Jean Brown of U.S. Center for Disease Control and Prevention, Lin Guozhen of Guangzhou Center for Disease Control, Yan Chonghuai of Shanghai Jiaotong University, Dave Jacobs of the National Center for Health Housing, Michael Kosnett of University of Colorado, and Perry Gottesfeld of OK International.

China Adopts Lead Battery Recycling Regulation

A new regulation to prevent pollution from the recycling of waste lead-acid batteries was officially issued and is effective from March 1, 2010. China's Ministry of Environmental Protection (MEP) issued the "Technical Specifications of Pollution Control for Treatment of Lead-acid Battery (HJ 519-2009) Standard". This regulation outlines requirements for the collection, handling, storage and recycling of waste lead batteries and provides guidance to recyclers on site selection and facility pollution controls. The new regulation

In This Issue

OK International Presents at ICEOM Conference in Dujiangyan, China

China's New Lead Battery
Regulation

China Poisonings Continue

Lead Poisoning at Kenyan
Lead Battery Recycling Plant

Forced Closure of Battery
Recycler in Cambodia

Hybrids Increase Demand for Lead Batteries

Teeth as Indicators of Exposure

Firefly Energy Closure

India's New E-Waste Law

Lead Paint Coalition to Meet in Geneva

extends producer responsibility with mandatory collection of used lead batteries and mandates that collected battery waste can only go to recycling facilities approved for operation by the government.

Additional requirements include:

- Battery recycling facilities must have a lead recovery rate of 95% for existing factories and no less than 97% for new factories;
- Existing recycling facilities must have a capacity of at least 10,000 tons per year to be allowed to continue to operate;
- New factories must have capacities of at least 50,000 tons per year;
- Recyclers must have appropriate worker training, supervision, and assessment.



Since our last edition in February, at least two more mass lead poisonings incidents in China have been reported. There have now been at least ten similar reports in the past year, which has impacted thousands of children and adults. In the latest incidents in Sichuan and Hunan Provinces, the Zhongyi Alloy Company and the Yuanshan Lead Recycling Company were closed after blood lead testing of those living near these plants demonstrated that approximately 300 children had blood lead levels in excess of 10 ug/dL. Some of those children tested were confirmed to have four to five times the acceptable threshold exposure to lead and were hospitalized.

In light of the growing number of reported poisoning cases, China's Minister of Environmental Protection (MEP), Zhou Shengxian announced on April 9, 2010 that decreasing heavy metal emissions will be a top priority this year. Few details were released on what actions may be taken to back up this pledge.

Lead Poisoning from Battery Recycling in Kenya

In early 2009 Metal Refinery EPZ Ltd., a car battery recycling company operating a factory in Mombasa, Kenya, was closed by local public health officials following massive public outcry that the operation was poisoning workers and community members. At least three children living in the nearby Owina Ouru slum were confirmed to have blood lead levels in excess of the 10 ug/dL recommendation.

A recent report by the Eco-Ethics International-Kenya Chapter indicates that the environmental audit conducted following the closure of the factory by the National Environment Management Authority did not address lead emissions or the children affected by the factory's emissions. The local



Growth Industry: 75% of Photovoltaic solar systems in China rely on lead acid batteries!

For recent news and updates, follow OK International on Twitter: http://twitter.com/
occupknowledge

OK International would like to thank our program funders including:

International Finance Corporation

Environ Foundation

Public Health Department has approved the factory's reopening, and residents have recently reported that it is operating at night.

Battery Recycling Plant Closed in Kampong Cham Province, Cambodia

Numerous health complaints were reported by those residing near a battery recycling plant that began operating nearly four months ago in the Memot District of Kampong Cham Province. Local villagers began raising complaints that the factory emitted intense, foul smelling odor. These complaints reached local civil society organizations and government officials who sent public health authorities to examine the factory emissions. After determining the emissions were indeed a threat to human and environmental health, the factory was closed in April for further investigation.

Hybrid and Electric Vehicles to Drive Lead Battery Sales

The growing consumer demand for electric hybrid vehicles is fueling the search for new lead battery technologies that are efficient and affordable. While much of the industry is focused on lithium-ion technology, Axion has developed a new type of lead-carbon battery for use in electric and plug-in hybrids. The company claims that the life of lead-carbon batteries is approximately four years, costs about 25 percent less than an equivalent lithium-ion pack, and requires significantly less lead than the traditional lead-acid battery. Axion has recently proposed a \$52 million expansion of their production facilities after partnering with battery giant Exide Technologies.

Several auto companies are also marketing electric vehicles reliant on traditional lead batteries. The Chinese auto company Geely, recently announced that they will introduce an electric car with lead batteries that will sell at a lower price than the Tata Nano or about 1,500 British Pounds. A recent press report indicates that Indian based Reva may be sold for a reported \$100 million. The company has sold about 3,000 lead battery powered electric vehicles.

Indian Study Uses Teeth as Indicators of Lead Exposure around a Smelter

A recent study "Relating tooth and blood lead levels in children residing near a zinc-lead smelter in India" by researchers at the Department of Pediatric Dentistry at the Pacific Dental College & Hospital in Udaipur, Rajasthan, tested lead levels in primary teeth and blood of children living

Goldman Fund

Deshpande Foundation

Mailman Foundation

Sigrid Rausing Trust

United Nations Environment Program near a zinc-lead smelter. The study found that the distance from the smelter influenced blood lead levels. Although no similar correlation was found for teeth, the study concluded that measuring tooth lead levels may be a better indicator of overall lead exposure.

Firefly Energy Closes its Doors

Seven-year-old Firefly Energy, a company backed by Caterpillar that pioneered technology to improve the efficiency of lead acid batteries, filed for Chapter 7 bankruptcy in March. The company developed an innovative method to replace the negative electrode's lead grid with a carbon-graphite foam grid.

India Releases Draft Electronic Waste Law

In March, India's Ministry of Environment and Forests (MoEF) released a draft rule that would hold manufacturers responsible for the collection and proper disposal of electronic waste. The E-waste (Management and Handling) Rules, 2010, outlines reporting requirements for producers, dealers, and recyclers and calls for a reduction in the use of hazardous substances in the manufacturing process. Additionally, the proposed rule would ban the import of used electronics, including computers, into India for charitable purposes.

The proposed allowable levels of cadmium and mercury are considerably less stringent than the European and Chinese Restriction of Hazardous Substances (RoHS) standards for new electronic equipment. The proposed standard does not limit lead levels in electronics.

The draft E-waste (Management and Handling) Rules, 2010 document may be viewed here: http://bit.ly/a4jMLI.

International Coalition Launches Global Effort to Eliminate Lead Paint

The Global Alliance to Eliminate Lead in Paints, an international partnership of governments, businesses, and non-governmental organizations, will hold its first meeting in Geneva on May 26-28, 2010 to formulate plans for phasing-out lead from paints. The alliance is being jointly coordinated through the United Nations Environment Programme (UNEP) and the World Health Organization (WHO), and was unanimously approved by UN member countries at the International Conference on Chemicals Management in May 2009. As part of this effort, OK International is proposing an international certification program to test and label paints that do not contain lead. Further details on the partnership including alliance members can be found here:

http://www.chem.unep.ch/Lead_in_paint/default.htm

Occupational Knowledge International

www.okinternational.org

www.bestbattery.org