



Centers for Disease Control and Prevention
National Institute for Occupational
Safety and Health
Robert A. Taft Laboratories
4676 Columbia Parkway
Cincinnati OH 45226-1998

October 3, 2012

OSHA Docket Office
OSHA Docket No. OSHA-2012-0013
U.S. Department of Labor
Occupational Safety and Health Administration
Room N-2625
200 Constitution Avenue, NW
Washington, DC 20210

Dear Sir/Madam:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) *Lead in General Industry Standard; extension of the Office of Management and Budget's (OMB) approval of information collection (paperwork) requirements* published in the *Federal Register* on August 10, 2012 [77 FR 47882]. Our comments are enclosed.

Please do not hesitate to contact me at 513/533-8302 if I can be of further assistance.

Sincerely yours,

Paul A. Schulte, Ph.D.
Director
Education and Information Division

Enclosure



Comments to OSHA

Comments of the National Institute for Occupational Safety and Health
on the

U.S. Department of Labor, Occupational Safety and Health Administration,
Lead in General Industry Standard;
Extension of the Office of Management and Budget's (OMB) Approval of
Information Collection (Paperwork) Requirements

Docket No. OSHA-2012-0013

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Cincinnati, Ohio

October 2, 2012

The National Institute for Occupational Safety and Health (NIOSH) has reviewed the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) *Lead in General Industry Standard; extension of the Office of Management and Budget's (OMB) approval of information collection (paperwork) requirements* published in the *Federal Register* on August 10, 2012 [77 FR 47882].

II. Special issues for comment, third bullet (p. 47883)

NIOSH offers the following information supporting the quality, utility, and clarity of information collected by companies in terms of lead exposure monitoring and biological monitoring. NIOSH reviews and uses employer-generated biological monitoring data for lead during field investigations for health hazard evaluations (HHEs). The following three examples describe HHEs where employer-generated biological monitoring data were used to determine past occupational health exposures and make decisions about current working conditions.

- 1) Review of a scrap metal recycling facility's biological monitoring data showed that two "burner" employees had been identified with blood lead levels (BLLs) above the OSHA action level of 30 micrograms per deciliter ($\mu\text{g}/\text{dL}$) [NIOSH 2005]. Review of the company's monthly monitoring data showed that the BLLs decreased over time until they reached acceptable levels. The company had a lead hazard exposure and biological monitoring program which allowed NIOSH to review past exposures at the facility and focus resources on current exposures. NIOSH found lead exposures for workers cutting steel plates exceeded the OSHA permissible exposure limit (PEL) and NIOSH recommended exposure limit (REL) and recommended that those workers be included in the company's written compliance program.
- 2) NIOSH reviewed the current medical surveillance program for inmates and staff exposed to lead and cadmium during electronics recycling in four federal prisons [NIOSH 2009]. NIOSH reviewed medical surveillance records, individual medical records, and industrial hygiene sampling records from each institution. For two prisons, exposure monitoring and medical surveillance were not performed during the first several years of electronics recycling operations, so the extent of exposure to lead and cadmium during that time could not be determined. Descriptions of operations during those times suggested that exposures were not well-controlled and were potentially above occupational exposure limits for lead and cadmium. Review of exposure monitoring data from the third prison documented exposure to lead and cadmium over occupational exposure limits during glass breaking operations. Past exposure monitoring at the fourth prison documented exposure to lead and cadmium below occupational exposure limits. NIOSH collected personal breathing zone (PBZ) air samples at one of the prisons and found that exposure to lead and cadmium was below occupational exposure limits. NIOSH collected wipe samples for lead and cadmium at two of the prisons which showed wide-spread contamination.
- 3) NIOSH evaluated employee lead exposure at an indoor small arms firing range [NIOSH 2011]. Medical monitoring results of instructors and the hazardous materials technician showed that BLLs were all below 10 $\mu\text{g}/\text{dL}$ of lead. PBZ air sampling results showed that exposures for one instructor, one shooter, and the hazardous materials technician were above the OSHA PEL and NIOSH REL for lead.

NIOSH found that the information from a company's implemented environmental and biological monitoring program for lead was useful in determining the workers' total exposure in the work environment from all exposure routes.

Information collected under the OSHA Lead Standards is crucial to research conducted by NIOSH and others to prevent adverse health effects among lead-exposed workers. For example, a new NIOSH project "Preventing Lead Exposure in Battery Manufacturing Industries" will use information already collected by companies under the OSHA Lead standard to identify processes, tasks, procedures, jobs, and areas that may contribute to elevated lead levels among workers. The objectives of this collaborative project include identifying possible causes of persistent rates of elevated blood lead levels above the national rate in the battery manufacturing industry and implementing exposure prevention activities among vulnerable workers, especially younger and older workers and women of reproductive age.

NIOSH also offers these comments on the *Supporting statement for the information collection requirements in the lead in general industry standard (29 CFR 1910.1025)*, Office of Management and Budget (OMB) control no. 1218-0092 (July 2012), page 28, Table A. Estimated number of facilities and exposed workers (<http://www.regulations.gov/#!documentDetail;D=OSHA-2012-0013-0002>):

- 1) The "Battery Manufacture" line item shows a decrease in the estimated number of facilities. If not already considered, NIOSH suggests reviewing data from the Economic Census (U.S. Census Bureau); this source indicates an increasing trend in the number of storage battery manufacturing establishments (NAICS 335911) from 130 establishments (17,132 employees/12,984 Production workers average per year) in 2002 to 160 establishments (20,605 employees/15,460 Production workers average per year) in 2007 [U.S. Department of Commerce, United States Census Bureau 2002, 2007].
- 2) The "Secondary Smelting" line item shows a reduction in the estimated number of facilities. NIOSH suggests this item include new secondary lead smelters, if not already considered. Please see U.S. Geological Survey, Mineral Commodity Summaries, January 2012, page 91, second paragraph (<http://minerals.usgs.gov/minerals/pubs/mcs/2012/mcs2012.pdf>): "A leading domestic lead-acid battery manufacturer broke ground on a new \$100 million secondary lead smelter in Florence, SC. When completed in 2012, the facility would have the capacity to produce about 120,000 tons per year of secondary lead. Another producer was expanding secondary lead production capacity at an existing facility in Tampa, FL, by 400%, to 118,000 tons per year. The company was on schedule to start a new secondary lead furnace in late September and reach its expanded capacity in early 2012."

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- U.S. Department of Commerce, the United States Census Bureau [2007]. 2007 Economic Census. Industry Statistics Sampler, NAICS 335911 Storage battery manufacturing [<http://www.census.gov/econ/industry/ec07/a335911.htm>]. Date accessed: September 2012.