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Ann Soiza Assistant Director Division of Occupational Safety and Health Washington State Department of Labor & Industries P.O. Box 44000 Olympia, Wash. 98504-4000

June 23, 2016

Dear Ms. Soiza:

Thank you for the opportunity to provide comments in support of updating the two standards that are designed to protect workers from occupational exposures to lead:

- WAC 296-62-07521: General industry lead standard
- WAC 296-155-176: Lead in construction standard

We very much appreciate your efforts to gather information during the Lead Safety Stakeholder meetings and we look forward to working with you to update these standards.

As we noted in our petitions to the Governor and L&I, Washington state's current occupational standards for lead are based on outdated scientific knowledge about lead toxicity. A broad scientific consensus now recognizes the significant health consequences associated with exposure levels that were previously considered safe.

Based on the current medical understanding of the health effects of lead intoxication, we request that L&I update Washington's occupational standards for lead. Please find attached a summary table that describes our recommendations.

The overarching goal of these revisions is to ensure that workers' blood lead levels (BLLs) do not exceed 10 micrograms per deciliter ($\mu g/dL$) over a working lifetime. To this end, we recommend lowering the Action Level and Permissible Exposure Level for lead and requiring medical removal at a BLL more protective of worker health. We also recommend changes to the requirements for Protective Clothing, Hygiene, Training, and Warning Signs to further reduce exposures to lead. Please see the attached table for our specific recommendations.

A recent analysis of BLL data from Washington state's adult blood registry revealed that workers of color in King County experience disproportionate lead poisoning. In battery manufacturing, most elevated BLLs were seen in Vietnamese and Salvadoran workers. In bridge painting, almost a third of lead-exposed workers were Hispanic. The disproportionate number of racial/ethnic populations working in industries placing them at risk for lead poisoning also raises equity and social justice concerns. All employers must be required to adequately convey the hazards associated with work and provide appropriate training and safeguards to minimize the risk of lead exposure.

We appreciate the work that L&I is putting into the stakeholder process on this issue, and look forward to reviewing the draft rule when it is ready.

Sincerely,

Patty Hayes, RN, MN

Director, Public Health – Seattle & King County

Requirement	General Industry standard (WAC 296-62-07521)	Construction standard (WAC 296-155-176)
Medical surveillance	Trigger tasks not applicable	All employees assigned for the first time to areas where level 2 or 3 trigger tasks ^a are performed must receive a baseline medical exam - unless the employer has provided an exam in the previous 12 months.
	 Medical surveillance, including blood lead level (BLL) testing, must be provided to all employees with potential for lead exposure and should not be dependent on personal airborne lead level measurements. 	
	 All employees subject to medical surveillance should have a BLL test at least every month for the first three months or upon change in task to a higher exposure, then every six months thereafter. Employees with a BLL at or above 10 µg/dL should be tested at least every three months, and those with a BLL at or above 20 µg/dL should be tested at least every four weeks. Once three consecutive BLLs, taken at least four weeks apart, each indicate a BLL below 10 µg/dL, the testing reverts to at least every six months. Employees on medical removal protection due to an elevated blood lead level should be tested every four weeks during the removal period. All employees with the potential for lead exposure must be provided an annual blood pressure measurement and a brief questionnaire regarding medical conditions that might increase the risk of adverse health effects of lead exposure. 	
Medical Removal Protection	 Workers must be removed from lead exposure if a single blood lead concentration is at or above 30 µg/dL or if two successive blood lead concentrations measured over a four-week interval are at or above 20 µg/dL. Employees who have been medically removed may return to work when two blood lead tests taken four weeks apart are less than 15 µg/dL. 	
Permissible Exposure Level (PEL) / Action Level (AL)	• The PEL and AL should be reduced in order to achieve lower BLLs which reflect new medical/toxicological information on chronic and low-level health effects. PHSKC recommends an AL of 2 μg/m³ and a PEL of 10 μg/m³	
Protective Work Clothing	Employers must provide protective work clothing and shoes and training in proper use to all employees exposed to lead at or above the Action Limit.	Employers must provide protective work clothing and shoes and training in proper use to all employees performing level 1, 2, or 3 trigger tasks or exposed to lead at or above the Action Limit.
Hygiene	 The following protective hygiene practices and policies must be in place to eliminate ingestion of lead. Eating, drinking, smoking, or applying cosmetics should be prohibited in areas where employees alter or disturb lead containing materials or lead containing paint or coatings. Workers should be required to wash up before eating, drinking, smoking or applying cosmetics whenever they alter or disturb lead containing materials or a lead containing paint or coating. Employers must provide clean eating and change areas for employees who work in areas where lead containing materials or lead containing paint or coatings are altered or disturbed. Employers must conduct qualitative or quantitative testing for lead on surfaces to ensure cleanliness. Employers must regularly test surfaces in eating areas and change areas and to clean more frequently when lead is found. A quantitative limit for lead on surfaces must be set and acceptable sample collection and analysis methods specified. 	
Training	 Employee training must be conducted quarterly. Training must be provided in a format that is accessible to employees. Specifically, training must be in a language understandable to workers and the training must be appropriate for employees with no or low literacy skills. Training must maximize the use of participatory and hands-on methods. 	
Warning Signs	Employers must post a warning sign in areas where lead is present. The sign must be in a language and format understandable to workers	

Public Health - Seattle & King County: Requested updates to Washington state's occupational lead standards			
Requirement	General Industry standard (WAC 296-62-07521)	Construction standard (WAC 296-155-176)	
Engineering and Work Practice Controls	 Minimum engineering and work practice controls must be defined and required by the employer unless the employer can demonstrate that such controls are not feasible. Work practice controls should be consistent with those recommended in EPA's Renovation Repair and Painting Rule and include wet methods for minimizing lead-containing dust, local exhaust ventilation on power tools, and isolation of the work area. 		

^aTrigger tasks:

Level 1: a) where lead containing coatings or paint are present: manual demolition of structures (e.g., dry wall), manual scraping, manual sanding, heat gun applications, and power tool cleaning, grinding, or sanding with HEPA dust collection systems; b) spray painting with lead paint.

Level 2: a) using lead containing mortar; lead burning and b) where lead containing coatings or paint are present: rivet busting; power tool cleaning without dust

Level 2: a) using lead containing mortar; lead burning and b) where lead containing coatings or paint are present: rivet busting; power tool cleaning without dust collection systems; cleanup activities where dry expendable abrasives are used; and abrasive blasting enclosure movement and removal.

Level 3: abrasive blasting, welding, cutting, and torch burning.