Lead Protection Program

Western Washington University complies with the Washington Administrative Code (WAC), Part 296-62-07521, regarding protection of workers from the hazards of lead exposure and with WAC 296-155-176 regarding worker lead protection in construction which includes:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair or renovation of structures or portions of structures with materials containing lead
- Installation of products containing lead
- Lead contamination clean-up
- Maintenance operations associated with the above activities.

The University's lead protection program includes training, exposure monitoring, personal protective equipment, respiratory protection, medical surveillance, and signage. This text includes a guide for a written Lead Protection Work Plan which may be required if airborne concentrations of lead exceed permissible exposure levels during construction activities.

A. Responsibilities

It is the responsibility of the chair, department head, or director to ensure that a written Lead Protection Work Plan is prepared and followed, if required through consultation with the Environmental Health and Safety office, before employees under her or his purview perform construction-type activities involving lead-containing materials. He or she shall ensure that appropriate personal protective equipment is available, that staff are trained both in the use of personal protective equipment and in the hazards of lead, and that compliance with appropriate procedures is enforced.

Persons responsible for employees or students, including faculty or supervisors, shall be responsible to the chair, department head, or director for preparing a written Lead Protection Work Plan, if required, as described in Part G. These persons are responsible for implementing the lead protection program for employees or students under their purview whenever lead-containing materials may create a health hazard.

All employees shall comply with written lead protection procedures.

The Environmental Health and Safety staff shall be responsible for providing and updating University-wide procedures and assisting departments with implementation of the program, including the written Lead Protection Work Plan. Contact the staff for assistance, consultation in whether a written Lead Protection Work Plan is required, training, equipment evaluation, exposure monitoring, signage, or procedures.

Consultation with the Environmental Health and Safety office is required prior to beginning work in the following situations:

- Work involves tasks described in Part B of this section
- An activity is performed on pure lead metal
- An activity is performed on lead-containing materials which workers think may generate visible dust
- Workers are concerned about the hazards of lead exposures to themselves or to others

B. Exposure Monitoring and Exposure Assessment

Exposure monitoring is air sampling and subsequent lead analysis conducted to determine the exposures employees may have when performing lead-related tasks. As defined in WAC 296-62-07521 and WAC 296-155-176, exposures above the defined action level of 30 micrograms per cubic meter of air or the permissible exposure level of 50 micrograms per cubic meter require specific actions, such as, wearing of a respirator and signage. Exposure monitoring is generally conducted by the Environmental Health and Safety office. Employees are notified about the sampling process as described in the WAC.
Consult with the Environmental Health and Safety office for an exposure assessment on any lead projects and follow special procedures, including wearing protective equipment, when performing the following tasks involving materials containing lead:

**Table 20-1. Tasks which require Prior Consultation and Special Procedures**

1. Manual demolition of structures, e.g. dry wall
2. Manual scraping or sanding
3. Heat gun applications
4. Power tool cleaning with or without a dust collection system
5. Spray painting with lead paint
6. Using lead mortar
7. Lead burning
8. Torch burning
9. Rivet bursting
10. Clean-up activities where dry, expendable abrasives are used
11. Abrasive blasting enclosure movement or removal
12. Abrasive blasting
13. Welding
14. Cutting
15. Chemical lead paint removal systems, e.g., paint strippers

**C. Respiratory Protection Program**

A respiratory protection program is implemented in accordance with WAC 296-62-07521 and WAC 296-155-17613 for employees who may be exposed to levels of lead above the permissible exposure limit. The University’s respiratory protection program is found in Section 12 of the *Safety Information Book*, available within each department. Contact the Environmental Health and Safety office for copies and for consultation to determine when respiratory protection is required.

**D. Personal Protective Equipment**

Personal protective equipment is to be provided in accordance with the hazards associated with particular tasks. Hazards involving lead exposure are to be included in the written Hazard Assessment Certification for each department or shop. Hazard Assessment Certification information may be found in Section 5 of the *Safety Information Book*.

Personal protective equipment may include clothing, coveralls, gloves, respirators, shoe covers or head coverings. Protective equipment used during exposures to lead above the permissible exposure level (defined in WAC 296-62-007521 or 296-155-176) is not to be taken home. It is to be placed in a closed container in a change room. A change room is a place where workers may safely remove lead-contaminated clothing or equipment. A change room is to be identified for each job in the written Lead Protection Work Plan.

**E. Housekeeping and Personal Hygiene Practices**

In an area where lead-containing materials are being disturbed or abated, all surfaces are to be maintained as free as practicable of accumulations of lead. Standard chemical safety procedures are to be employed when working in an area where lead-containing materials are being disturbed or abated and are mandatory in areas where lead levels are above the permissible exposure limit:

- Food or drink is not to be present or consumed;
- Tobacco products are not to be present or used; and
- Cosmetics are not to be applied

Employees working in an area where lead concentrations are above the permissible exposure limit are to have a clean change room provided and are to shower at the end of the work shift. Personal clothing which may become contaminated shall be bagged or contained and the Environmental Health and Safety office is to be consulted.

**F. Medical Surveillance**
Employees who are exposed above the action level for more than thirty days per year (240 hours per year) shall participate in a medical surveillance program. Medical examinations and procedures are performed by or under the supervision of a licensed physician without cost to employees and at a reasonable time and place. Baseline and periodic blood lead levels are monitored in accordance with WAC 296-62-07521 and/or WAC 296-155-17621.

G. Lead Protection Work Plan

A Lead Protection Work Plan guide is provided in this document. A written Lead Protection Work Plan shall be completed prior to starting work for each lead construction project performed by University employees or students which will generate lead concentrations over the permissible exposure limit. The plan shall be available on the work site for inspection, in accordance with WAC 296-155-17611. Consult with the Environmental Health and Safety office prior to beginning work to determine if a written work plan is needed, and to complete the plan with the proper protective procedures and equipment.

H. Training

Information on lead hazards shall be communicated in accordance with the Hazard Communication Program located in Section 6 of the Safety Information Book. Any employee exposed to airborne lead concentrations above 0.30 micrograms per cubic meter averaged over a time period of eight hours (the action level defined in WAC 296-62-07521 and WAC 296-155-176) will be provided with information about the hazards of lead exposure including the following topics:

- Exposure monitoring
- Written program
- Respiratory protection program
- Personal protective equipment
- Housekeeping
- Medical surveillance
- Training
- Recordkeeping

This training will be provided prior to allowing the employee or student to work and on an annual basis.

Each employee working on a job which has a written Lead Protection Work Plan shall be made aware of the contents of the plan. Training shall be documented in writing. As described above, training is available from the Environmental Health and Safety office.

I. Records

A copy of each written Lead Protection Work Plan is filed with the office of Environmental Health and Safety. A copy is kept on-site during all work performed. Exposure monitoring information, training information, and medical monitoring data are maintained at the Environmental Health and Safety office.

J. Signage

Signs shall be posted in each work area where lead concentrations are over the permissible exposure limit. The signs shall read: Warning, Lead Work Area, Poison, No Smoking or Eating. Signs shall be provided on containers of contaminated protective equipment as specified in WAC 296-62-07521.