**CHAPTER 19 LEAD SAFETY**

1. **REFERENCES:**
* SPPM 5.25 Lead Safety
* WAC Chapter 296-155-176 – Lead in Construction
* [WAC 296-62-07521](http://lni.wa.gov/safety/rules/chapter/62/WAC296-62.PDF#WAC_296_62_07521) – Lead in General Industry
* [Lead Management Plan](https://ehs.wsu.edu/documents/2021/02/lead-management-plan.pdf/)

# APPENDICES

1. Good Faith Survey Hazard Assessment

# SCOPE:

This chapter establishes requirements forEH&S employees that may contact or disturb lead-containing materials. The WSU Lead Management Plan (Appendix A) is the primary policy document for lead-related activities at WSU promoting safety and delineating regulatory requirements.

# DEFINITIONS:

**Competent Person:** An employee capable of identifying existing and predictable lead hazards in the environment or working conditions and has authorization to take prompt corrective measures to eliminate them (WAC 296-155-17605 (2)).

**Lead Program Manager:** An employee assigned by the EH&S department to act as the primary lead resource and Competent Person for EH&S employees. Duties include maintaining the WSU Lead Management Program, retaining lead and XRF training records and performing “custodial authorized user” duties for X-ray fluorescence (XRF) devices when applicable.

**Lead-containing Material:** any material containing detectable quantities of lead.

**Lead-related Work:** Work involving “trigger tasks” as defined below.

**Regulated Area:** An area established by the employer demarcating areas where lead work is conducted and within which airborne concentrations of lead exceed or can reasonably be expected to exceed the permissible exposure limit (PEL).

**Trigger Task:** Tasks that involve the potential disturbance of lead-containing materials as outlined in WAC 296-155-17609. The following are considered trigger tasks:

1. Demolition of structures or materials that may contain lead coatings
2. Scraping/sanding of painted surfaces
3. Heat gun application to painted surfaces
4. Cleaning surfaces with power tools
5. Spray painting
6. Sweeping/shoveling lead containing materials
7. Rivet busting
8. Abrasive blasting of components with lead coatings
9. Welding or hot work on painted or lead-containing surfaces
10. Cutting or hot work on painted or lead-containing surfaces
11. Torch burning of paints or coatings

# RESPONSIBILITIES

Lead Program Manager

1. Provides lead awareness training
2. Serves as department consultant for lead issues
3. Assists with the collection of air and bulk samples used to evaluate worker exposures and waste designation
4. Maintains lead sampling and worker exposure monitoring records
5. Provides quality control/quality assurance oversight on lead-related projects
6. Recommends appropriate engineering controls, work practices and personal protective equipment
7. Periodically reviews and updates the Lead Management Plan

Supervisors

1. Ensure employees adhere to this chapter’s requirements and the Lead Management Plan
2. Request the Lead Program Manager or designee perform sampling/analysis of suspect lead containing materials
3. Ensure lead-related work is performed under a lead work plan
4. Designate Competent Persons to oversee lead-related work
5. Ensure that potentially exposed employees receive annual awareness training and medical surveillance (if applicable)
6. Distribute exposure monitoring data to all affected employees

Employees

1. Adhere to this chapter’s requirements and the Lead Management Plan
2. Identify suspect lead containing materials to their Supervisor and/or Lead Program Manager
3. Perform lead-related tasks per the lead work plan
4. Adhere to Lead Competent Person’s instructions
5. Attend annual awareness training and submit to medical surveillance (if applicable)

# TRAINING

General Training - All employees who contact or disturb lead-containing materials or enter a lead regulated area must attend lead-awareness training. The Lead Program Manager, or other qualified OHS Industrial Hygienist within the department will provide lead-awareness training per WAC 296-155-17625. Supervisors are responsible for instructing workers prior to assignment of job tasks in which lead exposure may occur. Re-training is required when:

* + There have been changes in the workplace, such as new processes and/or equipment, which render previous training obsolete; and/or
	+ When an employee exhibits inadequate knowledge, skill or understanding or non-conforming use of the equipment.

XRF Lead Analyzer - Custodial Authorized User

The Lead Program Manager must complete custodial authorized user training administered by the WSU Radiation Safety Office (RSO) to oversee XRF use and training for the EH&S department and others that use an XRF. A current “Authorized User” cover sheet must be displayed at the XRF unit storage location when the XRF stored contains radioactive material.

General XRF Training – All employees assigned to use an XRF device are required to complete radiation awareness training, as directed by the WSU Radiation Safety Office (RSO). This training requirement is satisfied by completing module 12 on-line at <http://www.rso.wsu.edu/training/training.html>. In addition, the XRF Custodial Authorized User will provide function specific training. Upon completion of training, all employees must sign the “User Acknowledgement” form found in the Lead Management Plan prior to use.

# GENERAL REQUIREMENTS

* Refer to the WSU Lead Management Plan <https://ehs.wsu.edu/documents/2021/02/lead-management-plan.pdf/> for specific WSU policy and procedures regarding lead management and safety.
* The EH&S Lead Program Manager will fulfill Competent Person duties for EH&S personnel and WSU employees throughout campus when responding to emergent conditions that may have disturbed lead, lead containing or contaminated materials.
* All employees must comply with safety and health rules and practices on contractor-controlled job sites. This may include wearing site specific PPE, safety clothing and observing access limitations. Supervisors are responsible for reviewing these requirements and ensuring employees’ compliance to perform the work safely.
* All employees that enter a lead regulated area must wear the respiratory protection assigned by a Competent Person. A Competent Person may be the Lead Program Manager, or a person designated as such by a contractor that is approved by the Lead Program Manager or industrial hygienist in the Occupational Health and Safety (OHS) group.
1. **TASK SPECIFIC REQUIREMENTS**

#  *Lead Surveys:* All employees that perform lead surveys or inspections must have completed lead awareness training and, if using an XRF, XRF training. Additional hazards may be present in the work area that must be addressed before conducting the survey. Such hazards include, but are not limited to hazardous energy (e.g. electricity, radio frequency, mechanical energy) noise, elevated work, confined spaces, penetration (sharp objects), and compression (pinch points). Employees must conduct a hazard assessment prior to each survey. A hazard assessment template intended to support asbestos Good Faith Surveys and lead paint evaluations is included in Appendix B. Supervisors must review hazard assessments, ensure proper PPE is used and required training is completed and documented before the task commences.

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#  *3rd Party Lead-related Work Oversight:* Oversight of all in-house or outside contractor lead-related work must be conducted by an employee with lead awareness training. Personnel impacting lead paints associated with child occupied facilities (i.e. The Children’s Center) or family housing e.g. WSU apartments, must be EPA Lead Renovation Repair and Painting Program trained and certified. Since hazards may vary greatly at different job sites, employees must conduct a hazard assessment for each oversight location. Supervisors must review hazard assessments and ensure proper PPE is used and required training is completed and documented before the task commences.

***Construction, Demolition, Repair, Remodeling, Maintenance or Renovation Activities:*** All employees involved in the above activities, including project managers, supervisors, leads and workers are responsible for their roles and responsibilities outlined in the attached Lead Management Plan.

# Reviewed by:

# Lead Program Manager

# EH&S Director

# Appendix A

| **WORKPLACE HAZARD ASSESSMENT CERTIFICATION FORM** |
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| ***Instructions: Complete form using Personal Protective Equipment Hazard Assessment Guidelines. Completed form is to be retained for departmental records.*** |
| **Person conducting the hazard assessment: Matt McKibbin** | **Date of hazard assessment: 2/19/16** |
| **Work Activity Assessed** | **Hazard(s) Identified** | **PPE Selected (Make & Model #)** | **Training** |
|  | Falls | Flat/low pitched roofs with parapets <39” - Use safety watch system. One person will act as a safety watch while the other conducts required sampling | Acting safety watch: Competent Person (fall protection)Others: Fall protection user/awareness training |
| Good Faith Asbestos/Lead Surveys and 3rd party oversight(throughout campus) |  | High pitched roofs and scissor lifts: Fall restraint or fall arrest system – SALA 1231106 harness | Fall protection Competent Person when work plan is required. Fall protection user/awareness training otherwise. |
|  |  | Ladder safety |
| Penetration | Nitrile coated work gloves or similar | Hands-on for correct use and maintenance |
| Boots with slip and puncture resistant soles and/or safety toes. | Hands-on for correct use and maintenance |
| Trenches and Shoring | Possible fall protection considerations(personnel will not enter trenches>/=4’) | Trench and excavation Competent Person |
|  | Noise (e.g. mechanical rooms, server rooms) | Wear appropriate hearing protection needed to reduce exposure below 85dB. | Annual hearing conservation training |
| Asbestos | Assigned by Competent Person. Half-face tight fitting APR or full-face APR with HEPA filter | Annual fit test, medical approval and respirator training. AHERA Building Inspector. |
| Confined spaces | (personnel will not enter permit required confined spaces) | Confined Space Competent Person |
| Overhead | Hard hat – meets ANSI Z89.1 | Hands-on for correct use and maintenance |
| Impact | Eye protection – Meets ANSI Z87+ standard for impact and D standard for dust protection | Hands-on for correct use and maintenance |
| Good Faith Asbestos/Lead Surveys and 3rd party oversight(throughout campus) | Ergonomics |  | Hands-on task specific training |
| Laboratory hazards:Biological/Chemical/Radiation | Varies by laboratory. Read lab signage for appropriate PPE and contact PI and/or department for access restrictions |  |
| Non-ionizing radiation |  | Contact Facilities Services for list of NI radiation zones on roofs. Follow safety protocols and signage for each location |
| Electrical | Use equipment with GFCI protection in abatement areas. | Lockout/tagout |
| Lead | Assigned by Competent Person. Half-face tight fitting APR or full-face APR with HEPA filter | Lead Awareness with hands-on training Annual fit test, medical approval and respirator training.  |
| I, , certify that the assessment of the identified work activities has been performed.  **Date:**  ***Signature*** |