TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF ATTACHMENTS

1.0 PURPOSE AND SCOPE

(5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5)

This standard implements Occupational Safety and Health (OSHA) 29 CFR 1926.62 requirements for lead work performed during Construction activities and OSHA 29 CFR 1910.1025. Definitions for construction and general industry work activities are provided in Attachment A.

Lead exposure is most likely to occur from dust generated by work activities that disturb lead in lead-containing materials, paints, and coatings. Lead can enter your body by breathing lead-contaminated dust, or from hand-to-mouth activities. Examples of hand-to-mouth activities include: eating, drinking, smoking, chewing gum, and applying cosmetics.

This procedure is limited to General Industry and Construction work activities involving worker exposure to lead. It identifies and implements requirements for lead exposure control, permissible exposure limits, action levels, recordkeeping, worker notification, and planning criteria for lead work activities.

These procedural requirements apply to all WRPS workers, WRPS pre-selected subcontractor workers, and WRPS subcontractors and their lower-tier subcontractors.

1.1 Precautions and Limitations

- Exposure to organic lead compounds are not covered in this procedure.
- The implementation of worker protective clothing, showers, lunch areas/rooms, clean areas, change areas/rooms, and signage is driven by worker exposure to lead that would occur if the worker was not wearing a respirator.
- Section 3.2 applies **only** to Construction lead work activities.
- Section 3.3 of this procedure applies **only** to general industry lead work.

2.0 IMPLEMENTATION

This standard is effective on the date shown in the header.

3.0 STANDARD

3.1 Responsibilities

The responsibilities of line management, lead competent person, industrial hygienist, and lead (Pb) subject matter expert (SME) are provided in, but are not limited to, the contents of this section.

3.1.1 Line Management

Line management's responsibilities include:

- Identify all work activities which may result in worker exposures to lead

- Ensure that the project/facility IH participates in the hazard identification process for work activities where Lead is used in a work process or where lead coatings and paints may be present

- Ensure the development of a Lead Compliance Plan and designate a "competent person" for TOC work packages that involve disturbing lead coatings and lead containing paints, and processes where lead is being used

- Authorize the lead competent person to take prompt corrective measures to control lead hazards

- Insure compliance with all requirements set by this procedure.

NOTE: The lead "Competent Person" is required by OSHA 1926.62, "Lead in Construction." Lead in General Industry 1910.1025 does not require a lead competent person. See Attachment A for the types of operation covered by the lead construction standard.

- Ensure that the requirements of the lead compliance plans are adequately implemented during lead work activities.

- Ensure that potential lead exposures are adequately documented in the worker's "Employee Job Task Analysis" (EJTA).

- Coordinate with the Lead subject matter expert (SME), and the Site Occupational Medical Provider whenever a worker exhibits signs or symptoms of lead overexposure.

- Ensure that Lead Compliance Plans are reviewed every 6 months and are revised/ updated, as necessary.

3.1.2 Lead Competent Person

A "lead competent person" is designated for lead work activities governed by OSHA Lead in Construction standard. (5.1.5)

NOTE 1: When required, the competent person must be an individual capable of identifying and controlling lead hazards on a day-to-day basis in the field. Generally, this will be the Field Work Supervisor or Person in Charge (PIC) with appropriate training.

NOTE 2: OSHA 1910.1025 does not require a lead competent person for general industry work.

The lead competent person's responsibilities include:

- Conducting lead hazard identification and control activities, on a day-to-day basis, from planning through completion of the work activity

- Identifying existing and predictable lead hazards, and is authorized to take prompt corrective measures to control the hazard

- Conducting oversight/inspections of lead work activities

- Verifying and documenting determinations that work practices and hazard control measures are performed as designed and as required to control worker exposures to lead. (5.1.5)

3.1.3 Project/Facility Safety & Health Professional (Industrial Hygienist)

The industrial hygienist's responsibilities include:

- Working with lead competent person to complete the WRPS Lead Compliance Plan (Site Form A-6006-696)
- Communicating applicable regulatory requirements to line management and their competent lead person during the work planning process
- Preparing a written exposure assessment for lead impacted work
- Supporting the lead competent person in the lead hazard identification and control activities
- Developing lead exposure sample plans for work impacted by this procedure.

3.1.4 Lead Exposure Subject Matter Expert

The Lead Exposure Subject Matter Expert (SME) responsibilities include:

- Managing the WRPS lead program
- Reviewing lead exposure assessments annually and ensuring compliance with 29 CFR 1926.62(n) Exposure Assessment
- Assisting the Project/facility safety & health professional in the preparation of lead exposure assessment
- Reviewing regulatory requirements at least annually and updating this procedure as necessary.

3.2 Lead Requirements for Construction-Related Work Activities
(5.1.5)

3.2.1 Initial Determination

NOTE: See Attachment B for more information regarding typical lead containing materials/compounds and activities that may result in worker exposure to lead and/or lead compounds.

Identify all work activities that may result in worker exposure to lead and ensure that the project/facility S&H professional participates in or conducts the hazard identification. (5.1.5) The following activities may be used as a means to identify and evaluate the potential lead hazards:

- Review of Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS)

- Review of any material or product specifications to determine if lead is present (especially paint products)
- Evaluate past use of products that may have contained lead such as paint, mortar, shielding, and solders
- Conduct bulk, wipe, or other sampling methods to identify lead as necessary
- Review environmental survey and characterization data for lead content of building substrates or environmental media.

3.2.2 Lead Exposure Assessment
(5.1.5)

An initial exposure assessment is required at the planning stage of the job to determine if worker Lead exposure is likely at or above the action limit of 30 ug/m^3. The exposure assessment is conducted according to TFC-PLN-34, which is based on:

- Lead information, observations, or calculations
- Any previous (historical) measurements of airborne lead
- Worker complaints of symptoms that may be attributable to exposure to lead
- Results of worker exposure monitoring
- Historical lead air sampling and objective data.

NOTE: If used, historical and objective data must be appropriately documented in the lead compliance plan and in the work package.

Historical lead air sampling and objective data may be used in place of initial monitoring where:

- Personal air monitoring data was obtained within the 12 preceding months, and if:
  - The personal air monitoring was conducted on the same or similar jobs. These jobs must be of similar materials types, control methods, work practices, and environmental conditions
  - The sampling and analytical methods used to obtain and analyze the “historical” samples are the same
- Objective data demonstrates that a particular product or material process, operation or activity cannot result in worker exposure to lead at or above the AL.

3.2.3 Personal Monitoring for Lead Exposure
(5.1.5)

NOTE: Personal air monitoring may be limited to workers who have the greatest lead exposures. (5.1.5)

In the absence of valid historical monitoring results or objective data, personal air monitoring is conducted at the start of the job and follows the criteria listed below:

- At least one personal air sample is collected on each job classification on each shift, OR
- Personal air samples are representative of a full shift
- Personal air samples are representative of the work performed.

3.2.3.1 Observation of Monitoring
(5.1.5)

The affected worker or their designated representative shall have the opportunity to observe, without interfering, any monitoring of worker exposure to lead. Observers must not interfere with work performed and must comply with all safety and health rules. Observers shall be provided required protective clothing and equipment. Observers are entitled to:

- Receive an explanation of measurement procedures
- Observe all steps related to the monitoring performed at the place of exposure
- Record the result obtained or receive copies of the results when returned to the laboratory.

3.2.4 Protection of Worker During Exposure Assessment
(5.1.5)

Where lead is present, until an exposure assessment is performed and documented that the worker is not exposed to lead above the PEL, line management shall protect the worker as if the worker is exposed above the PEL. Examples of tasks covered by this requirement can be found in Table 1. Table 1 also contains minimum respiratory protection required for tasks shown in this table. For information on respirator assigned protection factors, see 1910.134(d)(3)(i)(A).

NOTE: Tasks found in Table 1 are not a complete list of tasks that are likely to result in lead exposures above the PEL.

Table 1. Respiratory Protection Requirements for Initial Evaluation and Interim Controls Lead in Construction

Tasks that Disturb Lead Containing Paint or Coatings[1] (5.1.5)	**Minimum required protection factor** (5.1.5)	**Minimum Required Respiratory Protection**[2] (5.1.3)
• Manual demolition of structures (e.g., dry wall), manual scraping, manual sanding, heat gun applications, and power tool cleaning with dust collection systems • Spray painting with lead paint • Any tasks where the line management has any reason to believe exposure could be in excess of the PEL.	10	Half face APR with P100 cartridges
• Rivet busting; power tool cleaning without dust collection systems; cleanup activities where dry expendable abrasives are used; and abrasive blasting enclosure movement and removal • Using lead containing mortar • Lead burning	100	Full face APR with P100 cartridges
• Abrasive blasting, • Welding, • Cutting, and • Torch burning	1000	Full face PAPR or hood PAPR* with P100 cartridges * - Hood PAPR's must be certified by their manufacturer as providing a Assigned Protection Factor of 1000

[1] Other interim protective measures are also required for these activities including personal protection equipment (PPE), change areas, hand washing facilities, biological monitoring, and certain training. Such measures must remain in place until exposure assessment demonstrates that they may be eliminated or relaxed.

[2] All APRs and PAPRs must be fitted with HEPA filters. Note that Protection Factors assigned to respirators for lead exposure may be different than those assigned for radiological hazards.

3.2.5 Monitoring Frequency
(5.1.5)

NOTE: Document all worker exposure data, per the requirements in TFC-ESHQ-S_IH-C-46.

If personal lead monitoring results reveal that, worker lead exposure is less than the AL, personal lead air monitoring may be discontinued. However, lead monitoring is to continue if personal air sampling results reveal that worker lead exposures are at or above the AL. Periodic monitoring is to be conducted at the following frequency:

- If worker exposure is at or above the action level but below the PEL, monitoring is performed every **six months** until at least two consecutive measurements, taken at least **seven days** apart, are below the action level

- If worker exposure is above the PEL, monitoring is to be performed **quarterly**. Quarterly monitoring is performed until at least two consecutive monitoring events, taken at least **7 days** apart, show that airborne lead levels are below the PEL.

Additional personal monitoring is to occur whenever there has been a change of equipment, process, control, personnel, or a new task has been initiated, and this change may result in new or additional lead exposures.

3.2.6 Accuracy of Measurement

For airborne lead concentrations greater than or equal to 30 mg/m^3, methods for lead monitoring and sample analysis must have a margin of error of +/- 25 percent or less. The sample results must also fall within the 95 percent confidence level. (5.1.5)

3.2.7 Worker Notification

NOTE: Worker notification records are documented according to requirements in TFC-ESHQ-S-IH-C-46.

As soon as possible, but no later than 5 working days after the receipt of the monitoring results, the affected worker is notified in writing of the results. Results are also posted at an appropriate location, accessible to all workers affected by the monitoring. (5.1.5)

Whenever the results indicate that the actual or representative worker exposure is at or above the PEL, a description of the corrective action taken or to be taken to reduce exposure to below that level is added to the notification. (5.1.5)

3.2.8 Hazard Control

Where it can be reasonably anticipated that any worker's lead exposure may be above the PEL, that worker is protected as if they are exposed to lead above the PEL. Such worker(s) are protected until an exposure assessment is conducted and documented that worker exposure is below the PEL. (5.1.5)

NOTE: The application of exposure controls as prescribed in Table 1 does not preclude the requirement for the initial exposure assessment

Methods for maintaining worker exposure to levels below the AL are documented in the lead compliance plan (A-6006-696). Methods for controlling worker lead exposure include: *(In this order)*

- Engineering controls
- Work practice controls/administrative controls
- Personal protective equipment (PPE). (5.1.5)

Where monitoring results reveal that worker exposure is above the PEL, engineering and work controls are implemented to reduce and maintain worker exposures to levels that are below the PEL. (5.1.5)

If engineering and work practice controls are not effective at reducing worker exposures to levels below the PEL, respirators with the appropriate protection factor are worn to lower exposures to levels below the PEL. (5.1.5)

Until the results of the initial exposure assessment are received and a determination is made that the worker is not exposed to lead levels above the PEL, workers are to be provided interim protection as if they are exposed to lead above the PEL. (5.1.5) Information on interim protection is located in Table 1

If workers are performing any task listed in Table 1 or similar, the worker is also required to wear a respirator as prescribed in Table 1. The level of respiratory protection may be reduced if the results of the initial monitoring indicate a lower level of respiratory protection will provide adequate lead protection. (5.1.5)

Additional Hazard Controls include:

- Hazard communication training
- Lead worker training
- Medical Removal
- Medical surveillance
- Compliance plan
- Engineering
- Mechanical Ventilation
- Respiratory Protection
- Protective clothing
- Change areas
- Showers
- Eating facilities
- House keeping
- Signage.

Methods for maintaining worker exposures to levels below the AL are documented in the lead compliance plan.

3.2.8.1 Mechanical Ventilation

When ventilation is used to control lead exposure, line management shall evaluate the mechanical performance of the systems and its effectiveness at controlling worker exposure to levels below

the AL. (5.1.5) All ventilation measurements results are documented in the applicable Lead Compliance Plan(s).

3.2.9 Compliance Plan

Prior to commencement of any work activity that will or is likely to result in worker exposures at or above the AL, line management shall ensure the development of a Lead Compliance Plan (5.1.5) (WRPS form A-6006-696).

NOTE: A Lead Compliance Plan is developed during the work planning phase, and line management ensures the participation of the designated "competent person," and the project/facility S&H professional in the development of the Lead Compliance Plan.

The Lead Compliance Plan shall contain all of the following elements: (5.1.5)

a. Description of activities emitting lead;

b. Specific means to achieve compliance with the PEL and the OSHA standard's requirements, including engineering controls and justification(s) for selection of engineering controls;

c. Air monitoring data to document lead emission sources;

d. Detailed schedule for implementation;

e. Work practices, personal protective equipment, housekeeping, hygiene facilities, and others;

f. Administrative control schedule;

g. Arrangements between multiple contractors and subcontractors regarding compliance and hazard information (required for construction activities only); and

h. Other pertinent information, as necessary.

The compliance plan provides for frequent and regular inspections of job sites, materials, and equipment as determined by the competent person, project industrial hygienist, and/or safety professional. (5.1.5)

3.2.10 Respiratory Protection
(5.1.5)

Respirators are required for the following situations:

- During initial exposure assessment (see Table 1 above)
- During work operations for which engineering and work-practice controls are not sufficient to reduce worker exposure to levels below the PEL
- During periods when a worker requests a respirator

- When worker exposure is likely to exceed the PEL.

3.2.11 Selection of Respirators
(5.1.5)

Workers are to select and use respirators appropriate for work performed. Respirators are used according to the WRPS Respiratory Protection Program (TFC-ESHQ-S_IH-C-05).

Additionally, workers are to utilize:

- Full face piece respirators instead of half mask respirators for protection against lead aerosols that may cause eye or skin irritation
- HEPA (P-100) filters for powered and non-powered air-purifying respirators
- A powered air-purifying respirator (PAPR) instead of a negative pressure respirator when a worker chooses to use a PAPR.

For information on respirator assigned protection factors, see Table 1. Additional information on respirator assigned protection factors can be found in 1910.134(d)(3)(i)(A).

3.2.12 Protective Clothing

NOTE 1: Disposable protective clothing is acceptable as long as it is used per manufacturer's instruction and provides adequate protection.

NOTE 2: Any worker who cleans, launders, or disposes of lead contaminated protective clothing is to be notified in writing of the potentially harmful effects of lead exposure prior to start of work. (5.1.5)

NOTE 3: Removing lead from protective clothing or equipment by blowing, shaking, or any other means that disperses lead into the air is prohibited. (5.1.5)

Protective clothing is required when worker exposure is likely to exceed the PEL (without regard for respiratory protection) or when worker exposure to lead may cause skin or eye irritation. (5.1.5) Protective clothing is administered and used according to TFC-ESHQ-S_IS-C-02. Required protective clothing includes: (5.1.5)

- Coveralls or similar full-body work clothing
- Gloves, hats, and shoes or disposable shoe coverlet
- Face shields, vented goggles, or other appropriate protective equipment.

3.2.13 Cleaning and Replacement of Protective Clothing
(5.1.5)

Line management provides clean/dry protective clothing:

- At least weekly when worker exposure exceeds, or is likely to exceed, the PEL (without regard to respiratory protective equipment), and
- Daily to workers whose exposure is over 200 µg/m3 of lead (without regard to respiratory protective equipment) as an 8-hour TWA.

NOTE: Removing lead from protective clothing or equipment by blowing, shaking, or any other means that disperses lead into the air is prohibited.

Protective clothing and equipment is repaired or replaced as needed to maintain effectiveness.

All protective clothing is removed at the completion of a work shift. It is removed only in change areas provided for that purpose (see 3.2.15).

Once contaminated clothing is removed, it is placed in a closed container in a manner that prevents lead dispersion outside the container.

The container containing contaminated clothing and PPE shall be labeled as follows:

DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

Wash water used for cleaning and laundering lead-contaminated clothing or PPE is disposed of in accordance with applicable local, state, or federal regulations.

3.2.14 Hygiene Practices

NOTE: Workers are to wash their hands and face prior to eating drinking, smoking, and applying cosmetics.

The presence or consumption of food or drink is prohibited in areas where workers may be exposed above the PEL (without regard to respiratory protective equipment). Likewise, tobacco and cosmetic products are not to be present or used in areas where the PEL is likely to be exceeded. (5.1.5)

3.2.15 Change Areas
(5.1.5)

NOTE: Clean change areas are necessary for workers performing tasks identified in Table 1 or similar.

When worker exposure is likely to exceed the PEL (without regard to respiratory protective equipment), clean change areas are provided. Additionally:

- Change rooms have separate areas for protective work clothing, equipment, and street clothes.
- Workers are not to leave the work area or change area wearing protective equipment and tools that were required in the lead work area.

3.2.16 Showers

Shower facilities are provided, where feasible, for workers whose airborne exposure to lead is above the PEL (without regard to respiratory protective equipment). (5.1.5) Where showers are required and feasible, workers are to shower at the end of the work shift. Shower facilities are provided in accordance with TFC-ESHQ-S-STD-17.

Where workers shower, an adequate supply of cleansing agents and towels is made available for affected workers. (5.1.5)

3.2.17 Eating Facilities
(5.1.5)

Lunch rooms or eating areas are provided for workers who are likely to be exposed to lead above the PEL (without regard to respiratory protective equipment).

- Lunch rooms and eating areas are kept as clean as practicable from lead contamination.
- Workers are to wash their face and hands prior to eating, drinking, smoking or applying cosmetics.
- Workers do not enter lunchroom facilities or eating areas with lead contaminated protective work clothing or equipment

3.2.18 Housekeeping
(5.1.5)

NOTE: HEPA Vacuuming is the preferred method of cleaning floors and other surfaces contaminated with lead. However, other methods that minimize the likelihood of lead becoming airborne may be used.

All surfaces are to be maintained as free as practical of accumulations of lead.

When vacuuming methods are selected, the vacuums shall be equipped with a HEPA filter, used, and emptied in a manner that minimizes the re-entry of lead into the workplace.

Prohibited Cleaning Activities
(5.1.5)

The following cleaning practices are prohibited:

- Floors and other surfaces where lead and lead dust accumulate may not be cleaned by the use of compressed air

- Shoveling and dry or wet sweeping/brushing may only be used where HEPA vacuuming or other equally effective methods have been tried and found to not be effective.

3.2.19 Signage

Signs are posted in each work area where the PEL is exceeded (without regard to respiratory protective equipment). (5.1.5) Examples of appropriate signage can be found in Attachment C of this procedure.

Contradictory information is not to appear on or near any sign. Signs are illuminated and cleaned as necessary to be readily visible. (5.1.5)

3.2.20 Worker Training

Workers are to complete lead hazard communication training or lead worker training as applicable prior to the start of the work activity. (5.1.5)

3.2.21.1 Lead Hazard Communication Training

NOTE: Lead Hazard Communication may be given at the pre-job safety meeting or monthly safety meetings. Lead Hazard Communication can be given by a health and safety professional or lead competent person as long they are knowledgeable of the hazards of working with lead and the job to be performed.

All workers with exposure to lead receive Lead Hazard Communication Training. (5.1.5) Lead Hazard Communication training is to comply with WRPS "Hazard Communication" (TFC-ESHQ-S_IH-C-02), and include: (5.1.5)

- Reproductive/developmental toxicity
- Central nervous system effects
- Kidney effects
- Blood effects
- Acute toxicity effects.

3.2.21.2 Lead Awareness Training

TOC 356614 has been specifically designed to meet the OSHA training requirements for lead hazard communication training.

3.2.21.3 Lead Worker Training

NOTE 1: Lead (Pb) Worker Training (MSA course # 020150) has been specifically designed to meet the OSHA training requirements for workers exposed to lead at levels at or above the AL.

NOTE 2: Once workers have completed MSA course # 020150, MSA course # 020152 will satisfy yearly training requirements.

NOTE 3: "Lead worker" training and "Lead Awareness" training courses do not generally cover the contents of job-specific "Lead Compliance Plans." Training on the job specific lead compliance plans is mandatory (5.1.5), and must be given during the pre-job safety briefing. Lead hazard communication can be given by a health and safety professional or lead competent

person as long as they are knowledgeable of the hazards of working with lead, and are familiar with the job to be performed.

Lead worker training is provided to:

- Workers who have the potential for airborne lead exposure at or above the action level on **any day** receive lead worker training (5.1.5)

- Workers who have the possibility of skin or eye irritation from lead aerosols on **any day** (e.g., lead arsenate, lead azide) receive lead worker training. (5.1.5)

Lead worker training is to be provided yearly for any worker who is subject to lead exposure at or above the AL for any day. (5.1.5)

3.2.21.4 Designation of a Competent Person for Lead

Line Management designates a Lead Competent Person for each construction lead work activity governed by this procedure. The candidate selected for the designated lead competent person must first successfully complete Lead Worker Training (MSA Course # 020150). Second, the candidate is evaluated by a knowledgeable person. If the knowledgeable person finds that the candidate possesses the knowledge, skill, and ability to act in the role of a Lead Competent Person, the candidate is deemed a competent person for lead.

This person must be knowledgeable of lead health hazards, lead hazard identification and mitigation techniques, as well as this program. The candidate's evaluation is conducted according to the "WRPS Lead Competent Person Evaluation Form" located in Attachment D. The candidate's successful completion of the evaluation is recorded on this form. Once completed, the form is forwarded to the Lead SME for approval. The SME forwards the approved form to Training Records for retention.

Lead worker refresher training MSA course # 020152 is taken on a yearly basis to maintain the lead competent person designation.

3.2.21.5 Access to Information and Training Materials

(5.1.5)

Line management shall make readily available to all affected workers a copy of this standard and its appendices.

The line management shall provide, upon request, all materials relating to the worker information and training program to affected workers and their designated representatives, and to the Assistant Secretary and the Director

3.2.21 Initial Medical Monitoring

NOTE: Initial medical monitoring occurs prior to the start of the work activity.

Workers receive initial medical monitoring if they are likely exposed on **any day to lead at or above the action level**. Initial medical monitoring consists of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin (ZPP). (5.1.5) This initial medical monitoring is conducted by the Hanford Site Occupational Medicine Contractor.

3.2.22 Medical Surveillance Program

Workers are entered into the medical surveillance program if they are exposed to lead at or above the action level for more than 30 days in any 12 consecutive months. Medical surveillance is administered by the Hanford Site Occupational Medicine Contractor in accordance with 1926.62(j)(2) and 1926.62(j)(3). (5.1.5)

3.2.23 Chelation Therapy

Therapeutic or diagnostic chelation is performed only under the supervision of a licensed physician. Chelation therapy is performed in a clinical setting with thorough and appropriate medical monitoring. The worker is notified in writing prior to its occurrence. (5.1.5)

3.2.24 Worker Request for a Medical Exam

(5.1.5)

NOTE: Worker requested medical exams are scheduled with the Hanford Site Occupational Medicine Medical Contractor as soon as possible after manager or supervisor notification.

Any workers may request a lead medical exam and biological testing if they report to their manager or supervisor that they:

- Have developed signs or symptoms commonly associated with lead intoxication/poisoning,
- Desire medical advice concerning the effects of current or past exposure to lead on the worker's ability to procreate a healthy child,
- Are pregnant,
- Demonstrate difficulty in breathing during a respirator fitting test or during respirator use.

3.2.25 Management of Lead Medical Monitoring Program

The Hanford Site Occupational Medicine Contractor administers and manages the WRPS construction lead medical program according to 29 CFR 1926.26(j).

Once a worker has been referred to the Hanford medical contractor for medical monitoring or entry into the lead medical surveillance program. The Hanford medical contractor determines the frequency of lead medical exams and blood lead testing as applicable per 29 CFR 1926.62.

Line management ensures that all provisions of the Hanford Site Occupational Medical Contractor's medical opinion are strictly followed. Some examples of such provisions are:

- Work limitations
- Respirator use restrictions
- Temporary medical removal
- Return to work determinations.

3.3 Lead Control in General Industry (5.1.4)

3.3.1 Initial Determination

An initial determination is required to determine if worker lead exposure is at or above the action limit of 30ug/m3. The following activities may be used as means to identify and evaluate the potential lead hazards.

3.3.2 Lead Basis of Initial Determination (5.1.4)

Line management shall ensure that an initial determination is performed for all potential lead exposures. Initial determinations are based on worker exposure monitoring results, and any of the following:

- Lead information, observations, or calculations that would indicate worker lead exposure;
- Any previous measurements of airborne lead;
- Worker complaints of symptoms that may be attributable to lead exposure.

Lead air sampling data may be used in place of initial monitoring where personal air monitoring data was obtained within the 12 preceding months.

If previous data is used, it must be appropriately documented in the lead compliance plan (A-6006-696), and in the work package.

Where an initial determination is made that no worker is exposed to airborne lead concentrations at or above the action level, a written record is made of such determination. The record is to include information obtained from Section 3.3.4 as well as the:

- Date of determination
- Location within the worksite for the determination
- Name and social security number of each worker monitored.

3.3.3 Personal Monitoring for Lead Exposure

NOTE: Personal air monitoring may be limited to workers who line management has reason to believe have the greatest lead exposures. (5.1.4)

In the absence of valid monitoring results, personal air monitoring is performed according to the following conditions:

- Personal air monitoring is representative of a full shift (5.1.4)
- Personal air monitoring is representative of the work performed
- At least one personal air sample is collected on each job classification on each shift. (5.1.4)

3.3.3.1 Observation of Monitoring
(5.1.4)

The affected worker or their designated representative shall have the opportunity to observe any monitoring of worker exposure to lead. Observers must comply with all safety and health rules and shall be provided required protective clothing and equipment. Observers are, without interfering, entitled to:

- Receive an explanation of measurement procedures
- Observe all steps related to the monitoring performed at the place of exposure
- Record the result obtained or receive copies of the results when returned from the laboratory.

3.3.4 Monitoring Frequency
(5.1.4)

All worker exposure data must be documented, per the requirements in TFC-ESHQ-S_IH-C-46.

If personal lead monitoring results reveal that worker lead exposure is less than the AL, personal lead air monitoring may be discontinued. If personal air sampling results reveal that worker lead exposure is above the AL, lead monitoring is to continue at the following frequency:

- If worker exposure is at or above the action level but below the PEL, monitoring is performed every six months until at least two consecutive measurements, taken at least seven days apart, are below the action level.
- If worker exposure is above the PEL, monitoring is to be performed **quarterly.** Quarterly monitoring is performed until at least two consecutive measurements, taken at least **seven days** apart, are below the PEL.

Additional personal monitoring is to occur whenever there has been a change of process, control, personnel, or a new task has been initiated that may result in new or additional lead exposures. Personal monitoring is to occur if line management has any reason to believe that additional exposures may occur.

3.3.5 Monitoring Records
(5.1.4)

All lead exposure monitoring records shall also include the following:

- Date, number, location, duration and results of each exposure monitoring sample
- A description of the sampling procedure used to determine work exposure
- A description of work performed and the sampling and analytical methods used
- The types of respiratory protection devices used

- Name, unique worker identification number, and job classification of the worker monitored, and of all the other workers whose exposure the monitoring results is intended to represent

- The environmental variables that could affect the measurement of worker exposure.

3.3.6 Accuracy of Measurement

Monitoring and analysis methods used for lead monitoring must have an accuracy of not less than plus or minus 20 percent for airborne concentrations of lead equal to or greater than 30 µg/m(3) and a confidence level of 95 percent. (5.1.4)

3.3.7 Worker Notification

Fifteen working days after the receipt of the monitoring results, the affected worker is notified in writing of the results. Results are also posted at an appropriate location, accessible to all workers affected by the monitoring. (5.1.4)

Whenever the results indicate that the actual or representative worker exposure is above the PEL, a description of the corrective action taken, or to be taken, to reduce exposure to below the PEL is added to the notification. (5.1.4)

3.3.8 Hazard Control Engineering and Work Practice Controls

Where monitoring results reveal that worker exposure is above the PEL for more than 30 days per year, engineering and work controls are implemented to reduce and maintain worker exposures to levels below the PEL. (5.1.4) Methods for controlling worker lead exposure include: (in this order)

- Engineering controls
- Work practice controls
- Administrative controls, and
- Personal protective equipment (PPE). (5.1.4)

If engineering and work practice controls are not feasible, or sufficient to reduce worker exposure to levels below the PEL, engineering and work practice controls are used to reduce exposures to the lowest feasible level, and respiratory protection is used to further reduce worker exposure to levels below the PEL. (5.1.4)

Where any worker is exposed to lead above the permissible exposure limit, but for 30 days or less per year, engineering controls are implemented to reduce exposures to 200 ug/m^3. Any combination of engineering, work practice (including administrative controls), and respiratory controls are then implemented to further reduce and maintain worker exposure to lead to levels below the PEL. (5.1.4)

Work Practice and Administrative Controls

Examples of work practice and administrative controls include:

- Hazard communication training
- Lead worker training
- Medical Removal

- Medical surveillance
- Compliance plan
- Engineering
- Mechanical Ventilation
- Respiratory Protection
- Protective clothing
- Change areas
- Showers
- Eating facilities
- House keeping
- Signage.

Controls for maintaining worker exposures to levels below the AL are documented in the lead compliance plan and the work package as applicable.

3.3.9 Mechanical Ventilation Engineering and Work Practice Controls

When ventilation is used to control worker exposures, measurements are taken to demonstrate its effectiveness prior to start up, and every three months thereafter. These measurements include:

- Capture velocity
- Duct velocity and/or
- Static pressure.

Measurements of the ventilation system's effectiveness in controlling lead exposure also occur within five working days of any changes to production, process, or control that might result in a change in worker exposure to lead. (5.1.4)

Recirculation of Air

NOTE: All ventilation measurements are documented in the applicable Lead Compliance Plan(s).

If air from exhaust ventilation is recirculated into the workplace, the system is equipped and operated with:

- A high efficiency filter with reliable back-up filter
- Controls to monitor the concentration of lead in the return air
- Controls to automatically bypass the recirculation system if the system fails

The recirculation system is properly maintained to ensure effectiveness. (5.1.4)

3.3.10 Compliance Plan

(5.1.4)

A written lead compliance program/plan is established to reduce worker exposures to levels below the AL, solely by methods of engineering and work practice controls. Written compliance plans are to include at a minimum:

- A description of each operation in which lead is emitted; e.g. machinery used, material processed, controls in place, crew size, worker job responsibilities, operating procedures and maintenance practices;

- A description of the specific means that will be employed to achieve compliance, including engineering plans and studies used to determine methods selected for controlling exposure to lead;

- A report of the technology considered in meeting the permissible exposure limit;

- Air monitoring data that documents the source of lead emissions;

- A detailed schedule for implementation of the program, including documentation such as copies of purchase orders for equipment, construction contracts, etc.;

- A work practice program that includes items required under sections 3.3.12 – 3.3.17 of this procedure;

- Other relevant information.

If exposures cannot be reduced to levels below the PEL with engineering controls, work practices and interim measures are used to keep exposure below the PEL, and these measures are documented and justified in the compliance plan.

Written programs are submitted upon request to any affected worker or authorized worker representatives.

Written programs are revised and updated at least annually to reflect the current status of the program.

A lead Compliance Plan (Site Form A-6006-696) is developed during the work planning process for any work activity that will or is likely to result in worker exposures above the AL.

3.3.11 Respiratory Protection

When respiratory protection is required by this procedure, respiratory protection is used in accordance with the WRPS Respiratory Protection Program (TFC-ESHQ-S_IH-C-05).

Respirators are used for:

- Periods necessary to install or implement engineering or work-practice controls (5.1.4)

- Work operations for which engineering and work-practice controls are not sufficient to reduce worker exposures to or below the permissible exposure limit (5.1.4)

- Periods when a worker requests a respirator (5.1.4)

- Lead exposure is likely to exceed the PEL.

Selection of Respirators

Workers are to select and use respirators appropriate for work performed. (5.1.4)
For information on respirator assigned protection factors see Table 2. Information regarding respirator protection factors is also located in 29 CFR 1910.134(d)(3)(i)(A).

Table 2. Respiratory Protection for Lead Aerosols
(5.1.4)

Airborne concentration of lead or condition of use	Minimum required protection factor (5.1.3)	Required Respirator for lead activities/operations covered under 29 CFR 1910.1025[1]
Not in excess of 0.5 mg/m^3 (500 µg/m^3)	10	Half-mask APR equipped with high efficiency (HEPA) filters [2,3]
Not in excess of 2.5 mg/m^3 (2500 µg/m^3)	50	Full-face APR equipped with HEPA filters[3]
Not in excess of 50 mg/m^3 (50,000 µg/m^3)	1000	1. Any PAPR with HEPA filters[3] or, 2. Half-mask supplied air respirator operated in positive pressure mode.[2]* - Hood PAPR's must be certified by their manufacturer as providing a Assigned Protection Factor of 1000

1 Respirators specified for higher concentrations can be used at lower concentrations of lead.

2 Full face piece is required if the lead aerosols cause eye or skin irritation at the use concentrations.

3 A high efficiency particulate filter (HEPA) means a filter that is a 99.97 percent efficient against particles of 0.3 micron size or larger.

Additionally, workers are to utilize:

- Full face piece respirators instead of half mask respirators for protection against lead aerosols that may cause eye or skin irritation (5.1.4)
- HEPA (P-100) filters for powered and non-powered air-purifying respirators (5.1.4)
- A powered air-purifying respirator (PAPR) instead of a negative pressure respirator when a worker chooses to use a PAPR. However, the PAPR must provide adequate protection to the worker. (5.1.4)

3.3.12 Protective Clothing

Protective clothing is required when worker exposure is likely to exceed, the PEL (without regard to respiratory protective equipment) or when worker exposure to lead may cause skin or eye irritation. (5.1.4) Protective clothing is provided and used according to WRPS Personal Protective Equipment (TFC-ESHQ-S_IS-C-02).

NOTE: Disposable protective clothing is acceptable as long as it is used per manufacturer's instructions and provides adequate protection.

Protective clothing consist of: (5.1.4)

- Coveralls or similar Full-body work clothing
- Gloves, hats, and shoes or disposable shoe coverlets
- Face shields, vented goggles
- Other appropriate protective equipment as necessary.

3.3.12.1 Cleaning and Replacement of Protective Clothing

(5.1.4)

Line management provides clean/dry protective clothing:

- At least weekly when worker exposure exceeds, or is likely to exceed, the PEL (without regard to respiratory protective equipment).

- Daily to workers whose exposure is over 200 µg/m3 of lead (without regard to respiratory protective equipment) as an 8-hour TWA.

CAUTION: Removing lead from protective clothing or equipment by blowing, shaking, or any other means that disperses lead into the air is prohibited.

Protective clothing and equipment is repaired or replaced as needed to maintain their effectiveness.

All protective clothing is removed at the completion of a work shift or a job/task. It is removed only in change/areas rooms provided for that purpose as prescribed in paragraph 3.3.14.

Once contaminated clothing is removed, it is placed in a container/bag in the change room/area in a manner that prevents lead dispersion outside the container/bag.

Any worker who cleans, launders or handles lead contaminated PPE and/or protective clothing is informed in writing of the potentially harmful effects of lead exposure.

Wash water used for cleaning and laundering lead contaminated clothing or PPE is to be disposed of in accordance with applicable local, state, or federal regulations

The container containing contaminated clothing and PPE shall be labeled as follows:

DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

3.3.13 Hygiene Practices
(5.1.4)

Workers are to wash their hands and face prior to eating, drinking, smoking, and applying cosmetics.

In areas where workers are exposed to lead above the PEL (without regard to respiratory protective equipment):

- Food or beverage is not present or consumed,
- Tobacco products are not present or used, and
- Cosmetics are not applied.

3.3.14 Change Rooms
(5.1.4)

Clean change rooms are provided when worker exposure is likely to exceed the PEL (without regard to respiratory protective equipment). Additionally:

- Change rooms shall have separate clean areas and storage facilities for protective work clothing and equipment, and street clothes

- Workers do not leave the work area or change area wearing protective equipment/clothing or tools that were worn or used in the lead work area.

3.3.15 Showers

Workers who work in areas where their airborne exposure to lead is above the PEL (without regard to respiratory protective equipment), are to shower at the end of the work shift. (5.1.4) Shower facilities are provided in accordance with TFC-ESHQ-S-STD-27.

Workers who are required to shower do not leave the workplace wearing any clothing worn during the work shift. (5.1.4)

3.3.16 Lunch Rooms
(5.1.4)

Lunchroom facilities are provided for workers who are exposed to airborne lead above the PEL (without regard to respiratory protective equipment).

Lunchroom facilities are:

- Temperature controlled,
- Under positive pressure, equipped with a filtered air supply, and
- Readily accessible to workers.

When lead exposures are likely to exceed the PEL (without regard to respiratory protective equipment), workers are to wash their face and hands prior to eating, drinking, smoking or applying cosmetics regardless of lead exposure.

Workers do not enter lunchroom facilities or eating areas with lead contaminated protective work clothing or equipment.

3.3.17 Housekeeping
(5.1.4)

All surfaces shall be maintained as free as practicable of lead accumulations.

Acceptable Cleaning Methods

Only methods that minimize the likelihood of lead dust becoming airborne are used to clean lead contamination. (5.1.4) Examples are:

- Wet cleaning methods
- HEPA Vacuuming.

HEPA Vacuums are used and emptied in a manner that minimizes the re-entry of lead into the workplace. (5.1.4)

Shoveling, dry or wet sweeping may be used **only** where vacuuming or other equally effective methods have been tried and found not to be effective. (5.1.4)

Prohibited Cleaning Activities

The following cleaning methods are prohibited for cleaning lead contamination:

- Floors and other surfaces where lead and lead dust accumulate may not be cleaned by the use of compressed air. (5.1.4)
- Use of Vacuums not equipped with a HEPA filtration system
- Any method that causes lead to become airborne.

3.3.18 Signage

Sign are posted in each work area where the PEL is exceeded (without regard to respiratory protective equipment). (5.1.4) Examples of appropriate signage can be found in Attachment C of this procedure.

Contradictory information is not to appear on or near any sign. Signs are illuminated and cleaned as necessary to be readily visible. (5.1.4)

3.3.19 Worker Training

Lead training is given annually to all workers exposed to lead in an occupational setting covered by 29 CFR 1910.1025. The appropriate Lead training must be completed prior to working with or around lead. (5.1.4)

3.3.19.1 Appropriate Lead Training

Workers who work with or around lead exposures are given lead hazard communication training, or lead worker training in accordance with levels of exposure.

3.3.19.2 Lead Hazard Communication Training

NOTE: TOC 356614 has been specifically designed to meet the OSHA training requirements for lead hazard communication training, and may be given instead of Appendices "A" and "B" of 29 CFR 1910.1025

Lead Hazard Communication training is provided to workers exposed to lead at levels below the AL. Lead hazard communication training is provided according to "Hazard Communication," (TFC-ESHQ-S_IH-C-02) and must cover the contents of 29 CFR 1910.1025, Appendices "A" and "B." (5.1.4)

3.3.19.3 Lead Worker Training

NOTE: MSA course # 020150 has been specifically designed to meet the OSHA training requirements for lead workers. Once workers have completed MSA course # 020150, MSA course # 020152 will satisfy yearly training requirements.

Lead worker training is provided to:

- Workers who have the potential for lead exposure at or above the action level (5.1.4)
- Workers who have the possibility of skin or eye irritation (e.g., lead arsenate, lead azide). (5.1.4)

3.3.19.4 Additional Lead Training

The above mentioned lead courses generally do not cover the contents of job specific "Lead Compliance Plans." Training on compliance plans is mandatory. It must be given at the facility or a job-specific level such as pre-job safety meetings, or weekly/monthly safety meetings. (5.1.4) It is recommended that the facility S&H professional deliver or be involved in this training when it is provided.

3.3.19.5 Access to Information and Training Materials

(5.1.4)

The following information is made readily available to all affected workers or workers' designated representative upon request:

- A copy of this standard and its attachments
- All materials relating to the worker's information and the training program.

3.3.20 Medical Exams and Consultations

Workers receive an initial medical exam and biological monitoring prior to job assignment in areas where lead exposure is likely to be at or above the AL. (5.1.4) Worker follow-up medical

exams and consultations are determined by the Hanford Site occupational medicine contractor as necessary. (5.1.1)

3.3.21 Medical Surveillance for General Industry Lead Work Activities

Workers enter the medical surveillance program when lead exposure is likely to be above the AL for more than 30 days per year. (5.1.4) The medical surveillance program is administered by the Hanford Site Occupational Medicine Contractor. (5.1.1, 5.1.4)

3.3.22 Worker Request Medical Exam

(5.1.4)

NOTE: Worker-requested medical exams are scheduled with the Hanford Site Occupational Medicine Contractor as soon as possible after manager or supervisor notification.

Any workers may request a lead medical exam and biological testing if they report to their manager or supervisor that they:

- Have developed signs or symptoms commonly associated with lead intoxication/poisoning,
- Desire medical advice concerning the effects of current or past exposure to lead on the worker's ability to procreate a healthy child,
- Are pregnant,
- Demonstrate difficulty in breathing during a respirator fitting test or during respirator use.

3.3.23 Chelation Therapy

(5.1.4)

NOTE: Self-administered or Prophylactic Chelation is prohibited at any time!

Therapeutic or diagnostic chelation is performed only under the supervision of a licensed physician. Chelation therapy is performed in a clinical setting with thorough and appropriate medical monitoring. The worker is notified in writing prior to initiation of chelation therapy.

3.3.24 Management of the Lead Medical Monitoring Program

The Hanford Site Occupational Medicine Contractor administers and manages the WRPS General Industry lead medical program according to 29 CFR 1910.1025(j) & (k).

Once a worker has been referred to the Hanford medical contractor for medical monitoring or entry into the lead medical surveillance program, the Hanford site occupational medicine contractor determines the frequency of lead medical exams and blood lead testing as applicable per 29 CFR 1910.1025.

Line management ensures that all provisions of the site occupational medicine provider's medical recommendations are strictly followed. Some examples of such provisions are:

- Work limitations;
- Respirator use restrictions;

- Temporary medical removal;
- Return to work determinations.

3.4 Records

All data collected during the initial exposure assessment (objective historical and/or air monitoring data) is documented according to the TFC-ESHQ-S_IH-C-46 and retained in the Site Wide Industrial Hygiene Database.

All records shall be kept in accordance with requirements in 29 CFR 1926.62, 29 CFR 1926.33, 29 CFR 1910.1025, and 29 CFR 1910.1020. Exposure assessment and objective data records will be maintained in accordance with TFC-ESHQ-IH-STD-03, which complies with OSHA recordkeeping requirements. The Site Occupational Medicine Provider shall maintain medical surveillance records for each worker.

The following records are discussed in this standard, but generated through other relevant procedures and work packages:

- Training records
- Facility lead compliance program
- Worker personal lead monitoring results
- Worker notifications
- Worker medical records
- TOC Lead Compliance Plan (A-6006-696)
- Lead objective data
- SWIHD Lead exposure monitoring data
- Lead training records
- Employee Job Exposure Analysis (EJTA)
- Medical exam records.

4.0 DEFINITIONS

Action level (AL). Worker exposure, without regard to the use of a respirator, to an airborne concentration of lead of 30ug/m3, as calculated over an 8-hour time-weighted average.

Competent person. An individual who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions, and who has authorization to take prompt corrective measures to eliminate them.

The Construction Standard. Applies to a combination of erection, installation, assembly, demolition, or fabrication activities involved to create a new facility or to alter, add to, rehabilitate, dismantle, or remove an existing facility. It also includes the alteration and repair (including dredging, excavating, and painting) of buildings, structures, or other real property, as well as any construction, demolition, and excavation activities conducted as part of environmental restoration or remediation efforts.

The General Industry Standard. Applies where the same work activities occur at the same location day after day, such as a factory assembly line, firing range, or foundry. For example a work in a welding shop would be considered general industry work if the same part (widget) was being welded to the same item day in and day out. Maintenance activities covered by the General

Industry Standard are those that involve making or keeping a structure, fixture, or foundation in proper condition in a routine, scheduled, or anticipated fashion.

Lead. Metallic lead, inorganic lead compounds, and organic lead soaps. Excluded from this definition are all other organic lead compounds.

Permissible Exposure Limit (PEL). Worker exposure, without regard to the use of a respirator, to an airborne concentration of lead of 50ug/m3, as calculated over an 8-hour time-weighted average.

- Written exposure assessment documenting full shift personal, air samples representative of at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level.

- The personal air samples must have been collected within the last 12 calendar months and be representative of the monitored worker's regular, daily exposure to lead at less than 30µg/m3 over an 8-hour period.

5.0 SOURCES

5.1 Requirements

1. 10 CFR 851, "Worker Safety and Health Program."

2. 29 CFR 1910.133, "Eye and Face Protection."

3. 29 CFR 1910.134, "Respiratory Protection."

4. 29 CFR 1910.1025, "Lead (General industry)."

5. 29 CFR 1926.62, "Lead Exposure (Construction)."

5.2 References

1. TFC-ESHQ-IH-STD-03, "Exposure Monitoring, Reporting, and Records Management."

2. TFC-ESHQ-S_IH-C-02, "Hazard Communication."

3. TFC-ESHQ-S_IS-C-02, "Personal Protective Equipment."

4. TFC-ESHQ-S_IH-C-05, "Respiratory Protection."

5. TFC-ESHQ-S-STD-27, "Housekeeping Sanitation."

6. TFC-PLN-34, "Industrial Hygiene Exposure Assessment Strategy."

ATTACHMENT A - TYPICAL LEAD-CONTAINING MATERIALS AND ACTIVITIES

Lead may be found in paints, shielding materials, bulk metals, solders, alloys, nails for metal roofs, mortars, glass, piping systems, ammunition, metal seams and joints, laboratory and process chemicals, various equipment and building components, waste materials, and contaminated environmental media, as well as in other materials.

Lead exposure may result from a variety of operations/activities, including but not limited to the following:

- Lead-brick shielding/handling,
- Weapons firing (patrol),
- Pouring molten lead,
- Soldering,
- Welding/cutting/grinding,
- Sandblasting, abrasive blasting,
- Painting and paint removal,
- Loading lead ballast/shot,
- Use of powder actuated tools,
- Lead cable pulling, and
- Maintenance activities involving lead and/or lead containing materials.

ATTACHMENT B - OPERATIONS COVERED UNDER OSHA'S LEAD IN CONSTRUCTION STANDARD

(5.1.5)

The OSHA Lead Construction Standard defines covered construction work as construction, alteration and repair, including painting and decorating. It includes, but is not limited to the following:

- Demolition or salvage of structures where lead or materials containing lead are present;
- Removal or encapsulation of materials containing lead (e.g., lead paint abatement);
- New construction, alteration, repair, or renovation of structures, substrates or portions thereof, that contain lead or lead-containing materials;
- Installation of products containing lead;
- Lead contamination/emergency cleanup;
- Transportation, disposal, storage, or containment of lead or lead-containing materials on the site or location at which construction activities are performed; and
- Maintenance operations associated with the construction activities described in this paragraph.

Work covered by the construction standard may include work activities that require interim controls and protective equipment, including respiratory protection, until an exposure assessment is completed.

ATTACHMENT C - SIGNAGE FOR CONSTRUCTION AND GENERAL INDUSTRY FOR AREAS WHERE LEAD IS PRESENT AT LEVELS ABOVE THE PEL
(Without regard to respiratory protective equipment)

DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA 926.62(m) (1) (ii)

DANGER
LEAD WORK AREA
MAY DAMAGE FERTILITY OR THE UNBORN CHILD
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM
DO NOT EAT, DRINK OR SMOKE IN THIS AREA

DANGER:
CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.

Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (m)(2)(ii) of this section: (5.1.4)

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

ATTACHMENT D – LEAD COMPETENT PERSON EVALUATION FORM

TRAINING COMPLETION RECORD WRPS Competent Person – Lead	Records Use Only

STUDENT

HID/Person ID _____ Last Name _____ First Name _____ MI ____

TRAINING

Course No. _____ Date Completed _____ CACN _____ Company _____

Course Title WRPS Competent Person – Lead

Criteria: Hazard Recognition and Control Experience

Demonstrated knowledge and ability to:

- Identify and control existing and predictable lead hazards in the workplace
- Take prompt corrective measures to control and/or eliminate the occupational lead hazards in coordination with the Field Work Supervisor and/or Person-in-Charge
- Perform frequent and regular job site inspections to ensure control measures are implemented as designed and/or required to adequately control lead hazards.

Also includes application of:

- 1926.62(b) Capable of identifying existing and predictable lead hazards
- **1926.62(e)(2)(iii)** Inspections of the job site.

Criteria: Training (The following courses or equivalent are required)

- Course 20150 Lead Worker Training (NOTE: Annual retraining is required.)

On-The-Job Evaluation Criteria: Demonstrated knowledge and capability to perform the following duties::

1. Understand and apply the requirements and work practices contained in the WRPS Lead Control Program (TFC-ESHQ-IH-STD-08) Occupational Lead Exposure Control.
2. Conduct frequent and regular inspections of job sites, materials, and equipment in accordance with the WRPS Lead Control Program.
3. Identify and control existing and potential lead hazards.

ATTACHMENT D – LEAD COMPETENT PERSON EVALUATION FORM (Cont.)

TRAINING COMPLETION RECORD WRPS Competent Person – Lead	Records Use Only

Meets: Yes or No	**Evaluation Points**
☐ Yes ☐ No	Required Hazard Recognition and Control Experience Criteria have been met.
☐ Yes ☐ No	Training is current
☐ Yes ☐ No	Required On-the-Job Evaluation Criteria have been met.

SIGNATURES/DATES

ATTACHMENT D – LEAD COMPETENT PERSON EVALUATION FORM (Cont.)

TRAINING COMPLETION RECORD WRPS Competent Person – Lead	Records Use Only

Responsibilities associated with the performance of Lead Competent Person duties have been discussed with the candidate by a person who possesses the knowledge, skills, and ability to perform competent person duties for lead work activities, and this person has evaluated the candidate and determined they have met all the necessary requirements listed above.

EVALUATOR: *(if different than the manager)*

Print Name	Signature	Date

CANDIDATE:

Print Name	Signature	Date

MANAGER:

My signature indicates that I qualify the above named individual to be a "**WRPS Competent Person – Lead"** who may be assigned work requiring the lead competent person qualification.

Print Name	Signature	Date

AUTHENTICATOR:

Print Name	Signature	Date